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# Intimate Relationships and Partner Selection among Individuals with Intellectual Disabilities

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# Chapter 1: Systematic Review

## Views and Experiences of Sex and Intimate Relationships in People with Intellectual Disabilities across Young to Middle Adulthood: A Meta-Synthesis of Qualitative Research

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## Abstract

**Background:** Despite increasing recognition of the sexual needs and rights of people with intellectual disabilities, little is known about their perspectives on sexual and intimate relationships. This meta-synthesis explores the views and experiences of individuals with intellectual disabilities aged 18 to 55 years.

**Method:** Twelve studies were identified for the review by searching electronic databases. The studies were reviewed, using a meta-ethnography approach, with separate analyses for articles published in Europe/America and East Asia.

**Results:** Five themes were identified from Western studies: 1) Beyond biology: missing information, 2) A perfect partner: a traditional view of intimate relationships, 3) It can be hard to meet someone, 4) Sexual identity and expression: not easy to be open, 5) Family and workers: it matters what they think. In East Asian studies, two themes were identified: 1) Warned about the dangers of sex, 2) A desire for a traditional relationship and a normal life.

**Conclusions:** Findings indicate that while individuals with intellectual disabilities desire intimate relationships, they face significant barriers, including restrictions from carers, lack of information, and social isolation.

**Key words**: Intellectual Disabilities, Intimacy, Relationships, Sex

## Introduction

Individuals with intellectual disabilities have encountered many misconceptions regarding their sexuality and most commonly have been regarded as asexual (Ramasamy et al., 2021). However, there has been increasing recognition that people with intellectual disabilities have the same sexual needs and desires for intimate relationships as those without intellectual disabilities and there have been significant strides in supporting them to have relationships. The United Nations Convention on the Rights of Persons with Disabilities (2006) stated that people with disabilities have the right to have a partner, marry and form a family (Article 23).

A greater research focus on sex and people with intellectual disabilities has accompanied a greater awareness of their sexual needs. Past work tended to rely on the assumptions and opinions of nondisabled individuals and mainly centred on sexual abuse, sex education, and safeguarding issues (Alexander & Gomez, 2017). Discussions around desire, pleasure and appropriate dating behaviour have largely been ignored in the research (Black & Kammes, 2019). However, more research has begun to explore the views, experiences, and desires of people with intellectual disabilities themselves (English et al, 2018). Taking account of the views of people with intellectual disabilities contributes to a more accurate understanding and can challenge stereotypes and stigma surrounding their sexuality. Furthermore, it helps to ensure that policies and practices around sexual relationships are informed by the lived experiences of people with intellectual disabilities.

Reviews by Black and Kammes (2019), English et al. (2018) and Whittle and Butler (2018) have synthesised qualitative literature on the experiences and views of relationships and sexuality among people with intellectual disabilities. The results of the reviews revealed two main themes: desire and restrictions. Many participants desired an intimate relationship to fulfil their need for companionship and affection and to alleviate feelings of loneliness. Those in a relationship described benefiting from a sense of security, love, and being cared for. Participants valued acts of intimacy including hugging, holding hands and kissing. However, participants felt restricted from engaging in relationships by caregivers, professionals, and policies. These experiences were characterised by feelings of loneliness, isolation and sometimes even a sense they were being punished for engaging in intimate relationships.

It is important to note these reviews did not contain any papers published in the last seven years. Furthermore, Black and Kammes's (2019) review did not critically appraise the research in their review. Historically, there have been different opinions regarding whether qualitative research could or should be critically appraised. However, recently there has been a growing consensus that qualitative research can and should be subject to critical appraisal (Tod et al., 2022). Assessing the quality of the underlying research is essential to gaining a more accurate interpretation of the synthesised findings. The reviews by English et al. (2018) and Whittle and Butler (2018) utilised a critical appraisal tool to exclude papers deemed as ‘low quality’, rather than to inform the interpretation of the data. Consequently, there a risk that valuable insights could have been excluded from the review, even if the findings from the lower quality studies would have needed to be treated with caution.

Past reviews have included a broad age range of participants, making it difficult to compare the experiences of individuals from different age groups. Participants included in Black and Kammes’s (2019) review ranged from 13 to 89 years of age. There are likely generational differences in the participants’ experiences and perspectives of intimate relationships. The results showed that the younger participants spoke about sex education and hopes for the future, rather than experiences with sexual relationships. This is not surprising as research shows that only 15% of females with mild to moderate intellectual disabilities are likely to have had sexual intercourse before the age of 16 (Baines et al., 2018). Research also suggests that adolescents with intellectual disabilities are delayed in their experiences of dating compared to typically developing youth (Heifetz et al., 2020). Barriers to developing romantic relationships for adolescents with intellectual disabilities include a lack of knowledge of sexuality, parental restrictions and social exclusion (Retznik et al., 2022).

Black and Kammes (2019) also suggested that older participants may have experienced greater restrictions in developing romantic relationships. Political and social attitudes towards individuals with intellectual disabilities have changed dramatically over the decades, with older generations with intellectual disabilities being more likely to have experienced social exclusion, discrimination, and oppression regarding their sexuality. It is also probable that older adults with intellectual disabilities experience age-related barriers to sexual relationships evident in the general population, including negative stereotypes about later-life sexuality, physical health limitations, and higher rates of isolation (Towler et al., 2023).

No review has focused on intimate relationships from the perspective of people with intellectual disabilities in young and middle adulthood, as defined by Kim et al. (2021) as between 18 to 55 years of age. These life stages are important because they often involve developing and maintaining romantic relationships, cohabiting with a partner, and getting married (Kaestle & Halpern, 2007). Although this remains a broad age range it covers a period when individuals with intellectual disabilities are likely to be more sexually active and have experience of intimate relationships. Research shows that most individuals with mild to moderate intellectual disabilities have had sexual experiences by the age of 19 (Baines et al., 2018).

### *Aims*

The aim is to systematically analyse qualitative literature on the views and experiences of sex and intimate relationships amongst people with intellectual disabilities aged 18 to 55 years old. This will provide an update on previous reviews of the literature and include a critical appraisal tool to assess the quality of the included studies. It is hoped that the findings will provide valuable information for services, carers and policymakers and aid them in effectively addressing the sexual and relationship needs of people with intellectual disabilities.

## Methods

A meta-synthesis of the qualitative literature on sex and intimate relationships from the perspective of people with intellectual disabilities across young to middle adulthood was conducted. This method was chosen as it provides an in-depth exploration of participant's experiences and perspectives (Saini & Shlonsky, 2012).

This review followed qualitative reporting guidelines, i.e. ENTREQ (Tong et al., 2012; see Appendix 1.1).

### *Inclusion criteria*

Papers were included within this review if they met the following inclusion criteria (a) published in a peer-reviewed journal (b) published in the English language (c) participants identified as having an intellectual disability (or previous and different labels for this diagnosis, e.g. learning disability) (d) participants were adults aged between 18 – 55 years of age (e) explored participants' views and experiences of sex and intimate relationships (f) used a qualitative method.

### *Exclusion criteria*

Papers were excluded if they met the following exclusion criteria (a) followed a mixed method approach and the qualitative data could not be extracted from the quantitative data (b) included proxy reports or data from other informants which could not be separated from those with intellectual disabilities (c) the primary focus was not on sex and intimate relationships (d) sex and intimate relationships were solely discussed in relation to public health, education, or abuse.

### *Search Strategy*

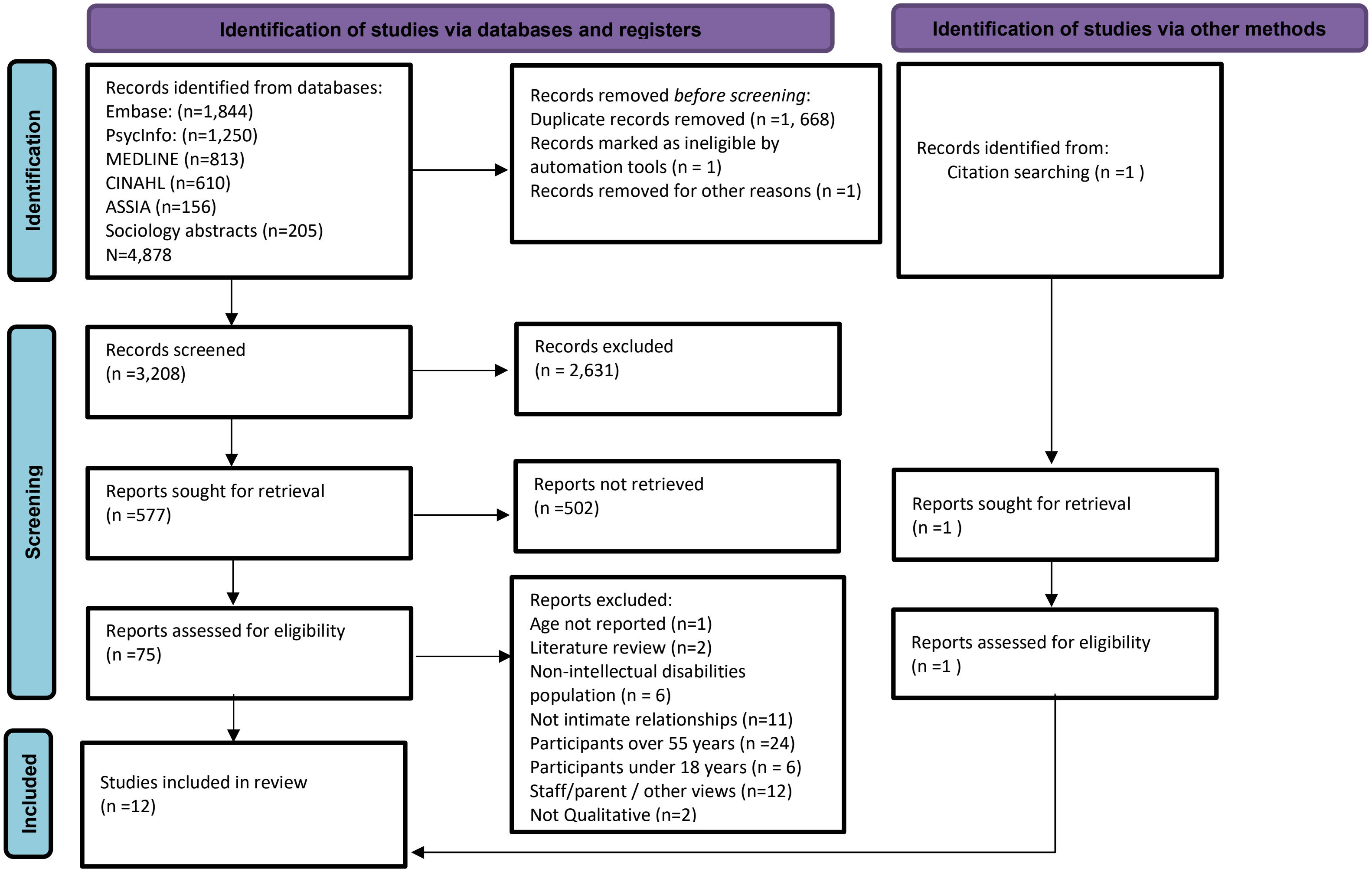
The databases used in the search were CINAHL searched via EBSCO, EMBASE, PsychINFO and MEDLINE searched via OVID, and ASSIA and Sociology Abstracts searched via ProQuest. Reference and citation lists of the included studies were also checked. The search strategy was developed by considering existing reviews (Waldron et al., 2019) and with guidance from a university librarian. The search was conducted on 27th October 2023 and used comprehensive terms related to 'intellectual disabilities' and 'Intimacy or Romance or Sexual Partners', see Appendix 1.2 for an example of the search strategy. Papers were screened by hand for studies using young to middle-aged participants and employing a qualitative design.

### *Selection process*

Figure 1.1 provides a flowchart of the search process and the reasons for excluding studies. The search identified 4,878 articles across all the databases. After duplicates and irrelevant articles were removed a total of 3,208 papers were left to be screened. Titles were reviewed against the inclusion and exclusion criteria and a further 2,631 articles were excluded.  Abstracts of the remaining papers 577 were then screened, and 502 papers were excluded. 75 articles were selected for full-text review and a further 64 articles were removed, leaving a total of 11 papers. The reference lists of these 11 articles were then reviewed, and one further article was identified. This resulted in 12 articles deemed suitable for inclusion in the meta-synthesis.

**Figure 1.1**

*Flowchart of the search process for relevant studies*



### *Data Extraction*

Data extraction was carried out using a standardized form in Microsoft Excel. The extracted data from each study encompassed the following elements: author name(s), date of publication, country of publication, study aims, participant demographics, recruitment methods, data collection methods, analysis methods, and key themes. Additionally, quotes that contributed to the understanding of the themes and the broader interpretation of the data were extracted. This approach enabled a nuanced analysis of the range of perspectives presented in the different studies, even when similar themes were identified.

### *Critical Appraisal*

The CASP Qualitative Checklist (Critical Appraisal Skills Programme [CASP], 2018) was used for the quality assessment of the studies. The CASP qualitative checklist aims to assess various elements of qualitative research studies, including research aims, use of appropriate methods and the rigour of data analysis. The CASP checklist is commonly used for quality appraisal in health-related qualitative reviews and is endorsed by the Cochrane Qualitative and Implementation Methods Group (Long et al., 2020). In line with previous reviews, each study was assessed for rigour against the ten CASP criteria and scored on a 3-point scale (No—0, can't tell—1, Yes—2) with a maximum score of 20 indicating a very high-quality study (Dattilo et al., 2020). The quality assessment results were not used to exclude studies from the review, but quality ratings were used to inform the interpretation of the data. An independent reviewer, who had relevant training in research methods, appraised 50% of the articles. Initial inter-rater appraisal ratings revealed 94% agreement; disagreements were discussed until consensus was reached.

### *Data Synthesis*

Meta-ethnography was the preferred method of synthesis in the current review, as it is a recognised approach for synthesising findings from studies that explore people’s experiences and views (Ring et al., 2011). It also allows studies that have employed different qualitative methods to be synthesised (Campbell et al., 2003). Sattar et al.'s (2021) step-by-step method for conducting meta-ethnography in healthcare research guided the meta-synthesis. This guidance is based on the original seven steps as developed by Noblit and Hare (1988). The first step involved repeatedly reading the studies to become familiar with the key concepts and metaphors. The next stage involved extracting the 'raw data' using a standardised data extraction table. Common and recurring concepts across studies were identified and clustered into relevant categories. During the next phase, the themes and concepts from each paper were compared to check for the presence or absence of commonality. The final stage involved creating third-order constructs by summarising shared themes across the studies.

Cultural variations in the studies could be overlooked if comparisons are made across different cultural contexts. Therefore, two separate syntheses were conducted; one for papers published in Europe (Bates, 2020; Azzopardi Lane et al., 2019; Dinwoodie et al., 2020; Kelly et al., 2009; Mattila et al., 2017; Puyalto et al., 2022; Stoffelen et al., 2018; White & Barnitt, 2000) and America (Turner & Crane, 2016) and one for those published in East Asia (Chou et al., 2015; Lam et al., 2022; Yau et al., 2009). Research suggests that East Asian countries often have more conservative views of sexuality than in Western countries (Vuuren & Aldersey, 2020). Furthermore, studies have found differences between East Asian and Western countries in their attitudes towards the sexuality of people with intellectual disabilities (Ip et al., 2022).

### *Reflexivity*

At the time of this systematic review, the lead researcher was conducting a study exploring individuals with intellectual disabilities' views of romantic relationships. Furthermore, the researcher was working clinically with individuals with intellectual disabilities where issues surrounding sex and intimate relationships were commonly encountered. This knowledge and experience could have influenced the researcher's interpretation of the themes generated from the selected studies. Research supervision was frequently employed to mitigate any potential biases that the researcher may have had during the data synthesis process.

## Results

### *Study Characteristics*

Tables 1.1 and 1.2 describe the general characteristics of the 12 studies selected for the meta-synthesis. The studies included in this review differed in the qualitative methods they used to analyse their data.

**Table 1.1**

*Details and themes of studies published in Europe and America*

| **Authors, year and country of publication** | **Aims** | **Participants** | **Context of recruitment** | **Method of data collection** | **Method of data analysis** | **Themes** |
|---|---|---|---|---|---|---|
| Azzopardi et al. (2019) Malta | To identify and interpret the opportunities and difficulties experienced by young persons with intellectual disabilities in expressing their sexuality in Malta. | Six females and three males<br>Age range: 18-34<br>Community residents | Recruited through non-governmental organisations such as sports and educational organisations and government agencies offering services to persons with intellectual disabilities | Semi-structured interviews | Interpretative phenomenological analysis | i. Quality of life and independent living<br>ii. Gender and cultural stereotypes<br>iii. Barriers and overprotection |
| Bates (2020) UK | To understand the experiences of people with intellectual disabilities who identify as bisexual, exploring if they face the same challenges as bisexual people without a disability. | Two females, five males and one transgender woman<br>Age Range: 18-47<br>Community residents | Social care organizations who worked with adults with intellectual disabilities shared information about the study via social media including, Twitter and Facebook. | Semi-structured interviews | Interpretative phenomenological analysis | i. Development of a bisexual identity<br>ii. Coming out<br>iii. Prejudice surrounding bisexuality<br>iv. Importance of support |

| | | | | | | |
|---|---|---|---|---|---|---|
| Dinwoodie et al. (2020)<br>UK | To explore how LGBTQ people with intellectual disabilities understand their sexual identities. | One female, three males and one transgender individual<br>Age range: 18-47<br>Community residents | Recruited through an LGBT-specific NHS service in the north of England | Semi-structured interviews | Interpretative phenomenological analysis | i. Living with abuse and discrimination<br>ii. Knowing sexuality<br>iii. Experience of intellectual disabilities and LGBTQ<br>iv. Navigating acceptance from others |
| Kelly et al. (2009)<br>Ireland | To understand Irish people with intellectual disabilities views, experiences and aspirations regarding sexuality and romantic relationships, and the type of support they wanted. | Seven females and eight males<br>Age range: 23-41<br>Living situation unknown | Participants volunteering from within an intellectual disability service that was looking to develop a relationships and sexuality policy | Focus groups (separated by gender). Additional individual interviews with two female participants | Thematic analysis | i. The extent of participants' knowledge about sexuality issues and practices<br>ii. Participants expressed desire for sexual and intimate relationships<br>iii. Prohibition |
| Mattila et al. (2017)<br>Finland | To find out how people with intellectual disabilities understand and describe love, and especially the phase of falling in love. | Five females and two males<br>Age range: 18-31<br>Living situation unknown | Unknown | Interviews | Content analysis | i. Partner selection<br>ii. The beginning of falling in love<br>iii. The experience of falling in love<br>iv. The effects that falling in love has on one‘s life |

| | | | | | | |
|---|---|---|---|---|---|---|
| Puyalto et al. (2022)<br>Spain | To explore people with intellectual disabilities opinions regarding the difficulties they experience in relation to having a partner and living together. | Three females and six males<br>Age range: 26-45<br>Community Residents | Participants volunteered from an advisory group | Focus groups | Thematic analysis | i. Finding the right person<br>ii. Having a partner relationship<br>iii. Going to live with your partner |
| Stoffelen et al. (2018)<br>Netherlands | To gain insight into the lives of women with intellectual disabilities who have sexual feelings for other women, or who identify themselves as lesbian or bisexual, and are living in the Netherlands. | 10 females and two of whom were couples<br>Age range: 25-47<br>Community residents | Recruited through intermediaries of associations that support people who are diagnosed with intellectual disabilities and sexologists who work with people with intellectual disabilities | One-to-one semi-structured interviews and two dyadic interviews with the couples | Thematic | i. Support<br>ii. Coming out<br>iii. Sexual Experience<br>iv. Mental Health<br>v. Social Contact<br>vi. Discrimination |
| Turner & Crane (2016)<br>USA | To explore how individuals with intellectual disabilities live out their social-sexual lives. | Two females and three males<br>Age range: 21-54<br>Community residents | Recruited through agency professionals for people with intellectual disabilities | Semi-structured interviews and observations | Thematic analysis | i. Sensuality<br>ii. Intimacy<br>iii. Sexual experience<br>iv. Sexual attitudes<br>v. Sexual self-identity |

| | | | | | | |
|---|---|---|---|---|---|---|
| White & Barnitt (2000)<br>UK | To explore if people with intellectual disabilities feel empowered or discouraged when they engage in an intimate relationship. | Three males and five females, two of whom were couples<br>Age range: 18-35<br>Community residents | Recruited through a social club for people with ID. | One-to-one semi-structured interviews and two dyadic interviews with the couples. | Qualitative methodology emerged from hermeneutic phenomenology | i. The experience of intimate relationships<br>ii. The future of a current relationship<br>iii. The involvement of others in relationships |

**Table 1.2**

*Details and themes of studies published in East Asia*

| Authors, year and country of publication | Aims | Participants | Context of recruitment | Method of data collection | Method of data analysis | Themes |
|---|---|---|---|---|---|---|
| Chou et al. (2015)<br>Taiwan | To explore attitudes toward sexuality among men and women with intellectual disabilities in Taiwan. | Five females and six males<br>Age range: 20-40<br>Community and institutional residents | Recruited through two parental organisations, two institutions and day-care services for people with intellectual disabilities in Taiwan | Focus groups (separated by gender) | Interpretative phenomenological analysis | i. Controlled by parents, the staff and the society<br>ii. Viewing pornography on the internet or loving a person in secret as alternative sexual activities<br>iii. Support in getting married but having difficulty finding a partner<br>iv. Wanting to have the same rights as 'normal' people, but less confident about parenting<br>v. Women's experiences of being sterilised, raped or sexually abused |
| Lam et al. (2022)<br>Hong Kong | To explore the experiences of people with intellectual disabilities on their need for an intimate or romantic relationship and sexual expression. | Two females and three males<br>Age range: 21-50<br>Community residents | Recruited through two non-government organisations that provide special services for people with intellectual disabilities | Semi-structured interviews | Interpretative phenomenological analysis | i. Understanding<br>ii. Doing |

| | | | | | | |
|---|---|---|---|---|---|---|
| Yau et al. (2009)<br>Hong Kong | To explore the phenomena of sexuality among people with intellectual disabilities. | Nine females and three males<br>Age range: 22-44<br>Community residents | Recruited through non-government organizations that provide special services for people with intellectual disabilities in Hong Kong | Semi-structured interviews | Thematic analysis | i. Concepts of dating and marriage<br>ii. Sexual attitudes<br>iii. Sexual behaviours<br>iv. Familial attitudes<br>v. Normalization |

*Results of Critical Appraisal*

Table 1.3 shows the quality appraisal for each paper, including their overall score and individual scores for the 10 qualitative research elements.  Only one study met all the quality criteria (Dinwoodie et al., 2020). All studies met five out of the ten CASP criteria.

All papers sought to interpret the subjective experiences of their research participants and thus qualitative methods were suitable for all of the studies. All but three studies (Chou et al., 2015; Kelly et al., 2009; Yau et al., 2009) included a clear statement of aims and considered the importance and relevance of their research.

All of the papers reported the research design. However, two studies (Kelly et al., 2009; Mattila et al., 2017) neglected to justify why the design was chosen. Most of the studies (e.g. Azzopardi Lane et al., 2019; Bates, 2020; Dinwoodie et al., 2020) described their recruitment processes in detail and referred to a specific sampling method (e.g., snowball and opportunity sampling). Mattila et al. (2017) neglected to provide any details on how their participants were recruited.

All the papers utilised appropriate data collection strategies, including semi-structured interviews and focus groups, which addressed their research aims. Only two of the studies (Bates, 2020; Dinwoodie et al., 2020) adequately acknowledged the researchers' connection with the research topic and how this could have influenced the conduct of the study and the interpretation of their findings. Bates (2020) and Dinwoodie et al. (2020) also described how potential biases were managed by the researchers considering their thoughts and feelings on the topic and reflecting on these during their data analyses.

All the studies demonstrated a degree of sensitivity to ethical issues and, apart from two studies (Kelly et al., 2009; Mattila et al., 2017), they all explicitly referenced ethical approval being granted. Four of the studies (Azzopardi Lane et al., 2019; Bates, 2020; Dinwoodie et al., 2020; Stoffelen et al., 2018) provided details on how they used accessible information and reasonable adjustments to obtain informed consent from people with intellectual disabilities.

In terms of data analysis, all papers detailed their chosen approach. However, only half of the studies (Azzopardi Lane et al., 2019; Chou et al., 2015; Dinwoodie et al., 2020; Lam et al., 2022; Puyalto et al., 2022; Yau et al., 2009) provided a rigorous and in-depth description of the analysis process. All twelve studies explicitly reported their findings and the contribution they made to the existing literature.

The varying quality of the studies largely stems from unclear reporting. Nevertheless, all the studies included offered valuable findings.

**Table 1.3**

*Quality criteria ratings*

| **CASP Criteria** | Azzopardi Lane et al. (2019) | Bates (2020) | Chou et al. (2015) | Dinwoodie et al. (2020) | Kelly et al. (2009) | Lam et al. (2022) | Mattila et al. (2017) | Puyalto et al. (2022) | Stoffelen et al. (2018) | Turner & Crane (2016) | White & Barnitt (2000) | Yau et al. (2009) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Aims** | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| **Qualitative methodology** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **Research design** | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| **Recruitment strategy** | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 |
| **Data collection** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **Research relationships** | 1 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Ethical issues** | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 |
| **Data analysis** | 2 | 1 | 2 | 2 | 1 | 2 | 0 | 2 | 1 | 1 | 1 | 2 |
| **Findings** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **Value of the research** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **Total score** | 19 | 19 | 17 | 20 | 14 | 17 | 13 | 18 | 17 | 15 | 16 | 17 |

### *Meta-synthesis*

The results from the meta-synthesis of the papers published in Western countries (Azzopardi Lane et al., 2019; Bates, 2020, Dinwoodie et al., 2020; Kelly et al., 2009; Mattila et al., 2017; Puyalto et al., 2022; Stoffelen at al., 2018; Turner & Crane, 2016; White & Barnitt, 2000) will be reported first. Five central themes were identified: 1) Beyond biology: missing information, 2) A perfect partner: a traditional view of intimate relationships, 3) It can be hard to meet someone, 4) Sexual identity and expression: not easy to be open, 5) Family and workers: it matters what they think. The content of each theme is described below with participants' quotes presented in italics.

#### ***Beyond biology: missing information***

Participants in the studies had varying and incomplete knowledge of sex and relationships. White and Barnitt (2000) gave the example of a participant describing clearly how a pregnancy test worked. However, the participant did not know how women got pregnant. Participants' inconsistent knowledge could be attributed to the varying ways in which they acquired their information. In three of the studies (Bates, 2020; Kelly et al., 2009; White & Barnitt, 2000) individuals reported attending formal sex education classes. In two of these studies, (Kelly et al., 2009; White & Barnitt, 2000) these classes were seen as informative and empowering, although mostly focusing on biological factors.

The bisexual participants in Bates's (2020) study reported that sex education classes provided a lack of information on lesbian, gay, bisexual, transgender, or queer/questioning (LGBTQ+) issues:

*'I didn't even know properly who I were. Because knowing about being bisexual, it could be a really long path. If you don't get the right information about it, if you don't know yourself. School education don't teach you about it'* (Bates, 2020).

While some participants noted that they could not talk to their parents about sex and relationships, others reported receiving varying information and advice. Most of the information from parents was practical and functional advice, such as financial issues, menstruation and protecting oneself. There was a lack of information on sexual intercourse and the social and emotional aspects of relationships.

Due to the lack of support and information about sex and relationships, many of the study participants acquired information from opportunistic sources, such as magazines, films and television programs. Gaining knowledge from unreliable sources meant individuals were likely to be misinformed, for example, participants in Kelly et al. (2009) study discussed sex in the context of 'affairs' they had seen on soaps.

Participants interviewed by Stoffelen et al. (2018) openly discussed that they did not know how to find a partner. A lack of knowledge in this area appeared to limit participants' opportunities to form romantic relationships.

### *A perfect partner: a traditional view of intimate relationships*

Participants currently in an intimate relationship talked about the benefits of being in a relationship, including companionship and it being associated with positive feelings:

*'You have a sort of calm feeling […] and you miss him, even if he is there, nearby'* (Mattila et al., 2017).

Participants not in a relationship strongly desired one, prioritising physical attraction, personality, shared activities, and similar interests in partner selection. They discussed feeling lonely when they were not in a relationship and described the sadness they felt when relationships ended. This suggests that romantic relationships positively impacted their quality of life, and their criteria for a desirable relationship were similar to those of the general population.

The participants' discussions revealed a strong inclination towards traditional values, with many expressing aspirations of marrying and starting families. Some individuals perceived this transition as a step toward achieving a more "normal" identity:

*'I'd like to have a family if that is the case, maybe have a family of my own, get married if that is the case. Just live a simple normal life like other persons do.'* (Azzopardi Lane et al., 2019).

Married participants viewed this as a significant milestone in life and linked it with feelings of pride. This demonstrated that participants felt empowered to consider and engage in long-term relationship goals.

### *It can be hard to meet someone*

Participants in the study appeared to spend most of their time in disability-centred environments and within the family home, where they socialised with relatives and carers. Participants spoke about needing consent from carers to socialise outside of these environments and often relied heavily on physical and financial assistance. As a result, participants frequently found themselves in restricted social circles, making it challenging to form friendships, let alone pursue romantic connections. As seen in the following quotation, participants spoke about feeling lonely and isolated due to a lack of social interaction:

*'Um, like I, always get lonely and play my games. No one to talk to.'* (Turner & Crane, 2016).

Participants interviewed by Azzopardi Lane et al. (2019) spoke about environmental barriers, such as inaccessible leisure venues, which inhibited their ability to access the community. This was particularly salient for individuals who had additional physical impairments.

When participants did socialise outside of disability-centred environments they were often monitored closely by staff or relatives. This lack of privacy may have inhibited their ability to freely interact with peers and consequently, develop more intimate relationships.

Non-heterosexual participants often described feeling isolated within intellectual disability services due to their LGBTQ+ identity. One participant in Dinwoodie et al. (2020) study spoke about feeling excluded from an upcoming dating event, organised by her support service, due to her sexuality:

*'I don't think it's for lesbians so I'm going to be a bit out of it'* (Dinwoodie et al., 2020).

Furthermore, participants felt disconnected from community LGBTQ+ groups as they were ill-equipped to meet the specific needs of people with intellectual disabilities.

In contrast, participants attending LGBTQ+ groups for people with intellectual disabilities discussed how they provided them with a safe and accepting community where they could meet new people and attend social events:

*‘I think it, like, it [LGBT group at specialist college] definitely helped–, I think it was around the time when I accepted me being bisexual so it’s good to join a group of people in the LGBT and like hear of people’s, like, stories and that.’* (Bates, 2020).

Within these environments, participants felt safe, understood, and socially included. This highlighted the importance of holistic social support which acknowledges their sexual identities and needs.

***Sexual Identity and expression; not easy to be open***

For the majority of study participants sexual identity and expression was a hidden experience. For some individuals, sex was viewed solely in the context of marriage and procreation. Azzopardi Lane et al. (2019) discussed the influence of Catholicism in Malta which tends to uphold traditional views on sex and considers it as a ‘taboo’ subject. Furthermore, Kelly et al. (2009) discussed the influence of Irish legislation, which at the time of writing, criminalised sexual relations with someone who lives with support, unless married to them. They noted that it failed to mention sexual relationships between two consenting individuals with intellectual disabilities and undermined the sexual rights of people with intellectual disabilities.

Participants spoke about being reprimanded by carers and family members for engaging in intimate behaviours, such as kissing. Consequently, many participants resorted to secrecy and maintained relationships that they portrayed to others as less intimate than they truly were.

Three participants in Stofflen et al. (2018) talked about negative sexual experiences, including abuse, rape, and online sexual exploitation:

‘I *have had many nasty experiences with sex…Yes, I was raped. I have flashbacks…. I want sex, but I don’t dare… the fear is stronger….*’ (Stofflen et al., 2018).

These traumatic experiences created a sense of fear and vulnerability around sex and led to them avoiding sexual intercourse to protect themselves.

There was a distinct lack of conversation around sexual pleasure and desire. Only participants in two studies (Stoffelen et al., 2018; Turner & Crane, 2016) talked openly about the enjoyment they gained from sexual intimacy:

*'Well, I like the touching, of his penis. And he gets excited by kissing, passionately. And I said, 'we're getting a little excited there, aren't we?' Yeah. We tease each other and I think that's what makes a great relationship'* (Turner & Crane, 2016).

Studies conducted with non-heterosexual participants (Bates, 2020; Dinwoodie et al., 2020; Stofflen et al., 2018) reported that they had not disclosed their sexuality in all settings. Some of the participants had witnessed LGBTQ+ abuse and harassment directed at others, while many of the participants had experienced this directly. These incidents were similar to those reported by LGBTQ+ individuals without an intellectual disability and included name-calling, intimidation and acts of violence. Consequently, participants expressed a fear of being maltreated by others and described 'acting straight' as a form of self-protection:

*'It was hard because I couldn't be myself. I couldn't be what I wanted to be. I had to still pretend that I was straight towards and not bisexual and just try and go out with.'* (Bates, 2020).

Behaving in a heterosexual manner may have suggested an internalised acceptance of heteronormativity, wherein their gay identities diverged from what they perceived as acceptable. However, some participants described placing the 'problem' within others and not themselves:

*'People have got the problem, you haven't got the problem'* (Dinwoodie et al., 2020).

It was likely that this helped participants to reject their stigmatised status and maintain a positive sense of self.

### *Family and workers: it matters what they think*

The influence of others was a core part of participants' accounts. Individuals spoke about restrictive measures, within the services that they attended, which prevented them from having partner relationships, such as separating individuals by gender. As demonstrated by the following quotation, staff openly discouraged participants from engaging in acts of intimacy:

*'It happened to me, too. We went on a trip with the group, and a monitor said: "Here you do not kiss or anything". And at night, I asked if I could sleep with my partner, and she said we had to sleep separately'*(Puyalto et al., 2022).

Participants reported incidents of themselves, or peers, being 'in trouble' by staff for engaging in intimate acts such as kissing. While some individuals were vocal about their rights concerning sexuality, others seemed unaware of these and appeared powerless to advocate for the chance to pursue intimate relationships.

As well as paid carers, some family members also put restrictive measures in place. It was apparent that the participants' parents viewed them as child-like and in need of protection. Women were viewed as particularly vulnerable. As well as seeing them as more prone to experiencing sexual abuse, it appeared that parents were anxious that they would get pregnant and not be able to manage the childbearing responsibilities:

*'(Parents) always bring it back to pregnancy, especially in the case of women with disabilities. The fear is that you will get pregnant and have children. It's a parent's fear that girls with functional diversity can't take good care of their children."* (Puyalto et al., 2022).

However, in contradiction to these experiences, participants also spoke about occurrences of positive support from others. In White and Barnitt (2000) and Kelly et al.'s (2009) studies, participants discussed the positive attitudes displayed by family members and support staff towards their efforts to build relationships:

*'I asked Mum [about getting married] and she said go for it, go for it, if it is what you want to do it's your choice'* (White & Barnitt, 2000).

Furthermore, one participant spoke about support staff providing emotional support when she was going through a relationship breakup.

LGBTQ+ participants also discussed having mixed reactions from others regarding their sexuality. One participant spoke about staff members putting discriminatory measures in place to prevent them from expressing their LGBTQ+ identity:

*'If you dress as a woman, we'll cut your clothes up with scissors.'* (Dinwoodie et al., 2020).

This highlights the power imbalances between clients and staff, enabling the enforcement of gender norms according to the staff's discretion.

Some participants stated that family members had not taken their sexual identity seriously as they were seen as ill-equipped to make reliable and informed choices about their sexuality:

*'People have that view that people with learning difficulties can't make their mind up about sexuality ... folk just say like it's a phase'* (Dinwoodie et al., 2020).

In contrast, LGBTQ+ participants in Bates (2020) and Stoffelen et al.'s (2018) studies reported supportive reactions from carers and family after disclosing their sexual identity. Participants recalled that staff had helped them to navigate their way in the LGBTQ+ community, for example by supporting them to attend LGBTQ+ socials and setting up bisexual dating profiles:

'*They just–, well I actually went on a dating website actually and one of my carers helped me sign up for it.'* (Bates, 2020).

It was apparent that the reactions of others influenced how accepting individuals felt towards their sexual identity and how confident they felt in developing a relationship**.**

### *Meta-synthesis*

The second meta-synthesis includes the papers published in Hong Kong (Lam et al., 2022; Yau et al., 2009) and Taiwan (Chou et al., 2015). Two themes were identified 1) Warned about the dangers of sex, and 2) A desire for a traditional relationship and a normal life. The content of each theme is described below with participants' quotes presented in italics.

### ***Warned about the dangers of sex***

The perception that sex was dangerous was a common feature for the study participants and it appeared that this attitude was learnt from family members and support staff. Participants' parents seemed reluctant to discuss topics related to sex and even prohibited them from engaging in sexual acts. As acknowledged by Chou et al. (2015) within East Asian cultures sex is often viewed as 'shameful' and not generally spoken about. Family members also forbade participants from viewing any acts of intimacy on TV programs, films, magazines, and the Internet:

*'When there is a scene on the TV about sex, my parents or my siblings tell me that it is a forbidden scene'* (Chou et al., 2022).

Restricting access to sexual content seemed to further perpetuate the notion that sex is an inherently negative and shameful act.

Most of the information participants received about sex had come from school or support staff. This tended to centre around protective measures, such as preventing sexual abuse, unwanted pregnancy, and health risks. It was clear that these messages had created a sense of fear around sex:

*'I am very afraid of AIDS. The social workers have taught us before"* (Yau et al., 2009).

Furthermore, due to a lack of comprehensive knowledge in this area, participants were vulnerable to misconceptions about the dangers of sexual acts:

*'Semen is related to health. If I lose one drop of semen, I will lose three drops of blood. So, masturbation is not healthy. I want to have sex. But I cannot. If it is outside marriage, I would be in jail'* (Lam et al., 2022).

Care professionals also appeared to support families in discouraging and preventing sexual-related behaviours.  Participants displayed a sense of fear around engaging in sexual acts due to being punished:

*'A boy wanted to kiss me. I said no because I was told that I should not do this. And if this is discovered by staff, they would scold me'* (Lam et al., 2022).

Due to the fear of being disciplined, some of the individuals spoke about enjoying intimate acts, such as kissing, when their parents were not home or when they were not under the surveillance of carers. However, for others, it appeared that carer attitudes around sex had been accepted and they chose to engage in self-imposed abstinence:

*‘I felt happy when a boy said he loved me. We were working in a sheltered workshop. But I did not keep up our relationship because he wanted to touch my body, which I think is no good’* (Lam et al., 2022).

Only one participant spoke openly about enjoying sexual intercourse with their partner. As acknowledged by Lam et al. (2022) and Yau et al. (2009) the lack of dialogue around sexual enjoyment could be linked to the influence of neo-Confucian Chinese beliefs in Taiwan and Hong Kong, which value sex for reproduction and not for seeking sexual pleasure.

Women tended to have even more reserved attitudes toward sex in comparison to men, and the majority spoke about negative experiences of sex, including sexual abuse and rape. It was apparent that women were viewed as more vulnerable and tended to receive more warning against intimate relationships, in comparison to their male counterparts:

*‘My mother told me that we should not be touched by any man. Men are no good. They would only take advantage of me’* (Chou et al., 2015).

Women were also warned about the risk of unwanted pregnancy. It was apparent that carers did not want participants to have children as they were concerned that they might lack competence in fulfilling caregiving duties. Furthermore, families were apprehensive about the potential risk of inheriting an intellectual disability. Female participants spoke about the experiences of being sterilised or encouraged to:

*‘The family suggested to the doctor to sterilize me as I can not afford [to have a baby], and my parents said the baby will be mentally handicapped.’* (Yau et al., 2009).

Most of the females in the studies denied they had any sexual desires and were not interested in engaging in sexual activities. Attitudes towards sex may have been influenced by past negative experiences of sexual abuse, sterilisation, and rigorous restrictions with regards to sexual relationships.

### *A desire for a traditional relationship and a normal life*

The majority of participants expressed a desire for a romantic relationship, with a notable emphasis on an aspiration to get married. As illustrated in the following quotation, marriage signified independence:

*'I can move out from the residential institution and can stay up late or stay out as long as I want!'* (Yau et al., 2009).

Marriage was also associated with being allowed to have sexual intercourse. The majority of the participants had been told that sex was only permitted within the context of marriage:

*'I should not think about sex because it is only allowed after marriage'* (Lam et al., 2022).

As noted by Lam et al. (2022) and Yau et al. (2009), Christian ideas, such as beliefs around premarital sex, have likely been absorbed in Asian cultures alongside their traditional beliefs.

Participants tended to hold stereotyped views on gender roles within relationships, such as females being responsible for household chores and childbearing duties and males being the primary income earners. All participants viewed relationships through a heteronormative lens. It seemed that participants were striving for a 'normal life' and attempting to conform to societal norms.

Despite a strong desire for a traditional relationship, participants discussed multiple barriers to achieving this. Individuals relied on the support and approval of their family and carers to develop relationships which was frequently denied:

*'I felt good when he touched me. But my father did not like him. Both my parents said that it is not good for me to be in a relationship. But my brothers are. I feel lonely when I see them'* (Lam et al., 2022).

It appeared that participants were viewed as 'eternal children' and not capable of managing an intimate relationship. As reported earlier, participants were not supported to have children. Some of the participants were vocal and aware of their rights to reproduce:

*'The law is not fair to us. We are just like any human beings; why can't we have children?'* (Chou et al., 2015).

Others presented with more reserved attitudes toward the rights of parenting and seemed more accepting of the view that may struggle to manage the caregiving duties.

Male participants spoke about financial and social barriers, such as not having a job or a house, which prevented them from developing a relationship:

*'I want to get married, but I need to have a flat first'* (Yau et al., 2009).

Furthermore, many participants said that they did not know how to get a partner or lacked the confidence to navigate situations necessary to establish a relationship:

*'I have never had sexual experiences, never kissed a girl either ... I am shy and not brave enough to get a girlfriend'* (Chou et al., 2015).

Participants appeared to find themselves in a conflicting situation: they were socialised to desire a traditional relationship, one where they could experience sexual intimacy within the bounds of marriage. However, a relationship, let alone marriage, seemed like a remote possibility.

## Discussion

This meta-synthesis provided an up-to-date exploration of the views and experiences of sex and intimate relationships amongst people with intellectual disabilities aged 18 to 55 years old. The studies included in this review indicate that people with intellectual disabilities desire intimate and meaningful relationships despite encountering significant challenges.

Participants' desire for a romantic relationship was not a surprising finding as it has been documented in previous reviews (Black & Kammes, 2019; English et al., 2018). Participants appeared to uphold an idealised perspective on relationships and placed significance on traditional notions of marriage and gender roles. These views were likely influenced by information provided by caregivers, professionals, and the media and represented a 'normal' identity (Azzopardi Lane et al., 2019). Despite desiring relationships, participants encountered significant social barriers to developing relationships, including a lack of social opportunities and resources. Further compounding these barriers, was a lack of knowledge about sexual intercourse and the social and emotional aspects of relationships. Participants' understanding mainly revolved around biology and protective measures. Consequently, many of the individuals felt they lacked the necessary skills to foster intimate relationships.

Individuals across all studies described facing restrictions from caregivers and family members on their ability to engage in sexual activities. Some participants seemed to accept the restrictions placed on them, while others were more vocal about their rights.  One way of dealing with these restrictions was to engage in intimate acts in secret. Pursuing secret sexual relationships is likely to increase an individual's vulnerability to abuse and exploitation (Kelly et al., 2009). Hence, caregivers’ attempts to protect individuals with intellectual disabilities by limiting their access to intimate relationships, may unintentionally increase their exposure to risk.

Most of the discourse in the studies overlooked the topic of sexual pleasure and desire. A significant number of participants perceived sex as wrong, prohibited and only permissible within the context of marriage. These notions carried socio-cultural connotations and discouraged discussions around sex. Gender norms appeared to compound this issue, disadvantaging women by promoting the suppression of their sexual needs.

It appeared that LGBTQ+ participants were exposed to a ‘layered stigma’. Consequently, they experienced discrimination and stigma due to their disability and because of their LGBTQ+ status. This finding is supported by research that LGBTQ+ people with intellectual disabilities face unique challenges when attempting to engage in intimate relationships (McCann et al., 2016). None of the participants in the studies conducted in East Asia self-identified as non-heterosexual. LGBTQ+ individuals in this region contend with significant social, cultural, and political discrimination, likely contributing to their invisibility as a subgroup (Phull et al., 2019) Chou et al.'s (2015) study predates the legalisation of same-sex marriage in Taiwan, potentially allowing for greater accessibility to LGBTQ+ experiences in future research.

Despite these challenges, papers conducted in Western countries discussed incidents where they received support and encouragement from others to engage in intimate relationships. However, this was not observed in the studies conducted in East Asia, where conversations seemed to centre on restrictions and precautions. Hong Kong and Taiwan have relatively conservative attitudes towards sexuality compared to Western countries and, sex tends not to be openly discussed (Vuuren & Aldersey, 2020). Consequently, parents from these populations tend to avoid talking about sex with their adult children who have intellectual disabilities (Chou & Lu, 2011; Lam et al., 2023). Furthermore, in these cultures, parents often exercise greater control over the lives of their children with intellectual disabilities and exhibit prohibitive attitudes towards them engaging in intimate relationships (Chou et al., 2018; Lam et al., 2023).

### *Limitations*

There are several limitations to the current review which should be acknowledged. The review included participants of a similar age who were likely to have had experiences with intimate relationships. However, the age range was still broad, likely resulting in generational differences among the participants. Furthermore, although studies conducted in Western and East Asian countries were analysed separately, different cultural and religious contexts within these regions likely influenced participants' experiences. Consequently, we sought to report commonalities between the various studies rather than generalise results from one study to another.

Furthermore, the three studies conducted in Hong Kong and Taiwan are not representative of the broader East Asian region. Hong Kong and Taiwan are often considered more progressive in their policies and practices regarding the rights of people with intellectual disabilities (Lee et al., 2023) and tend to have more open views on sexuality compared to more conservative regions like North Korea and Japan (Sik Ying Ho & Jackson, 2021).

To ensure a certain level of quality, only published papers were included in this review which might have resulted in the exclusion of some relevant studies. Furthermore, only articles published in English were included, so relevant articles in other languages may have been missed. Although the review covered studies from a variety of countries, there was a higher representation of Western countries.

The participants in the research studies were those who could verbally communicate their experiences and agreed to be interviewed about sex and relationships. As a result, these participants may represent a higher-functioning, more open, and more empowered group compared to many of their counterparts with intellectual disabilities who did not take part. Consequently, the views of a significant portion of the intellectual disabilities population remain unknown.

### *Implications*

The results of this review have strong implications for services, carers, and policymakers. It is essential for families and carers to receive more education about the sexual and relationship needs and rights of people with intellectual disabilities. While restrictive practices are sometimes viewed as necessary for safeguarding, excessive protection can lead to unintended negative consequences for people with intellectual disabilities, such as isolation, loneliness, and risky sexual activities. In terms of sex education, it must include information on healthy relationships and sexual pleasure, as well as biology and protective measures. Furthermore, sex education needs to move beyond a heteronormative lens and educate people about LGBTQ+ issues. More inclusive environments for people with intellectual disabilities are necessary to enhance their ability to develop relationships and consequently, express their sexual identity. It appears that individuals with intellectual disabilities who identify as LGBTQ+ experience additional barriers and may need more individualised support. However, pervasive stigma and taboo in society create a significant barrier in supporting the sexual rights of people with intellectual disabilities. These societal and cultural attitudes may lead to discomfort and reluctance among carers, families and professionals to engage in open discussion, training and support about sexual matters. These entrenched socio-cultural beliefs may impact on people with intellectual disabilities' self-perceptions and prevent them from exploring their sexuality. Further research is needed to examine the origins and development of these social attitudes and perceptions, and whether they improve as a result of education and exposure.  Such research could play a crucial role in developing interventions, programs and policies aimed at shifting social attitudes and improving the relational and sexual lives of people with intellectual disabilities.

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# Chapter 2: Major Research Project

# Views of Facial Attractiveness of Faces of Individuals With and Without a Disability.

Prepared in accordance with the author requirements for the Journal of Applied Research in Intellectual Disabilities (JARID)

http://www.onlinelibrary.wiley.com/page/journal/14683148/homepage/forauthors.html

## Plain Language Summary

### Title

Views of Facial Attractiveness of Faces of Individuals With and Without a Disability.

### Background

Little is known about the views of people with intellectual disabilities regarding attractiveness. In one study, individuals with and without intellectual disabilities were asked to rate the attractiveness of photographs of faces (Donnachie et al., 2021). Both groups gave very similar ratings of attractiveness to the different faces. Additionally, people with intellectual disabilities were more likely than those without disabilities to consider themselves desirable to those they found attractive. However, the study did not use facial images of people with recognisable intellectual disabilities, who may be potential relationship partners for participants with intellectual disabilities. This research explored what people with intellectual disabilities find attractive in others with intellectual disabilities, as well as whether they thought other people with intellectual disabilities would find them desirable.

### Methods

Twenty-four adults with intellectual disabilities and twenty-five adults without were recruited from further education colleges and voluntary community organisations. Participants were given photographs of faces of typically developing people and people with Down syndrome and asked to rate their attractiveness. They then selected the images they found most attractive from both groups of photos. Afterward, they were interviewed about their reasons for selecting the faces and their views on how desirable they thought they were to others.

## Main Findings and Conclusions

The participants with intellectual disabilities in this study rated the attractiveness of facial images of people with and without Down syndrome very similarly to their non-disabled peers. People with intellectual disabilities were more likely to consider themselves desirable to others compared to participants without intellectual disabilities. The findings suggest that people with intellectual disabilities may have a positive sense of self. However, more research is needed to see if these findings reflect the everyday experiences of people with intellectual disabilities. It is also important that carers and support professionals have open conversations with individuals with intellectual disabilities about romantic relationships.

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## Abstract

**Background:** Little is known about people with intellectual disabilities' views of facial attractiveness and self-desirability. This study aimed to build on the literature by exploring how people with intellectual disabilities regard the attractiveness of other people with an intellectual disability.

**Method:** Twenty-four adults with intellectual disabilities and twenty-five adults without disabilities were recruited from further education colleges and voluntary community organisations. Participants were asked to rate the attractiveness of facial images of typically developing individuals and individuals with Down syndrome. This was followed by a semi-structured interview, exploring participants' perceptions of self-desirability.

**Results:** The findings indicate a strong positive association between what people with and without intellectual disabilities consider attractive in individuals with Down syndrome. Participants with intellectual disabilities, compared to those without, were more likely to perceive themselves as a desirable to those they found attractive.

**Conclusion:** People with intellectual disabilities appeared to view themselves as desirable to others and maintain a positive sense of self. Further research is needed to examine if such views influence everyday behaviour.

**Keywords:** Attractiveness, Intellectual Disabilities, Romantic Relationships, Self-desirability

## Background

Individuals with intellectual disabilities have the same sexual needs and desires for intimate relationships as those without intellectual disabilities (Parchomiuk, 2021). Yet, little is known about people with intellectual disabilities' views of attractiveness and partner selection. Research by Bates et al. (2017) found that individuals with intellectual disabilities valued kindness, warmth, and companionship more than physical attractiveness, social status, intelligence, or financial security. While research by Mattila et al. (2017) found that participants with intellectual disabilities considered physical attractiveness to be an important feature of partner selection, they also emphasised the importance of shared interests, intimacy and empathy skills. However, selecting a partner is not solely based on someone's evaluation of others. It is also on the judgements they receive from others about their own attractiveness (Clapton et al., 2018). Consequently, when someone selects a partner, they are also making a social comparison about their own ranking as potential partners.

Social Comparison Theory (Festinger, 1954) argues that our evaluation of ourselves is achieved through comparison with others. Many individuals with intellectual disabilities experience discrimination (Scior et al., 2022), bullying (Martinez-Cao et al., 2021) and stigmatization (Pelleboer-Gunnink et al., 2021) which is likely to impact their self-concept. Individuals with intellectual disabilities with a greater awareness of stigma have been reported to feel more negative about themselves and to have lower self-esteem (Paterson et al., 2012). However, it is important to note that not everyone with intellectual disabilities reports low self-esteem (Dixon et al., 2006). Jahoda and Markova (2004) suggested that individuals with intellectual disabilities may be able to protect themselves from a stigmatised identity by viewing themselves more favourably than their peers with intellectual disabilities. Therefore, it is uncertain how stigma and discrimination may impact people with intellectual disabilities' views of themselves and their self-desirability.

There is a notable absence of research on partner selection concerning people with an intellectual disability who identify as lesbian, gay, bisexual, transgender, or queer/questioning (LGBTQ+). One reason for this may be due to a difficulty with recruitment because people fear prejudice and discrimination when affirming their non-heterosexual identities (Smith et al., 2022). Individuals with intellectual disabilities who identify as LGBTQ+ are often exposed to 'layered stigma'. They may experience discrimination and stigma due to their disability and their LGBTQ+ status (McCann et al., 2016). Research has shown that LGBTQ+ people with intellectual disabilities can struggle to express their sexual identity (Bates, 2020) and face unique barriers when attempting to engage in intimate relationships (McCann et al., 2016).

One way of understanding attraction is by investigating facial preferences. Physical appearance, particularly the face, is a strong cue for discerning a person's attractiveness and determining partner choice (Gerhardstein & Anderson, 2010). Specific facial features, such as symmetry and averageness, are often perceived as attractive (Jones et al., 2001; Little & Griffey, 2020), with findings appearing consistent cross-culturally (Apicella et al., 2007; Rhodes et al., 2001). Only one study by Donnachie et al. (2021) has utilised a method from research on the general population to examine people with intellectual disabilities views of facial attractiveness. They asked individuals, with and without intellectual disabilities, to rate the attractiveness of standardised images of faces. Despite the facial images being very similar, with only subtle differences in features associated with attractiveness (e.g., symmetry), individuals with and without intellectual disabilities made very similar judgments of facial attractiveness. This suggests that individuals with intellectual disabilities may be sensitive to the same subtle variations in facial attractiveness and may be influenced by shared cultural and societal norms. However, individuals with intellectual disabilities were more likely to see themselves as desirable to those they found attractive, than those without intellectual disabilities. This suggests individuals with intellectual disabilities may retain a favourable sense of self despite their devalued social status.

Within facial imagery research there has been a movement towards using unmanipulated, naturalistic images that capture the normal variations in human faces, reflecting real-life contexts (Jenkins et al., 2011). Donnachie et al.'s (2021) use of highly standardised images means that the findings do not offer insight into how people respond to more typical faces (Dawel et al., 2022). Moreover, Donnachie et al. (2021) did not include images of people with recognisable intellectual disabilities. Therefore, it remains unknown whether people with intellectual disabilities use similar visual cues when judging the attractiveness of facial images of people with a recognisable intellectual disability. This is of interest, as individuals with intellectual disabilities are more likely to interact with and have a romantic partner with a person with an intellectual disability (Bates et al., 2017; Merrells et al., 2018). Furthermore, the study only included five participants with diverse sexual identities. Ideas about attractiveness within the intellectual disability population should aim to include the opinions of people who identify as having alternative sexual and gender identities.

## Aims

This exploratory study aimed to build on Donnachie et al.'s (2021) research on facial attractiveness by using a more naturalistic set of facial images and including images of people with a recognisable intellectual disability. Consistent with Donnachie et al.'s (2021) findings, the study sought to examine whether people with and without intellectual disabilities make similar judgments about the attractiveness of naturalistic images of typically developing individuals. Furthermore, the study aimed to examine whether individuals with intellectual disabilities make similar judgments as people without intellectual disabilities about the attractiveness of facial images of people with a recognisable intellectual disability. The study also aimed to explore if there are differences in how desirable people with and without an intellectual disability think they are to others, and how desirable they view themselves to be (self-desirability).

Research Questions: -

1. How similar are attractiveness ratings of facial images of individuals with a recognisable intellectual disability by people with and without intellectual disabilities?
2. How similar are attractiveness ratings of facial images of typically developing individuals by people with and without intellectual disabilities?
3. Are there differences in perceptions of self-desirability between individuals with and without intellectual disabilities?
4. How do individuals with and without intellectual disabilities perceive themselves as romantic partners?

## Method

### Design

This exploratory study used an experimental between-group design to compare individuals with and without intellectual disabilities' judgments about the attractiveness of facial images and whether their perceptions of self-desirability differ. The dependent variables were the attractiveness judgments of facial images and perceptions of desirability, while the independent variable was the participants' intellectual disability status. The study compared two groups: those with intellectual disabilities and those without. Additionally, a qualitative component involving semi-structured interviews explored participants' perceptions of themselves as romantic partners.

## Participants

Twenty-four adults with intellectual disabilities and twenty-five without intellectual disabilities were recruited. Participants with intellectual disabilities were recruited from community organisations and further education colleges offering specialist courses for people with intellectual disabilities. Those without intellectual disabilities included college students studying a range of health and social care courses and volunteers and staff working in community organisations for people with intellectual disabilities. Despite extensive efforts, recruitment of participants from LGBTQ+ community organisations resulted in limited success.

All participants needed the ability to provide consent, be aged 16-40 years and have the appropriate receptive and expressive verbal ability to complete all the elements of the study. Suitable participants were identified by the help of college and support staff, which included assessing if potential participants met criteria on the Adaptive Behaviour Scale (ABS-RC:2) (Nihira et al., 1993). These criteria determined whether individuals could (1) converse with others about sports, family, group activities, etc.; (2) use complex sentences containing words like 'because' and 'but'; and (3) answer simple questions such as 'What is your name?' or 'What are you doing?'. Participants were excluded if they had any sensory, physical or mental health difficulties that would prevent them from completing the research tasks.

Following data collection, two participants in the intellectual disabilities group were excluded from the analyses as their scores were above 75 on the Wechsler Abbreviated Scale of Intelligence – Second Edition (WASI-II; Wechsler, 2011). The WASI-II is a brief measure of IQ and does not provide the same accuracy as a full battery ability of tests and a cut-off score of 75 was applied for having a mild learning disability. Three participants recruited to the non-intellectual disabilities group were also excluded from the analyses as their scores were below 75.

Table 2.1 shows the socio-demographic characteristics of the 43 participants who took part in the study. Participants were divided into two groups: Group One, consisting of 21 individuals with intellectual disabilities, and Group Two, consisting of 22 individuals without intellectual disabilities. The intellectual disability group had more male (*n* = 14) than female (*n* = 7) participants. The opposite pattern was true for the non-intellectual disability group, which had more female (*n* =18) than male (*n* = 4) participants. The groups were of similar ages, with the majority aged from late teens to mid-twenties. Recruiting LGBTQ+ participants proved challenging, with 5 participants in the intellectual disability group identifying as non-heterosexual, compared to 9 participants in the non-intellectual disability group. One participant with an intellectual disability said they did not know their sexual orientation. The majority of individuals with an intellectual disability identified as single (*n* =14), whereas the majority without an intellectual disability stated they were in a relationship (*n* =12). Most participants in both groups were living with their parents. Three participants with an intellectual disability did not provide a postcode and their socio-economic status could be calculated. The two groups were similarly distributed across the deprivation categories, with the majority of participants in the most deprived category.

**Table 2.1**

Participant characteristics

| Variable | Intellectual disability group (*n* = 21) *n* (%) | Non-intellectual disability group (n = 22) *n* (%) |
|---|---|---|
| **Gender** | | |
| Female | 7 (33.3%) | 18 (81.8%) |
| Male | 14 (66.7%) | 4 (18.2%) |
| **Age (years)** | | |
| Mean age (SD) | 24.14 (8.06) | 22.18 (5.24) |
| Range | 23 (17-40 years) | 14 (16-30 years) |
| **Sexual Orientation** | | |
| Heterosexual | 15 (71.4%) | 13 (59.1%) |
| Homosexual | 2 (9.5%) | 4 (18.2%) |
| Bisexual | 3 (14.3%) | 5 (22.7%) |
| Don't Know | 1 (4.8%) | 0 |
| **Relationship status** | | |
| Single | 14 (66.7%) | 10 (45.5%) |
| In a relationship | 7 (33.3%) | 12 (54.5%) |
| **Living situation** | | |
| Living with parent/s | 15 (71.4%) | 12 (54.5%) |
| Living with grandparents | 0 | 3 (13.6%) |
| Living with partner | 0 | 3 (13.6%) |
| Living alone | 4 (19%) | 1 (4.6%) |
| Foster Care | 2 (9.5%) | 1 (4.6%) |
| Shared accommodation | 0 | 1 (4.6%) |
| Living with children | 0 | 1 (4.6%) |
| **WASI-II** | | |
| Mean (SD) | 63.3 (7.48) | 91.5 (9.57) |
| Range | 22 (53-75) | 33 (76-109) |
| **SIMD quintiles** | *n* = 18 (%) | *n* = 22 (%) |
| Most deprived 1 | 11 (52.4%) | 15 (68.2%) |
| 2 | 4 (19%) | 3 (13.6%) |
| 3 | 1 (4.8%) | 3 (13.6%) |
| 4 | 1 (4.8%) | 0 |
| Least deprived 5 | 1 (4.8%) | 1 (4.6%) |

**Note:** SIMD = Scottish Index Multiple Deprivation; WASI-II = Wechsler Abbreviated Scale of Intelligence–Second Edition

## Experimental tasks, Interview and Measures

The following data were gathered from participants in the order presented below.

### *Background information*

Socio-demographic information was gathered about each participant's age, gender, relationship status, living situation, sexual orientation, and socio-economic status. Socio-economic status was assessed using the Scottish Index of Multiple Deprivation (SIMD; Scottish Government, 2016). SIMD uses a scale from one to five based on postcode, with one indicating the most deprived areas and five indicating the least deprived.

### *Attractiveness Rating Task*

Participants were presented with a set of facial images of people with Down syndrome and a matched set of facial images of typical developing people. These were either images of males or females based on the participants' sexual preference. Individuals who identified as bisexual or where unsure of their sexual orientation were able to choose their preference of male or female faces.

There is no publicly available database which includes validated facial images of people with a recognisable intellectual disability. Consequently, the first step involved creating a set of facial images of people with a recognisable intellectual disability. A decision was made to use images of people with Down syndrome as it is a widely recognised genetic condition associated with intellectual disability and marked by distinct facial characteristics, including the epicanthic fold (Carr, 1995). An expert in facial recognition research advised that 15 female and 15 male facial images were required to draw statistical conclusions.

An extensive search of freely available photo websites was conducted to find naturalistic images of people with Down syndrome, with varying levels of attractiveness. Images were selected where the individual appeared to be aged between 18-35 to reflect the age range of participants. Headshots were chosen where the individual posed front-on to the camera with a neutral or slightly positive expression. To control for the possible effects of emotional cues on responses to faces, facial images displaying extreme emotions were excluded.

Once all searches were exhausted, a matched set of images was created of typically developing people with similar levels of attractiveness. This was achieved by searching stock photo websites for images of people with similar facial characteristics to each of the images in the first set, avoiding any highly salient differences such as variations in eye colour and facial hair. Once all the images were identified, we obtained facial images of 26 females and 26 males in each set. The images were then cropped to reveal only the individuals' heads and shoulders, aligned on pupil position, and set to a resolution of 1350 x 1800 pixels at 24-bit ("true colour") depth. Peoples' hair and clothing remained visible in the images. The images were not standardized in terms of lighting, background, camera type, and angle. The images were printed to a size of 6 x 4 inches, a standard photograph size, and laminated.

The images consisted of mostly formal portrait photos of people with Down syndrome who were highly made up. Consequently, a further check was required to ensure it was clear which images depicted individuals with Down syndrome. Six individuals, who were not involved in the study, were asked whether the person in the image had

Down syndrome. Images incorrectly identified as not having Down syndrome were excluded from the image set, along with their matched image without Down syndrome. The final sets consisted of 22 female and 22 male facial images of people with Down syndrome and 22 female and 22 male facial images of people without Down syndrome. The process of developing the image sets spanned a duration of three months. Examples of the facial images are presented in Figure 2.1.

In keeping with Donnachie et al.'s (2021) study, participants rated how attractive they viewed the facial images on a five-point Likert scale; 1=not at all, 2=a wee bit, 3=ok, 4=quite, or 5=very. The scale was presented on boxes and the participants were asked to place the image in the box that corresponded with their answer. Blocks of increasing size were used alongside the boxes to visually represent the scale (see Figure 2.2). To mitigate any potential order effects, the sequence of photo presentation, and the order in which facial images of people with and without Down syndrome were shown was alternated.

**Figure 2.1**

*Examples of facial images*

*Facial image of female with Down syndrome and matched pair without Down syndrome (left column) and facial image of male with Down syndrome and matched pair without Down syndrome (right column).*

**Figure 2.2**

*Attractiveness Rating Task*

*Semi-structured ‘romantic partner’ interview*

A semi-structured interview was used to understand participants’ views about the attractiveness of others and how desirable they believe they are to others (see Appendix 2.11). Participants were shown the images they had rated highest in the attractiveness task and asked to select the image they found the most attractive and explain why by answering, "What made you think this person is attractive?". This was followed by the questions, "Do you think this person would ask you out on a date?" and "What do you think they would say if you asked them out on a date?". Their reasons for these answers were then explored by asking, "Can you tell me the reasons that made you think that?". These questions were asked for both sets of facial images. All questions were taken from the Donnachie et al. (2021) study.

*Wechsler Abbreviated Scale of Intelligence - Second Edition (WASI-II)*

To determine if participants were in the appropriate groups, the WASI-II was used to measure cognitive ability.

### Procedure

The researcher met with the participants individually in a private and confidential space, within their college or community service. Participants were given an information sheet and consent form in an easy-read format and consent was obtained from all those who expressed an interest. The researcher ensured that participants understood their role in the research, that participation was voluntary and that they had the right to withdraw at any time. Participants provided background information followed by the first attractiveness rating task of facial images. They then completed the semi-structured interview about the highest-rated image. The same order was followed for the second set of facial images. The WASI-II was completed last to ensure that participants did not think they were being tested on their ability to get answers ‘right’ on the other tasks. At the end of the session, participants could provide feedback on their experiences of the tasks and ask any questions.

#### *Pilot phase*

Piloting was completed with two individuals with intellectual disabilities and two individuals without intellectual disabilities to examine the feasibility of the tasks. It was confirmed that both the attractiveness rating task and interviews were comprehensible to the participants and could be completed in an hour. Consequently, it was decided that no changes were required, and the data collected from the pilot phase were incorporated into the main study.

### *Psychometric Instruments*

The WASI-II (Wechsler, 2011) is an abbreviated version of the Wechsler Adult Intelligence Scale-IV (Wechsler, 2008) and serves as a measure of cognitive ability. The two-subtest format was administered to determine if participants were in the appropriate groups. Psychometric properties of the WASI-II include good to excellent test-retest reliability across subtests (0.83 – 0.94) and composite scores (0.90 – 0.96), a high level of internal reliability (0.90 – 0.92), and acceptable (0.71) to excellent (0.92) concurrent validity.

The ABS-RC:2 (Nihira et al., 1993) is a tool designed to measure adaptive behaviour in individuals with intellectual disabilities. Research indicates that the scale demonstrates strong psychometric properties. Specifically, its internal consistency ranges from .80 to .99, test-retest reliability has correlation coefficients from .81 to .99, and interrater reliability ranges from .83 to .99 (Nihira et al., 1993). In the current study, three items from the ABS-R:2 were used as a description of potential participants' communication abilities, to help guide staff in identifying those with the necessary abilities to take part in the research. The three items were; (1) converse with others about sports, family, group activities, etc.; (2) use complex sentences containing words like 'because' and 'but'; and (3) answer simple questions such as 'What is your name?' or 'What are you doing?'. No assessments were completed using the ABS-R:2.

### *Sample size*

This exploratory study of facial attractiveness involved the novel adaptation of an existing approach that has not been used in prior research with people who have intellectual disabilities. The sample size was based on Donnachie et al.'s (2021) attractiveness study and the aim was to recruit twenty-five participants with and twenty-five participants without intellectual disabilities. A post hoc power analysis was conducted for the research question examining the association between participants with and without intellectual disabilities ratings of images of people with Down syndrome. Given an effect size of rho = 0.76, a total sample size of 20, and an alpha level of α=.05, the analysis revealed a power of 0.90. This indicates a 90% probability of detecting a true effect, suggesting that the study had sufficient power to identify a significant relationship between participants' ratings of images of people with Down syndrome.

### Analysis

Facial attractiveness: A Spearman’s rho correlation was used to examine whether ratings of facial attractiveness by people with and without intellectual disabilities were similar.

One heterosexual male with an intellectual disability rated all facial images as ‘not at all’ attractive due to being in a relationship. Consequently, their data were considered unreliable and excluded from the analysis.

Desirability to others: Chi-square analyses were conducted to analyse group differences in their responses to the dating scenario questions regarding whether they would be asked out on a date and if their offer of a date would be accepted by an attractive other with and without Down syndrome.

Perceptions of self-desirability: Recordings of the semi-structured interviews were transcribed verbatim and analysed using content analysis (Strauss, 1987). Categories were created by extracting the different reasons participants provided in relation to acceptance or rejection in the dating scenario questions. If participants provided multiple reasons, their responses could fall into more than one category. After developing all the categories, an independent second-rater, who was not involved in the study, was tasked with assigning the responses to the predefined categories. Agreement between the researcher and the second-rater was assessed using Cohen's kappa coefficient, with strong agreement indicated by kappa values exceeding .80 for all questions. Disagreements were resolved through discussion. All analyses were two-tailed as the study was exploratory.

### *Ethical Approval*

Ethical approval for this study was granted by the University of Glasgow's College of Medical, Veterinary and Life Sciences Ethics Committee (see Appendix 2.3).

## Results

### Ratings of attractiveness

The following findings represent attractiveness ratings by participants with and without an intellectual disability for the two sets of images. As noted previously, the gender distribution between the two groups was uneven, and only a small number of non-heterosexual participants were recruited. Consequently, the analyses were conducted separately for all participants who chose to rate female faces and those who chose to rate male faces. Research by Kranz and Ishai (2006) suggests that individuals rate the attractiveness of male and female faces similarly regardless of gender or sexual orientation, supporting the decision to combine these groups.

Participants rating female faces in the intellectual disability group included 10 heterosexual males, 1 lesbian, and 1 bisexual male. In the non-intellectual disability group, there were 2 heterosexual males, 3 lesbians and 3 bisexual females. Participants rating male faces in the intellectual disability group included 5 heterosexual females, 2 bisexual males, 1 gay man, and 1 female who was unsure of her sexual orientation. In the non-intellectual disability group, there were 11 heterosexual females, 2 bisexual females, and 1 gay man.

Caution needs to be exercised when interpreting these results, as the groups were unbalanced in terms of gender and sexuality.

### *Within group comparison*

Agreement of the ratings of attractiveness across participants were highly consistent within groups (participants with and without an intellectual disability rating male and female faces), for both sets of images (facial images of people with and without Down syndrome) as indicated by Cronbach's alpha all being above 0.80. Consequently, mean ratings for each image were created by averaging the scores provided by participants within each respective group. These average scores were used in the main analyses.

### *Between group comparison*

Research question one asked whether attractiveness ratings of facial images of individuals with a recognisable intellectual disability are similar between people with and without intellectual disabilities. To address this question, Spearman's rho correlation was used. The results showed a statistically significant association between both groups' attractiveness ratings of images of people with Down syndrome: for those rating female faces (rho = 0.76, $P < 0.001$) and those rating male faces (rho = 0.57, $P = 0.005$). This suggests some shared perceptions of attractiveness between the groups when looking at images of people with a recognisable intellectual disability. Scatterplots (Figure 2.3 and Figure 2.4) illustrate the associations between group ratings for those rating female and male faces.

**Figure 2.3**

*Scatterplot of the correlation of attraction ratings for facial images of females with Down syndrome between participants with and without intellectual disabilities (ID).*

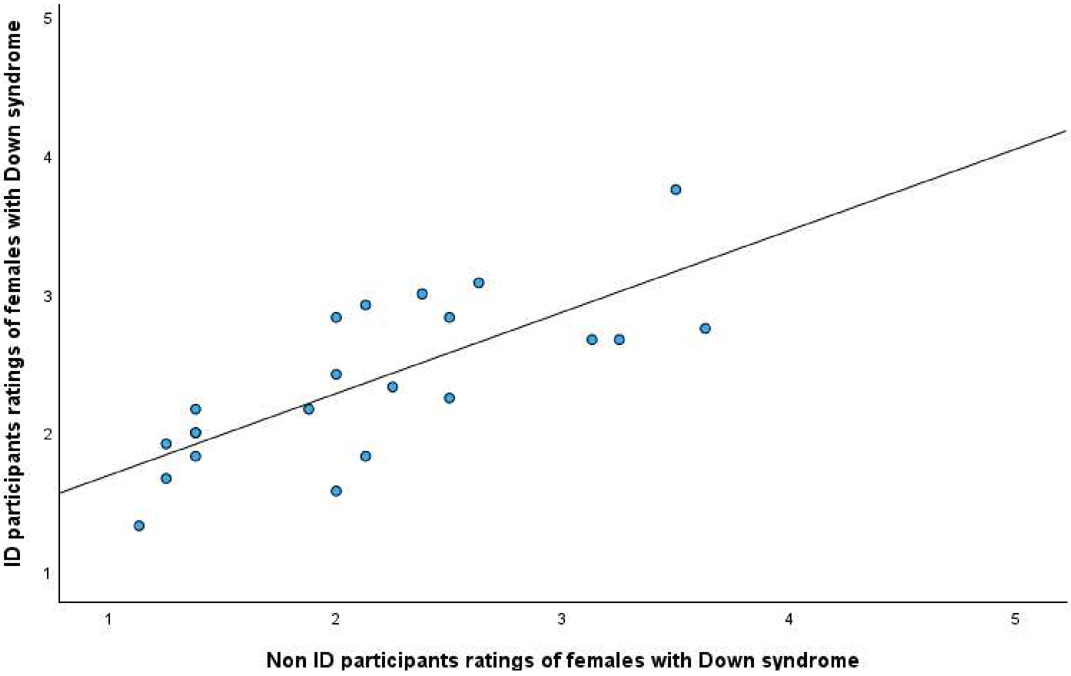
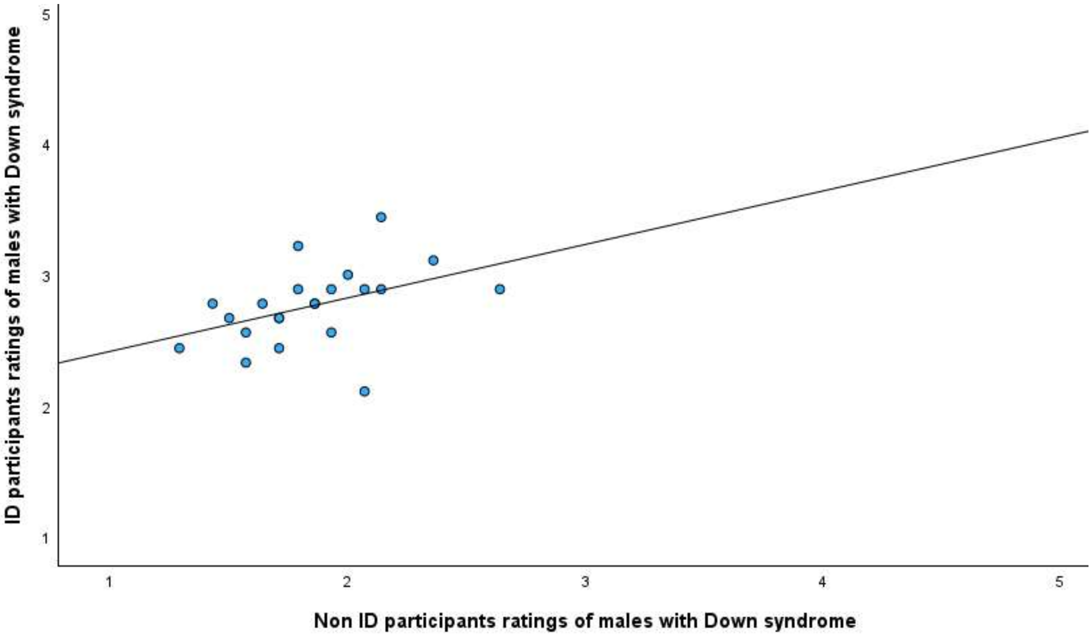


**Figure 2.4**

*Scatterplot of the correlation of attraction ratings for facial images of males with Down syndrome between participants with and without intellectual disabilities (ID).*



Research question two asked whether attractiveness ratings of facial images of typically developing individuals are similar between people with and without intellectual disabilities. To address this question, Spearman's rho correlation was used. The results indicated a statistically significant association between both groups' attractiveness ratings for female faces (rho = 0.58, *P* = 0.005). For male faces, a weak, positive association was observed between the two groups' attractiveness ratings (rho = 0.35, N = 22). However, this relationship did not reach statistical significance (*P* = 0.111). Scatterplots (Figure 2.5 and Figure 2.6) show the associations between the two groups' ratings for female and male images of people without Down syndrome.

**Figure 2.5**

S*catterplot of the correlation of attraction ratings for facial images of females without Down syndrome between participants with and without intellectual disabilities (ID).*

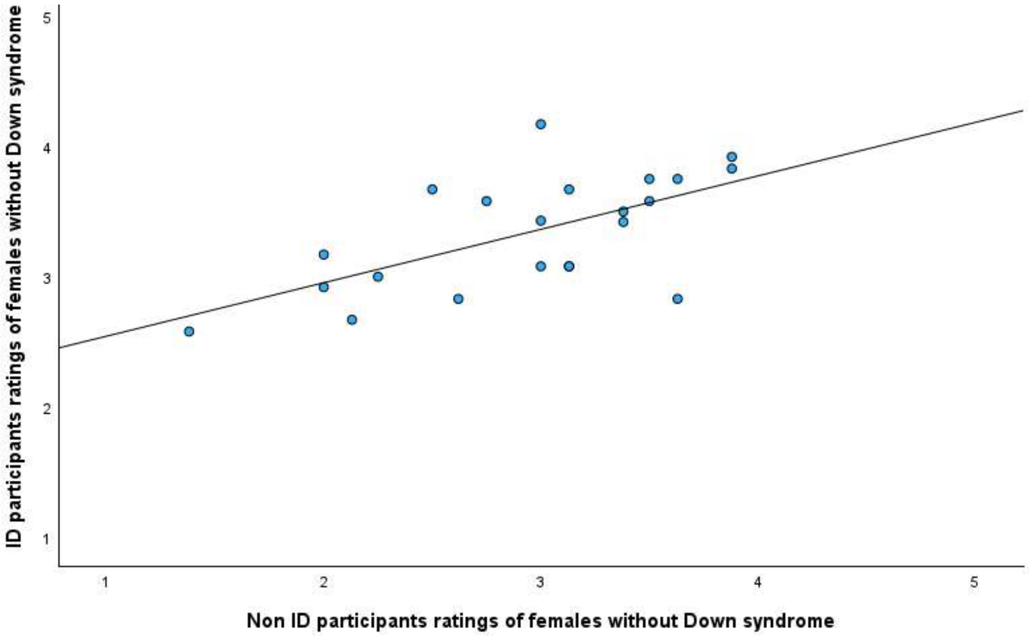
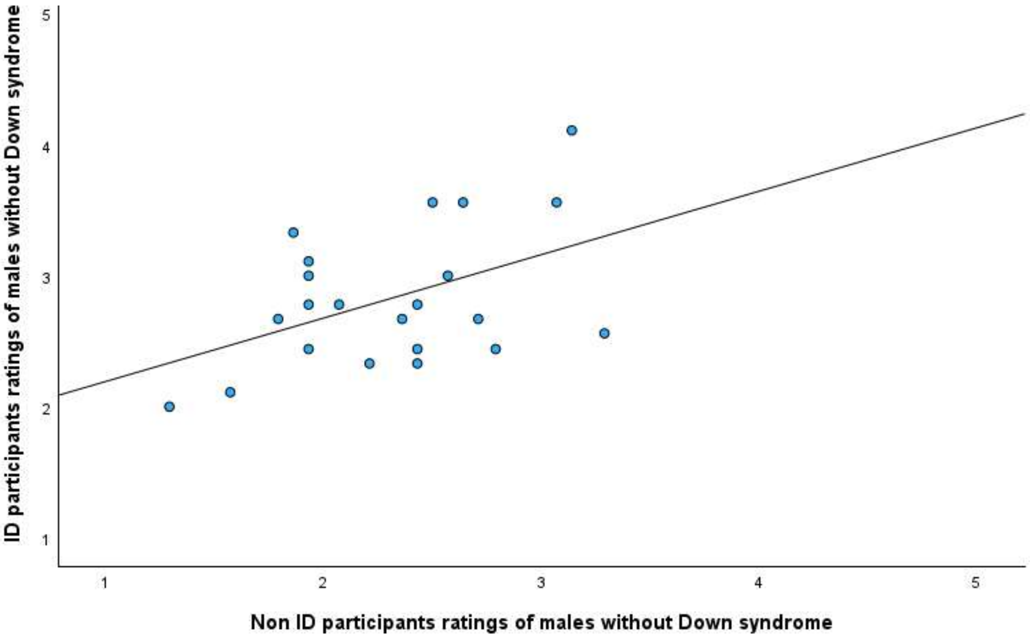


**Figure 2.6**

*Scatterplot of the correlation of attraction ratings for facial images of males without Down syndrome between participants with and without intellectual disabilities (ID).*



Perceived Attractiveness to others

Table 2.2 and Table 2.3 display group responses to the ‘dating scenario’ questions related to the images of the person with and without Down syndrome whom participants rated most highly. The questions included (1) Do you think this person would ask you out on a date? and (2) What do you think they would say if you asked them out on a date? To address the third research question, whether there are differences in perceptions of self-desirability between individuals with and without intellectual disabilities, a Chi-square analysis was used compare differences in their responses to these questions.

Research question four asked how individuals with and without intellectual disabilities perceive themselves as romantic partners. To answer this question, content analysis was used to explore participants' reasons for their perceptions of being asked out or rejected in these dating scenario questions.

The analysis below includes responses from all participants, regardless of whether they rated male or female faces.

*Being asked out on a date*

*Images of people with Down syndrome*

The results showed a statistically significant difference was found between the two groups regarding whether they felt the person with Down Syndrome they rated the most highly would ask them on a date ($\chi 2$ (1) =4.058, *P* = 0 .044). In the intellectual disability group, fifteen people believed they would get asked out on a date compared to nine in the non-intellectual disability group.

*Images of people without Down syndrome*

No statistically significant difference was found between the two groups regarding whether they felt the person without Down syndrome they rated the most highly would ask them on a date ($\chi 2$ (1) =1.133, *P* = 0.287). In the intellectual disability group, twelve people believed they would get asked out on a date compared to nine individuals in the non-intellectual disability group.

*Reasons for ‘yes’ responses.*

Table 2.2 shows reasons both groups of participants gave for being asked on a date by the person with and without Down syndrome they rated most highly. For both image sets, common reasons given by participants with intellectual disabilities included their own 'personality' being viewed positively and being seen as 'physically attractive.' Participants without an intellectual disability predominantly attributed the reason for being asked on a date to the other person's positive personality traits, such as being 'kind' and 'outgoing’. Regarding the images of people with Down syndrome, two participants in the intellectual disability group cited a 'shared disability' as a reason, with one individual explaining that they would have much in common. Conversely, one participant in the intellectual disability group associated the other person's disability with being 'flirtatious' and lacking an understanding of right from wrong.

**Table 2.2**

*Responses for participant’s being asked out on a date by individuals with and without Down syndrome.*

| | ID group overall response *n* = 21 (%) | ID group most common reason for response *n* (%) | | Non-ID group overall response *n* = 22 (%) | Non-ID group most common reason for response *n* (%) | |
|---|---|---|---|---|---|---|
| **Images of people with Down syndrome** | | | | | | |
| Yes | 15 (71.4%) | Physical Attraction 3 (20%) | ‘She would think I’m attractive' | 9 (40.9%) | Others Personality 4 (44.4%) | 'He just looks really nice and kind' |
| | | Personality 3 (20%) | ‘Cause I’m kind and caring and loving’ | | Physical Attraction 2 (22.2%) | 'He might like the look of me.’ |
| No | 6 (28.6%) | Physical Attraction 2 (33.3%) | ‘‘I don’t think I’m quite that good looking’ | 13 (59.1%) | Physical Attraction 3 (23.1%) | 'I would say she’s prettier’ |
| | | Confidence 1 ( 16.7%) | 'I don’t have the social confidence’ | | Confidence 3 (23.1%) | 'That comes to my confidence in my head' |
| **Images of people without Down syndrome** | | | | | | |
| Yes | 12 (57.2%) | Personality 4 ( 33.3%) | ‘Cause I’m like very friendly and caring’ | 9 (40.9%) | Others Personality 5 (55.6%) | ‘She looks very friendly and look like she might be open to it’ |
| | | Physical Attraction 3 ( 25%) | ‘I’m kind of attractive’ | | Physical Attraction 3 (33.3%) | 'I think maybe we are on a similar level of attractiveness' |
| No | 9 (42.8%) | Physical Attraction 5 (55.6%) | '‘I just don’t think I’m attractive ‘ | 13 (59.1%) | Physical Attraction 8 (61.5%) | '‘He seems too good looking for me’ |
| | | Own disability 1 ( 11.1%) | ‘Cause of my disability’ | | Confidence 1 (8%) | ‘I’m quite shy' |

**Note:** ID = Intellectual Disability

*Reasons for ‘no’ responses.*

Table 2.2 details reasons participants with and without an intellectual disability provided for not being asked on a date out by an attractive other with and without Down syndrome. Irrespective of the facial image, the predominant reason cited by participants in both groups was 'physical attraction.' Participants often negatively compared their own physical appearance to the facial image, feeling they were not attractive enough to be asked out. Another common reason, applicable to both sets of images, was a lack of 'confidence,' with participants describing themselves as 'self-critical' and having 'low self-esteem.' One participant in the intellectual disability group attributed their ‘own disability’ as a reason for not being asked out by an attractive other without Down syndrome. Of interest, two participants without an intellectual disability attributed the other person's disability as a reason, with one participant mentioning they had not 'looked at anyone with Down syndrome in a romantic light.’

*Offer of a date*

*Images of people with Down syndrome*

There were no statistically significant differences between the two groups in their belief that the person with Down Syndrome they rated the most highly would accept or reject their offer of a date ($\chi2$ (1) =2.216, $P$ = 0.137). Sixteen participants in the intellectual disability group, compared to twelve participants in the non-intellectual disability group believed their offer of a date would be accepted.

*Images of people without Down syndrome*

There were no statistically significant differences between the two groups in their belief that the person without Down syndrome they rated the most highly would accept or reject their offer of a date ($\chi2$ (1) =2.805, $P$=0.094). Thirteen participants in the intellectual disability group compared to eight participants in the non-intellectual disability group believed their offer of a date would be accepted.

*Reasons for ‘accepted’ responses*

Table 2.3 shows reasons both groups of participants gave for their offer of a date being accepted by an attractive other with and without Down syndrome. The most common reason participants with an intellectual disability gave for both sets of images was ‘physical attraction’. Participants without an intellectual disability commonly attributed the acceptance of their offer to the other person’s personality traits. Regarding the images of people with Down syndrome, participants with an intellectual disability discussed their ‘shared disability’ as a reason, noting that it makes it ‘fair’ and ‘easier to get along’. For images of individuals without Down syndrome, participants with intellectual disabilities cited their 'own personality' as a reason, while those without intellectual disabilities stated that their offer might be accepted out of 'sympathy' rather than genuine interest.

**Table 2.3**

*Responses for participant’s offer of a date being accepted or rejected by individuals with and without Down syndrome.*

| **ID group overall response *n* = 21 (%)** | **ID group most common reason for response *n* (%)** | | **Non-ID group overall response *n* = 22 (%)** | **Non-ID group most common reason for response *n* (%)** | |
|---|---|---|---|---|---|
| **Images of people with Down syndrome** | | | | | |
| Accepted 16 (76.2%) | Physical Attraction 4 (25%) | ‘I’m quite a handsome dude’ | 12 (54.5%) | Others Personality 7 (58.3%) | ‘They seem like quite an ongoing person' |
| | Shared Disability 3 (18.8%) | ‘It looks like she has disabilities as well the same as me' | | Similarities 2 (16.7%) | 'We could probably match in terms of attitudes towards things' |
| Rejected 5 (23.8%) | Confidence 2 (40 %) | 'I get nervous and tongue twist my words' | 10 (45.4%) | Physical Attraction 3 (30%) | 'I don’t think I’m good looking enough’ |
| | Physical Attraction 1 (20%) | 'I think she would go out with a boy with better looks then me ‘ | | Sexuality 2 (20%) | 'She also looks really straight' |
| **Images of people without Down syndrome** | | | | | |
| Accepted 13 ( 61.9%) | Physical Attraction 6 (46.2%) | ‘I’m quite a handsome dude’ | 8 (36.4%) | Others Personality 3 (37.5 %) | 'She looks like she has quite an easy going personality' |
| | Personality 5 ( 38.5%) | 'Cause I’m a nice person’ | | Out of Sympathy 2 (25 %) | ‘It would be a pity one' |
| Rejected 8 (38.1%) | Physical Attraction 3 (37.5 %) | 'Because I’m not handsome’ | 14 (63.6%) | Physical Attraction 6 (42.9%) | 'I think initially based on looks they would say no’ |
| | Type 2 (25 %) | ‘ Maybe not be her type’ | | Confidence 4 (28.6%) | 'I’m not confident with asking people out' |

**Note**: ID = Intellectual Disability

*Reasons for ‘rejected’ response.*

Table 2.3 shows the common reasons both groups of participants provided for their offer of a date being rejected by an attractive individual, with and without Down syndrome. Irrespective of the facial image, both groups of participants gave 'physical attraction’ as a reason and expressed a self-perceived lack of attractiveness. A lack of confidence in asking someone out was also mentioned by participants with and without an intellectual disability. Participants across both groups referred to the notion of 'type' as a reason for being rejected, feeling that they did not fit the perceived preferences of the other person. Regarding images of individuals with Down syndrome, one participant in the non-intellectual disability group attributed the other person’s disability as a reason, noting that 'romance might be a little bit more difficult for people with Down syndrome.'

## Discussion

The findings indicate a strong positive association between what people with and without intellectual disabilities consider attractive in individuals with Down syndrome. Many of the participants without intellectual disabilities had completed placements in organisations supporting individuals with intellectual disabilities as part of their college course. Given this, it was not surprising they expressed discomfort when rating images of people with Down syndrome. Nevertheless, they seemed to use similar visual cues to assess attractiveness as those with intellectual disabilities. Research has shown that certain facial features are considered attractive by people regardless of their age, race, or cultural background (Mengelkoch et al., 2022). The current findings could suggest that people may use these same universal cues of attractiveness when judging facial images of individuals with a recognisable intellectual disability. However, due to the unstandardised nature of the images, the specific features that define this attraction could not be determined. Furthermore, due to the small sample size the results must be interpreted with caution.

Consistent with Donnachie et al.'s (2021) study, a positive association was indicated between the two groups' attractiveness ratings of facial images of people without Down syndrome, suggesting that people with and without intellectual disabilities share consistent views of attractiveness when rating images of typically developing individuals. However, in the current study, the association between the two groups' ratings of male faces without Down syndrome was weak. This difference in findings could be due to Donnachie et al.'s (2021) use of standardised facial images, compared to the highly variable sample of images employed in the current study. Furthermore, male faces in Donnachie et al.'s (2021) study were rated by heterosexual females, in the current study they were rated by participants of different genders and sexualities who expressed a preference towards rating males. Furthermore, the finding could be related to the current study's small sample size and the unbalanced groups in terms of gender and sexuality.

In terms of self-desirability, a higher proportion of individuals with intellectual disabilities, compared to those without, believed they would be asked out and have their offer of a date accepted by an attractive person, both with and without Down syndrome. This indicates that individuals with intellectual disabilities are more likely to perceive themselves as desirable to others, with and without an intellectual disability, compared to their non-disabled peers. Despite people with intellectual disabilities frequently experiencing discrimination and stigmatisation (Pelleboer-Gunnink et al., 2021), the participants in this study appeared to demonstrate a positive sense of self. Paterson et al. (2012) found that most participants with intellectual disabilities reported relatively high self-esteem and maintained a favourable sense of self when comparing themselves to both individuals with and without intellectual disabilities.

More people with intellectual disabilities than those without, expected they would be asked on a date by a person with Down syndrome. This finding may reflect that individuals with intellectual disabilities have more opportunities to interact socially and have romantic partners with intellectual disabilities (Bates et al., 2017; Merrells et al., 2018). Further, people without intellectual disabilities may not expect to be asked out romantically by someone with an intellectual disability. In keeping with this, three participants with intellectual disabilities cited their shared disability as a reason for being seen as desirable by someone with Down syndrome. Other common reasons given by participants with intellectual disabilities included their attractive personality and physical appearance, potentially providing further evidence of their positive sense of self.

Fewer participants without intellectual disabilities, than those with intellectual disabilities, perceived they would not be desirable to an attractive individual with Down syndrome. Common reasons cited by participants without intellectual disabilities included feeling less attractive than the person in the image and lacking the confidence to assume they would be desired. This is interesting as people with intellectual disabilities are typically not considered conventionally attractive (Gerschick, 2022).  Furthermore, research has shown that people with intellectual disabilities often encounter rejection and mockery by non-disabled individuals when using online dating profiles (Martino & Kinitz, 2022; McCarthy et al., 2020). It could be argued that participants without intellectual disabilities were more influenced by social desirability bias, potentially leading them to respond in a more socially acceptable manner. Studies have shown that people are prone to displaying social desirability bias when discussing sensitive topics such as judgments of individuals with disabilities (Babik & Gardner, 2021). Measures were implemented to mitigate social desirability tendencies, including building rapport and ensuring privacy and anonymity. While these efforts may have reduced bias, complete elimination was unlikely. Two participants explained that they would find it difficult to view someone with an intellectual disability in a romantic light and that people with intellectual disabilities may face more challenges in romantic relationships. This aligns with research showing that young people are less likely to view individuals with intellectual disabilities as suitable partners (Ip et al., 2022). Moreover, legal considerations and concerns about individuals' capacity to consent may also contribute to reluctance to recognise people with intellectual disabilities as potential romantic partners (Shakespeare, 2013).

## Limitations

The findings from this study need to be interpreted with considerable caution. A major limitation was the small sample size, which included an uneven distribution of genders between the two groups and a small number of LGBTQ+ participants. Consequently, meaningful comparisons could not be made based on participants' sexuality or gender. Furthermore, the study did not collect data on participant ethnicity. The findings are not representative of people from diverse backgrounds and with differing cultural beliefs.

Although the non-standardised images provided more ecological validity, they prevented precise control over specific facial cues. Consequently, causal inferences could not be drawn regarding which facial cues were driving participants' attractiveness judgments.

## Further research

This exploratory study was based on hypothetical situations. Future research should investigate participants with intellectual disabilities’ actual experiences of being asked on a date and initiating romantic advances, as well as how they cope with rejection and its impact on their self-concept. Furthermore, the study did not directly explore participants' experiences and views on dating individuals with intellectual disabilities. Investigating these perspectives and experiences could provide deeper insights into how individuals with intellectual disabilities perceive romantic relationships, including how their self-perception of disability influences these views.

It could be argued that the findings related to perceptions of self-desirability might be influenced by social desirability bias, particularly among participants without intellectual disabilities. Their desire to be viewed favourably by the researcher may have led them to adjust their responses to appear as though they have more positive attitudes towards people with intellectual disabilities. To mitigate the impact of social desirability, one approach could be to include additional discussion points in the semi-structured interview, allowing for a deeper exploration of participants' reasons and rationales behind their responses. Another method could involve explicitly addressing social desirability at the beginning of the task, acknowledging that participants might feel pressured to provide socially acceptable answers. It would be emphasised that people are likely to find some individuals more attractive than others, and that participants' honest opinions are valued and confidential. Investigating different strategies to manage social desirability bias would be beneficial for future research.

Although LGBTQ+ services were contacted, they were unable to support the research study. Long-term work should focus on building relationships and fostering ongoing trust with LGBTQ+ organisations and individuals to support them in feeling more confident in engaging with research and discussing this aspect of their lives.

## Conclusions

Good quality social and personal relationships are associated with better physical and mental health (McCarthy et al., 2020). This study has helped enhance our understanding of individuals with intellectual disabilities' views of attractiveness, and their perceptions of self-desirability. However, it is unclear whether these findings apply to everyday situations. This highlights the importance of carers and support professionals engaging in open conversations with individuals with intellectual disabilities about romantic relationships. Traditional sex education often focuses solely on physical aspects, but it is equally important to address the emotional and social dimensions of relationships. By doing so, caregivers can help promote a more positive and holistic understanding of sexual expression and relationships.

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# Appendices

## Appendix One: Systematic Review

### Appendix 1.1 Completed Reporting Guidelines – ENTREQ

| Item No. | Guide and Description | Report Location |
|---|---|---|
| 1. Aim | State the research question the synthesis addresses | Introduction (*Aims*) |
| 2. Synthesis methodology | Identify the synthesis methodology or theoretical framework which underpins the synthesis, and describe the rationale for choice of methodology (e.g. meta-ethnography, thematic synthesis, critical interpretive synthesis, grounded theory synthesis, realist synthesis, meta-aggregation, meta-study, framework synthesis) | Methods |
| 3. Approach to searching | Indicate whether the search was pre-planned (comprehensive search strategies to seek all available studies) or iterative (to seek all available concepts until they theoretical saturation is achieved) | Methods (*Search Strategy)* |
| 4. Inclusion criteria | Specify the inclusion/exclusion criteria (e.g. in terms of population, language, year limits, type of publication, study type) | Methods (*Inclusion and exclusion criteria*) |
| 5. Data sources | Describe the information sources used (e.g. electronic databases (MEDLINE, EMBASE, CINAHL, psycINFO), grey literature databases (digital thesis, policy reports), relevant organisational websites, experts, information specialists, generic web searches (Google Scholar) hand searching, reference lists) and when the searches conducted; provide the rationale for using the data sources | Methods (*Search strategy*) |
| 6. Electronic Search strategy | Describe the literature search (e.g. provide electronic search strategies with population terms, clinical or health topic terms, experiential or social phenomena related terms, filters for qualitative research, and search limits) | Methods (*Search strategy*) |
| 7. Study screening methods | Describe the process of study screening and sifting (e.g. title, abstract and full text review, number of independent reviewers who screened studies) | Methods *(Selection process, Fig 1 PRISMA)* |
| 8. Study characteristics | Present the characteristics of the included studies (e.g. year of publication, country, population, number of participants, data collection, methodology, analysis, research questions) | Results (Tables 1.1.& 1.2 *Characteristics of included studies)* |
| 9. Study selection results | Identify the number of studies screened and provide reasons for study exclusion (e.g. for comprehensive searching, provide numbers of studies screened and reasons for exclusion indicated in a figure/flowchart; for iterative searching describe reasons for study exclusion and inclusion based on modifications to the research question and/or contribution to theory development) | Methods *(Selection process, Fig 1.1 PRISMA)* |

| | | |
|---|---|---|
| 10. Rationale for appraisal | Describe the rationale and approach used to appraise the included studies or selected findings (e.g. assessment of conduct (validity and robustness), assessment of reporting (transparency), assessment of content and utility of the findings) | Methods (*Critical Appraisal)* |
| 11. Appraisal items | State the tools, frameworks and criteria used to appraise the studies or selected findings (e.g. Existing tools: CASP, QARI, COREQ, Mays and Pope [25]; reviewer developed tools; describe the domains assessed: research team, study design, data analysis and interpretations, reporting) | Methods *(Critical Appraisal)* |
| 12.Appraisal process | Indicate whether the appraisal was conducted independently by more than one reviewer and if consensus was required | Methods *(Critical Appraisal)* |
| 13.Appraisal results | Present results of the quality assessment and indicate which articles, if any, were weighted/excluded based on the assessment and give the rationale | Results *(Results of Critical Appraisal)* |
| 14. Data extraction | Indicate which sections of the primary studies were analyzed and how were the data extracted from the primary studies? (e.g. all text under the headings "results /conclusions" were extracted electronically and entered into a computer software) | Methods (D*ata extraction)* |
| 15. Software | State the computer software used, if any | None used |
| 16. Number of reviewers | Identify who was involved in coding and analysis | Method (*Data synthesis*) |
| 17. Coding | Describe the process for coding of data (e.g. line by line coding to search for concepts) | Method (*Data synthesis*) |
| 18. Study comparison | Describe how were comparisons made within and across studies (e.g. subsequent studies were coded into pre-existing concepts, and new concepts were created when deemed necessary) | Method (*Data synthesis*) |
| 19. Derivation of themes | Explain whether the process of deriving the themes or constructs was inductive or deductive | Method (*Data synthesis*) |
| 20. Quotations | Provide quotations from the primary studies to illustrate themes/constructs, and identify whether the quotations were participant quotations of the author's interpretation | Results (*Meta-synthesis)* |
| 21. Synthesis output | Present rich, compelling and useful results that go beyond a summary of the primary studies (e.g. new interpretation, models of evidence, conceptual models, analytical framework, development of a new theory or construct) | Discussion |

**Appendix 1.2 Example of Search Strategy**

1. exp developmental disabilities/
2. exp learning disorders/
3. ((intellectual or mental) and ‘’developmental disorder’’).ti,ab
4. ((intellectual$ or mental$) adj5 (disabl$ or disabilit$ or deficien$ or impair$ or handicap$)).ti,ab.
5. ((deficien$ or low$) adj3 (cognition or "cognitive function$" or reason$ or intelligence)).ti,ab.
6. ("special needs" or or retard$).ti,ab.
7. ("Down$ syndrome" or mongol$ or "De Lange syndrome" or "Prader Willi syndrome" or "Labhart Willi syndrome" or "Royer syndrome" or "Rubinstein-Taybe syndrome" or "Rubinstein syndrome" or "WAGR syndrome" or "Williams syndrome" or "Broad Thumb Hallux syndrome").ti,ab.
8. 1 or 2 or 3 or 4 or 5 or 6 or 7
9. exp Romance/
10. exp Intimacy/
11. exp Sexual Partner/
12. (intima$ adj3 (relation$ or spouse or partner$ or wife or wive$ or husband$ or boyfriend$ or girlfriend$)).ti,ab.
13. (sex$ adj3 (interest$ or wish$ or activ$ or behave$ or ident$ or need$)).ti,ab.
14. 9 or 10 or 11 or 12 or 13
15. 8 and 14
16. Animal or exp invertebrate/ or exp nonhuman/ or exp animal experiment/ or exp animal tissue / or exp animal model/ or exp plant/ or exp fungas
17. 15 not 16

# Appendix Two: Major Research Project

## Appendix 2.1 STROBE Reporting Checklist

| | Item No | Recommendation | Page no. |
|---|---|---|---|
| **Title and abstract** | 1 | (*a*) Indicate the study's design with a commonly used term in the title or the abstract | 53 |
| | | (*b*) Provide in the abstract an informative and balanced summary of what was done and what was found | 53 |
| **Introduction** | | | |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported | 54-57 |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | 56-57 |
| **Methods** | | | |
| Study design | 4 | Present key elements of study design early in the paper | 56-57 |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | 57-58 |
| Participants | 6 | (*a*) *Cohort study*—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up<br>*Case-control study*—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls<br>*Cross-sectional study*—Give the eligibility criteria, and the sources and methods of selection of participants | 57-58 |
| | | (*b*) *Cohort study*—For matched studies, give matching criteria and number of exposed and unexposed<br>*Case-control study*—For matched studies, give matching criteria and the number of controls per case | N/A |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable | 58-64 |
| Data sources/ measurement | 8* | For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group | 58-64 |
| Bias | 9 | Describe any efforts to address potential sources of bias | 65 |
| Study size | 10 | Explain how the study size was arrived at | 64 |

| | | | |
|---|---|---|---|
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why | 64-65 |
| Statistical methods | 12 | (*a*) Describe all statistical methods, including those used to control for confounding | 64-65 |
| | | (*b*) Describe any methods used to examine subgroups and interactions | 64-65 |
| | | (*c*) Explain how missing data were addressed | N/A |
| | | (*d*) *Cohort study*—If applicable, explain how loss to follow-up was addressed<br>*Case-control study*—If applicable, explain how matching of cases and controls was addressed<br>*Cross-sectional study*—If applicable, describe analytical methods taking account of sampling strategy | 64-65 |
| | | (*e*) Describe any sensitivity analyses | N/A |
| **Results** | | | |
| Participants | 13* | (a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed | 65-66 |
| | | (b) Give reasons for non-participation at each stage | |
| | | (c) Consider use of a flow diagram | N/A |
| Descriptive data | 14* | (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders | 65-66 |
| | | (b) Indicate number of participants with missing data for each variable of interest | N/A |
| | | (c) *Cohort study*—Summarise follow-up time (eg, average and total amount) | N/A |
| Outcome data | 15* | *Cohort study*—Report numbers of outcome events or summary measures over time | N/A |
| | | *Case-control study*—Report numbers in each exposure category, or summary measures of exposure | N/A |
| | | *Cross-sectional study*—Report numbers of outcome events or summary measures | 69 |
| Main results | 16 | (*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included | 69-76 |
| | | (*b*) Report category boundaries when continuous variables were categorized | N/A |
| | | (*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period | N/A |

|  |  |  |  |
|---|---|---|---|
| Other analyses | 17 | Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses | N/A |
| **Discussion** |  |  | 78-81 |
| Key results | 18 | Summarise key results with reference to study objectives | 78-81 |
| Limitations | 19 | Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias | 81 |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence | 78-81 |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | 81 |
| **Other information** |  |  |  |
| Funding | 22 | Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based | N/A |

Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.

## Appendix 2.2 Final Approved MRP Proposal

https://osf.io/t67wd

## Appendix 2.3 Ethical Approval Letter

16th February 2022

Dear Professor Andrew Jahoda,

**MVLS College Ethics Committee**

***Project Title: People with intellectual disabilities' views of facial attractiveness: judging faces of individuals with and without a disability.***
***Project No: 200220153***

The College Ethics Committee has reviewed your application and has agreed that there is no objection on ethical grounds to the proposed study. It is happy therefore to approve the project, subject to the following conditions:

- You should complete a DPIA.
- Project end date: As stated in the application
- The data should be held securely for a period of ten years after the completion of the research project, or for longer if specified by the research funder or sponsor, in accordance with the University's Code of Good Practice in Research: https://www.gla.ac.uk/media/media_490311_en.pdf
- The research should be carried out only on the sites, and/or with the groups defined in the application.
- Any proposed changes in the protocol should be submitted for reassessment, except when it is necessary to change the protocol to eliminate hazard to the subjects or where the

change involves only the administrative aspects of the project. The Ethics Committee should be informed of any such changes.

- You should submit a short end of study report to the Ethics Committee within 3 months of completion.
- For projects requiring the use of an online questionnaire, the University has an Online Surveys account for research. To request access, see the University's application procedure at https://www.gla.ac.uk/research/strategy/ourpolicies/useofonlinesurveystoolforresearch/.

Yours sincerely

**Jesse Dawson**

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## Appendix 2.4 – Participant Information Sheet (Easy read)

https://osf.io/xnd79

## Appendix 2.5 Participant Information Sheet

https://osf.io/b7cu9

## Appendix 2.6 Consent Form (Easy read)

https://osf.io/de5vk

## Appendix 2.7 Consent Form

https://osf.io/32qea

## Appendix 2.8 Privacy Notice (Easy read)

https://osf.io/ryzmj

## Appendix 2.9 Privacy Notice

https://osf.io/yq8gs

## Appendix 2.10 Data Protection Impact Assessment

https://osf.io/g492p

## Appendix 2.11 Semi structured ‘romantic partner’ interview

https://osf.io/47cfw