

Doctoral Thesis

This thesis is submitted to the University of Oxford in partial fulfilment of the requirements for the degree of

Doctor of Clinical Psychology (DClinPsych)

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Inclusive Marking Guidelines for Students with Specific Learning Difficulties

These guidelines are to assist examiners and assessors in marking the submissions and examination papers of students who have a specific learning difficulty (SpLD) that has been confirmed by the Disability Advisory Service (DAS). SpLD is an umbrella term that includes dyslexia, dyspraxia, attention deficit (hyperactivity) disorder or AD(H)D, dyscalculia, and dysgraphia. SpLDs are characterised by a pattern of difficulties or differences in cognitive skills. They exist on a continuum and the particular impact varies from one individual to another, but can often lead to a discrepancy between a student's verbal and written performance. An SpLD might also explain why a student has continued difficulty presenting work in a standard academic format, which is not due to lack of academic experience or knowledge, or connected to intellectual ability or effort. Common difficulties experienced by students with SpLDs can include (but are not limited to):

- Slow reading speed, word omissions and difficulty making sense of the printed word without substantial re-reading – potentially leading to misunderstanding the text and misreading or miscopying information.
- Getting ideas onto paper or expressing full understanding of ideas or vocabulary.
- Proofreading or seeing own errors in print.
- Thinking in linear patterns, with the result that work may appear disjointed.
- Ordering things sequentially and keeping place in a numerical series or passage of text.
- Poor working memory – difficulty memorising or recalling new facts, terminology, names, etc.
- Persistent or erratic problems with spelling (even with 'easy' or common words), sentence structure, punctuation or organisation of written work.
- Tendency to misinterpret or miscopy complex written or spoken instructions.
- Trouble generalising, or acquiring and applying rules.
- Slow handwriting that lacks automaticity, omits words, and is poorly constructed or illegible.

More information about the impact of SpLDs on study can be found in the DAS Staff Guide. Key recommendations for marking written work:

1. Mark positively for content, ideas and critical thinking, focussing on what the student is trying to say or argue. This can be accomplished by concentrating on understanding the point even if there are mistakes in the text. It can be helpful to first read through the work quickly to get an initial sense of the candidate's overall argument and understanding of the question, without making corrections to or comments on the grammar, punctuation or spelling, etc.

2. Wherever possible do not penalise work for:

- Short sentences that lack links with those that precede and follow.
- Long paragraphs that look like a string of undifferentiated simple sentences linked by conjunctions.

- Sentences where it is possible to see that words have been omitted or mistaken, e.g. of in place of on.
- Sentences that change direction midstream: this may be because the student has realised that the sentence requires the use of a word that they cannot spell and so needed to rephrase the sentence to avoid a spelling error.
- Apparent preference for simple words rather that the more complex academic terms. This may reflect the student's difficulties with rapid word retrieval or with spelling, rather than an unsophisticated understanding of the topic.
- Repetition of words, sentences or ideas using slightly different phrasing. This may be because the student is not certain the point has been clearly made and has made a second (or third) attempt.
- Problems with spelling, sentence structure, punctuation or organisation of written work. NB. Minor inaccuracies do not normally affect overall coherence and intelligibility of written expression. If clarity of expression and accuracy in spelling is an integral part of what is being tested, the departmental policy must be transparent to students so that they understand what is required of them and where they are likely to be penalised.
- Clumsy/illegible handwriting, which is often an indication of grapho-motor difficulties that are likely to be exacerbated under pressure

Word Count

Component	Words
Systematic Review of the Literature (SRL)	6856
Service Improvement Project (SIP)	5108
Theory-Driven Research Project (TDRP)	4898
Executive Summary	580
Connecting Narrative	922
Total	18364

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Abstracts

Systematic Review of the Literature

Communication With Siblings About Their Siblings Life-Threatening or Life-Limiting Conditions: A Narrative Review

Background: Thousands of children in the UK live with a life-limiting or life-threatening condition, with many of these having siblings. Evidence consistently shows that a child's illness and death are likely to impact all family members, including siblings, with siblings being found to have poorer psychosocial outcomes. This review aimed to consider the extent to which communication with siblings may be important, the impact this can have on the well and unwell sibling, and parental and familial outcomes. In addition, this review will explore what influences communication and the potential challenges and barriers to this process as well as reporting on the preferences of siblings and parents regarding the way they would like information to be shared.

Methods: Eight electronic databases CINAHL, Embase, Medline, PsycINFO, Global Health, PubMed, Web of Science Core Collection and Sociology Collection were searched in November 2022 and April 2024, using these search term variations: children, adolescents, siblings, communication, and life-threatening/life-limiting illness. 7371 studies were retrieved, 2710 studies were screened by title and abstract and 264 were eligible for full-text screening. The Mixed Methods Appraisal Tool was used to assess the quality of the studies. PROSPERO registration number: CRD42022332276.

Results: A total of 40 studies were included. Several different variables were found to influence the communication of illness-related information, namely, parental demographics, age and gender of sibling and the severity and type of sibling illness. Sibling, parent and

healthcare professionals' barriers to communication were also considered. Siblings wanted more information about their sibling's illness, with a preference for this to be provided by their parents over time in a developmentally appropriate way.

Conclusions: Given the reported benefits to both parents and siblings of effective communication with siblings about their sibling's condition, parents should be encouraged to communicate with siblings, with a role for health professionals to help support this.

Keywords: communication, life-threatening conditions, life-limiting conditions, siblings, narrative review, illness.

Service Improvement Project

Wellbeing in Trainee Clinical Psychologists on the University of Oxford Clinical Psychology Doctoral Course

The current literature indicates training to be a clinical psychologist can be a demanding process with the potential to experience a number of stressors. This project aimed to explore the wellbeing levels of the trainees on the Oxford Clinical Psychology Doctorate and to explore the potential barriers and facilitators in relation to wellbeing. A total of 82 trainees participated in the mixed-methods design which included a standardised self-report questionnaire, bespoke rating scales and qualitative survey responses. All qualitative data was analysed using thematic analysis. A significant negative correlation was found between the number of additional hours trainees worked and their wellbeing score. Three major themes were identified within the qualitative data: relationships, workload and diversity. A total of 40 recommendations were made to the Oxford course, in relation to these themes.

Keywords: Wellbeing, Trainee Clinical Psychologists, Workplace Wellbeing, Clinical Psychology Doctorate, Service Improvement

Theory-Driven Research Project

The Impact of Social Media Comparison on Body Dissatisfaction and Disordered Eating in an Adolescent Population

Background

Social media use among adolescents is high, however, few studies explore the links between social media, appearance comparison, body dissatisfaction and eating disorders. The Tripartite Influence model suggests body dissatisfaction is developed and maintained by three sociocultural influences: media, peers and parents, with this occurring through two mediating processes: internalisation of societal standards of appearance and social appearance comparisons. It is then hypothesised that this body dissatisfaction leads to disordered eating. This study experimentally investigates the impact of social media social comparison on body dissatisfaction and disordered eating in an adolescent population.

Methods

A repeated measures (body dissatisfaction), within (self and other social media comparison) and between (high vs. low eating disorder symptomology group) experimental groups design was used in which participants who self-reported as having high or low levels of eating disorder symptomology were asked to make comparisons of themselves and others in relation to social media images.

Results

One hundred and two UK-based females aged between 16 – 21 years old participated. Individuals with high levels of eating disorder symptomatology were found to have greater overall body dissatisfaction, and following the self and other comparison task, compared to

those with low levels of eating disorder symptomology. The overall body dissatisfaction for the whole sample was greater following a self-comparison than the other-comparisons task. Those with high levels of eating disorder symptomology experienced significantly greater body dissatisfaction following the self-comparison or the other-comparison task when compared to baseline. No significant difference in body dissatisfaction between self and other comparisons was observed. Those with low levels of ED symptomatology experienced no significant difference in body dissatisfaction following either social comparison task.

Conclusions

This study provides support for the Tripartite Influence model, suggesting adolescents with eating disorder symptomology experience greater body dissatisfaction after social media comparison compared to adolescents without eating disorder symptomology.

Keywords: *eating disorders*, *body image*, *body dissatisfaction*, *social media*, *experimental design*, *social comparison*, *Tripartite Influence Model*.

Systematic Review of the Literature

Communication With Siblings About Their Siblings Life-Threatening or Life-Limiting Conditions: A Narrative Review

Word count: 6856

Submission Date: June 2023 (updated April 2024)

Internal Supervisor: Dr Ciorsdan Anderson

External Supervisors: Dr Louise Dalton and Dr Elizabeth Rapa

Proposed Journal: BMC Paediatrics has been chosen as it covers a wide range of topics relevant to this review, namely neonates, children, adolescents and life-limiting conditions. The journal uses Vancouver reference style. Author guidelines can be found here: Systematic Review | BMC Pediatrics (biomedcentral.com)

Abstract

Background: Thousands of children in the UK live with a life-limiting or life-threatening condition, with many of these having siblings. Evidence consistently shows that a child's illness and death are likely to impact all family members, including siblings, with siblings being found to have poorer psychosocial outcomes. This review aimed to consider the extent to which communication with siblings may be important, the impact this can have on the well and unwell sibling, and parental and familial outcomes. In addition, this review will explore what influences communication and the potential challenges and barriers to this process as well as reporting on the preferences of siblings and parents regarding the way they would like information to be shared.

Methods: Eight electronic databases CINAHL, Embase, Medline, PsycINFO, Global Health, PubMed, Web of Science Core Collection and Sociology Collection were searched in November 2022 and April 2024, using these search term variations: children, adolescents, siblings, communication, and life-threatening/life-limiting illness. 7371 studies were retrieved, 2710 studies were screened by title and abstract and 264 were eligible for full-text screening. The Mixed Methods Appraisal Tool was used to assess the quality of the studies. PROSPERO registration number: CRD42022332276.

Results: A total of 40 studies were included. Several different variables were found to influence the communication of illness-related information, namely, parental demographics, age and gender of sibling and the severity and type of sibling illness. Sibling, parent and healthcare professionals' barriers to communication were also considered. Siblings wanted more information about their sibling's illness, with a preference for this to be provided by their parents over time in a developmentally appropriate way.

Conclusions: Given the reported benefits to both parents and siblings of effective communication with siblings about their sibling's condition, parents should be encouraged to communicate with siblings, with a role for health professionals to help support this.

Keywords: communication, life-threatening conditions, life-limiting conditions, siblings, narrative review, illness, paediatrics.

Background

In 2017/18 over 86 thousand children were living in the United Kingdom (UK) with a life-threatening (LTC) or life-limiting condition (LLC), with this total expected to rise by 11% by 2030 (1). An LLC can be defined as a condition where there is no hope of a cure, and the child will die. LTCs are those defined as having a potential treatment but may fail e.g. cancer (2). For the purpose of this review, LTC will include LLC.

Evidence consistently shows that the illness and death of a child are likely to have an impact on all members of the family, including siblings (3). A growing body of evidence indicates that well-siblings of children with LTCs are likely to have poorer psychosocial outcomes, e.g. emotional, behavioural, academic, peer-related, and adjustment difficulties (4, 5). Effectively communicating with children in relation to LLCs has been shown to have positive effects on the child's emotional, behavioural and health outcomes, with these positive effects extending to the parents and wider family members (6, 7). According to Piagetian-based models, a child's understanding of illness and death rapidly changes with age, starting from concrete concepts, and moving to more complex and abstract ones (8). Individual differences of siblings and parents might also be important to consider, although not specific to sibling-parent communication, evidence indicates a parent's educational and socioeconomic background as well as the child's gender and culture may influence what and how information is shared with the unwell child (7).

Despite society's view of disclosing illness to children changing over the past 70 years (9), with healthcare services now advocating family-centred ways of working, there are very few available communication theories or guidelines to support clinicians and parents to

have conversations with siblings. The Family Communication Patterns Theory (10) can be used as a framework to understand how communication styles may impact talking with siblings. The theory suggests communication between family members occurs across two dimensions: conversation and conformity orientation. Conversation orientation can be defined as "*the degree to which families create a climate in which all family members are encouraged to participate in unrestricted interaction about a wide array of topics" p.*54 (10). Families on the high end of the conversation orientation spectrum would encourage family members to regularly speak openly about various topics. Parents are likely to view regular communication with their children as an essential way to educate and socialise and as an enjoyable part of family life. For families with low conversation orientation, the opposite is said to be true. Conformity orientation can be defined as *"the degree to which family communication stresses a climate of homogeneity of attitudes, values and beliefs" p.*55 (10). Families high in conformity orientation are likely to express similar views and beliefs to each other with children being expected to agree with their parents. Families who have low conformity orientation would encourage their children to hold and express their own differing views, to be independent and involved in making decisions. These two dimensions are believed to interact with each other to create four distinct family types: 1) consensual families, high in both conversation and conformity 2) laissez-faire families, low in both, 3) pluralistic families, high in conversation but low in conformity and 4) protective families, low in conversation with high conformity (10).

In relation to guidelines, Jaaniste *et al* (11) proposed a framework to use when communicating with siblings; it suggests the focus (illness/non-illness related) and purpose (informative/emotional support) of communication are important factors, which allow the

sharing of information alongside the opportunity to provide emotional support to siblings. Additionally, Dalton and colleagues (6) developed a framework to support conversations with children about serious illness within the family, with NICE guidelines suggesting information should be age-appropriate and in line with the child's level of understanding (12). However, both are not specific to communicating with siblings.

This review will extend a series of review papers focused on communicating to children about their LLC (7) or regarding their parent's illness (6) to consider the needs of siblings when their sibling has an LLC.

Aims

This review aimed to consider the available literature which explores communication with well-siblings when their sibling has a LTC. We sought to answer the following five questions:

1. What is the evidence that communication with children about siblings LTC is important?
2. What is the impact of communication on the well-sibling and unwell-siblings' emotional, behavioural and health outcomes?
3. What is the impact of communication between well-siblings and parents on parental and familial outcomes?
4. What factors influence the process of communication and what are the barriers and challenges to communication?
5. What are the reported preferences of siblings and parents about the way diagnosis and information should be communicated?

Methods

This review was registered with PROSPERO (CRD42022332276) and conducted in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines (PRISMA) (13).

Search Strategy

All search terms were reviewed by an experienced librarian and were informed by two previous reviews exploring communication with children (6, 7) and the directory of life-limiting conditions (14). The search terms comprised a combination of the key concepts: children, adolescents, siblings, communication, and life-threatening/life-limiting illness (see Appendix A1 for full search terms). The following eight electronic databases were searched on 14/11/2022 and updated on 29/04/2024: CINAHL (1982), Embase (1974), Medline (1946), PsycINFO (1806), Global Health (1973), PubMed (1972), Web of Science Core Collection (1900) and Sociology collection (1969). See Table 1 for the inclusion and exclusion criteria.

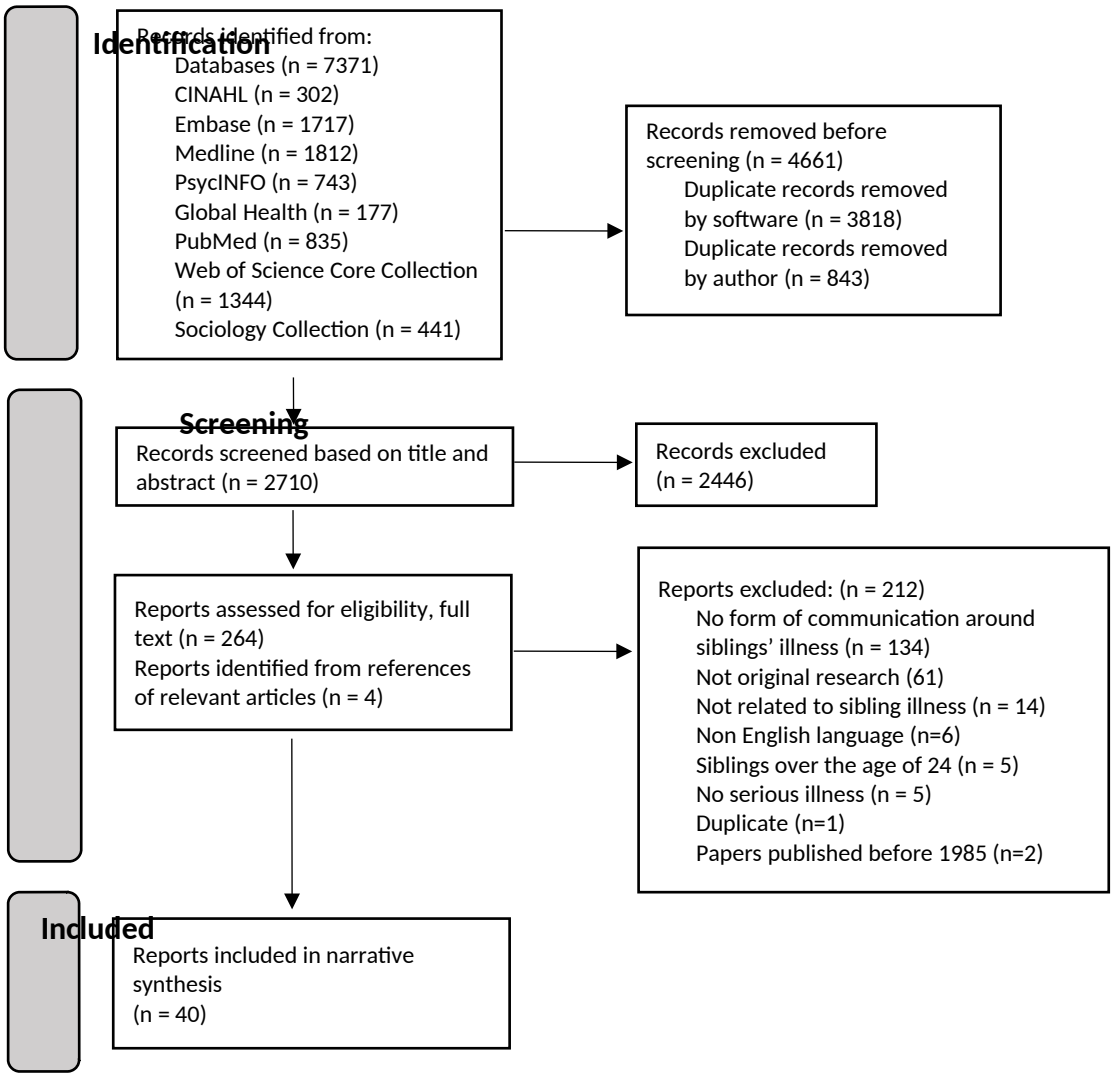
Table 1. Inclusion/Exclusion Criteria

Inclusion	**Exclusion**
Involves siblings/parents of children with a life-threatening or life-limiting illness/condition	Not original research: reviews, commentary, opinion pieces, letters, conference abstracts, dissertations, and case reports
Siblings aged 0 to 24 years old	Siblings aged 25 years old and older
Papers published between 1986 – 29/04/2024	Papers published before 1985
Qualitative, quantitative, and mixed-method studies	No form of communication around siblings' illness
Some form of communication around siblings' illness	Non-English language
Original research articles	
English language	

Search Outcome

A total of 7371 studies were retrieved from the eight databases searched, all of which were exported into Rayyan, pre-AI version (15) for processing. 4661 duplicates were detected and removed, resulting in 2710 studies being screened based on title and abstract. Additionally, 20% of studies were independently screened by author L.D (*Cohen's Kappa* = 0.814) and any disagreements were discussed and resolved. A total of 2446 studies were removed at this stage, meaning 264 were eligible for full-text screening. At this stage, 25% of studies were independently reviewed by author L.D (*Cohen's Kappa* = 0.818), again with any disagreements resolved. A further four papers were identified from reference lists of relevant articles. A total of 40 studies were included in this narrative review. See PRISMA flow diagram, Figure 1.

Figure 1. PRISMA Flow Chart



Data Extraction

The following data was extracted from the studies which met the inclusion criteria; year, lead author, study design, number of participants, type of participant, age range, sibling diagnosis, recruitment, method, measures, how communication was assessed, key results specifically on communication, setting and location (see Table 3 for full data

extraction). 50% of the data extraction process was independently duplicated by author E.R, with any discrepancies being discussed and resolved.

Due to the significant variation in the methodologies of papers included in this review, a narrative synthesis was conducted. Key findings of each paper were reviewed and then organised according to how each one answered the following five questions: 1) evidence that communication with children about sibling LTC is important, 2) impact of communication on the well-sibling and unwell-siblings' emotional, behavioural and health outcomes, 3) impact of communication between well-siblings and parents on parental and familial outcomes, 4) factors that influence the process of communication and what are the barriers and challenges to communication and 5) reported preferences of siblings and parents about the way diagnosis and information should be communicated. All authors reviewed the group organisation of all papers.

Quality Analysis

The Mixed Methods Appraisal Tool (MMAT) (16) was used to assess the quality of the studies. The MMAT enables the appraisal of both qualitative and quantitative studies as well as mixed-method designs. Each study was scored against two screening questions (1) clarity of research question, 2) method of data collection which enables testing of research questions, and with a further five criteria ratings depending on the study's design. Ratings included "Yes", "No" and "Can't Tell" (see below table 3 for more detail). 45% of studies were double-rated by author E.R (*Cohen's Kappa* = 0.857) and any disagreements were discussed and resolved. The quality of studies ranged from * (1 out of 5 criteria met) - *****

(5 out of 5 criteria met), as seen in Table 2. To ensure the review was representative of available literature, no studies were removed due to their quality rating. 28 papers scored 5 stars, six scored 4 stars, five scored 2 and one scored 0.

Table 2. Mixed Methods Appraisal Tool (MMAT) Scoring for Each Study (16)

Lead Author	Year	Study Design	Criteria							Overall Rating
			S/Q 1	S/Q 2	1	2	3	4	5	
Birenbaum, L	1989	4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Evans, C. A	1992	5	Yes	Yes	No	No	No	No	No	-
Kleiber, C	1995	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Wang, R-H	1996	5	Yes	Yes	No	Yes	Yes	Yes	Yes	****
Stallard, P	1997	5	Yes	Yes	No	Yes	Yes	No	No	**
Bettoli-Vaughan, E	1998	3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Akobeng, A.K	1999	1	Yes	Yes	Yes	Yes	No	C/T	C/T	**
Nehring, W.M	2000	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Freeman, K	2003	4	Yes	Yes	C/T	Yes	Yes	C/T	C/T	**
Sidhu, R	2005	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Dighe,M	2008	1	Yes	Yes	Yes	Yes	No	No	No	**
Fanos, J.H	2009	1	Yes	Yes	Yes	Yes	C/T	Yes	Yes	****
Hames, A	2009	1	Yes	Yes	Yes	Yes	No	No	C/T	**
Graff, J.C	2010	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Plumridge, G	2010	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Plumridge, G	2011	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Graff, J.C	2012	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Prchal, A	2012	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Redshaw, S	2012	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Price, J	2013	1	Yes	Yes	Yes	Yes	Yes	No	Yes	****
Steele, A.C	2013	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Okashah, R	2015	5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Rosenberg, A. R	2015	4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Lovgren, M	2018	4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Sarkar, S	2018	1	Yes	Yes	Yes	C/T	Yes	Yes	Yes	****
Van Schoors, M	2019	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Lovgren, M	2020	4	Yes	Yes	Yes	Yes	Yes	C/T	Yes	****
Pieper, E	2020	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Milo, F	2021	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Deakin, H	2022	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Eklund, R	2022	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Iveus, K	2022	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****

Jaaniste, T	2022	4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Kaneko, M	2022	4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Rinaldo, C	2022	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Turnwald, A	2022	5	Yes	Yes	Yes	Yes	Yes	Yes	No	****
Boyer, A	2022	4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Larson, C	2023	4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Ayoub, M	2024	5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****
Butler, A	2024	1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	*****

Note: Study design 1 = Qualitative, 2 = Quantitative randomized controlled trials, 3 = Quantitative nonrandomized, 4 = Quantitative descriptive and 5 = Mixed methods. C/T = "can't tell".

*Overall rating: * = 1 out of 5 criteria met, ** = 2 out of 5 criteria met, *** = 3 out of 5 criteria met, **** = 4 out of 5 criteria met, ***** = 5 out of 5 criteria met.*

S/Q 1 = screening question "Are there clear research questions?"

S/Q 2 = screening question "Do the collected data allow to address the research questions?"

Criteria 1,2,3,4 and 5 varied depending on the study design, see Hong QN (16) for more details.

Qualitative study designs (1) are assessed using criteria 1.1 – 1.5, "1.1. Is the qualitative approach appropriate to answer the research question?,1.2. Are the qualitative data collection methods adequate to address the research question?, 1.3. Are the findings adequately derived from the data?, 1.4. Is the interpretation of results sufficiently substantiated by data?, 1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?".

Quantitative nonrandomized study designs (3) are assessed using criteria 3.1 – 3.5, "3.1. Are the participants representative of the target population?, 3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?, 3.3. Are there complete outcome data?, 3.4. Are the confounders accounted for in the design and analysis?, 3.5. During the study period, is the intervention administered (or exposure occurred) as intended?".

Quantitative descriptive study designs (4) are assessed using criteria 4.1 – 4.5, "4.1. Is the sampling strategy relevant to address the research question?, 4.2. Is the sample representative of the target population?, 4.3. Are the measurements appropriate?, 4.4. Is the risk of nonresponse bias low?, 4.5. Is the statistical analysis appropriate to answer the research question?".

Mixed methods study designs (5) are assessed using criteria 5.1 – 5.5, "5.1. Is there an adequate rationale for using a mixed methods design to address the research question?, 5.2. Are the different components of the study effectively integrated to answer the research question?, 5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?, 5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?, 5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?".

Table 3. Summary of Studies Included in the Review

Lead Author, Year, Country	Study Design	Population N	Type of Participant	Age Range (mean, SD)	Sibling Diagnosis	Methods of Recruitment	Method and Measures	How was communication assessed?	Results related to communication
Birenbaum, L. K., 1989, USA	QT	37 families, 61 healthy siblings	Healthy siblings and parents	Healthy siblings: 4-17 Parents: not reported	Cancer	Families accessing private care and major medical health centres	Longitudinal: 4 data points were collected 2 weeks before the death of sibling, two weeks after death, 4 months after and 12 months post-death. Questionnaires: CBCL,PSCM	PSCM	2 weeks before death: parent-sibling communication was positively correlated to social competence. At 2 weeks, 4 months and 12 months after death: parent-sibling communication was negatively correlated with total behavioural problems and external behaviour problems. At 4 months post-death: parent-sibling communication was negatively correlated with internal behaviour problems.
Evans, C.A, 1992, UK	MM	16 siblings, 16 parents	Healthy siblings	Siblings: 6-15 (10.9) Parents: not reported	Cancer	Families who attend children's hospital	Questionnaires: CBCL, PQ, SQ, FSHQ, SIQ, PIQ Two open-ended questions	PQ, SQ	Sibling social competence and behavioural difficulties not related to what the sibling knew and what the parents thought the sibling knew. No correlation between sibling knowledge of the illness and siblings' behavioural difficulties. Siblings' knowledge of illness was associated with high social competence. Siblings frequently think about their sibling's illness which made them feel sad. 25% of siblings said they could speak with their parents and 56% reported being able to talk to someone about the illness. Siblings wanted to know more/facts about their sibling's illness, how the illness would affect them, how to ask more questions about the illness and what would happen to their sibling. Most wanted to be told this by their parents (69%) or by professionals (19%). Most parents told the siblings the truth about the illness and reported talking openly about it. Siblings spoke with their mothers (37%), father (19%), both (37%) and others (25%). Parents were not always able to spend enough time with the unaffected sibling since sibling's diagnosis, leading to parents feeling frustrated, guilty and sad.
Kleiber, C, 1995, USA	QL	14 parents (7 mothers, 7 fathers), 12 siblings	Parents and healthy siblings	Parents: 27-38 Healthy siblings: 5-12 (8) Affected sibling: 0-16	Premature birth, spina bifida, septicaemia, head injury, cancer, congenital heart disease	Paediatric and neonatal intensive care units	Semi-structured interviews	Interviews	The physical appearance of their sibling and hospital equipment/policies were most commonly communicated. Parents told siblings what they could expect when their sibling came home (increased care needs), this theme was not present in the sibling data. Half of parents withheld some information from the sibling, typically the prognosis that their sibling may die or have physical or mental health difficulties or when things were going wrong, fearing this information may cause the sibling to form a negative view of their affected sibling. Other parents reported telling the siblings everything. Most parents reported they felt "*fine*" or "*good*" sharing information with siblings, some queried whether the sibling was old enough to understand and questioned their abilities to share this information, stating it may be better for someone else to talk to the sibling. Siblings reported feeling sad when they were told about their sibling.

									Parents stated siblings asked questions about the hospital situation and the expected outcome for their sibling. Parents stated they felt the sibling should have more information regarding the sibling's illness and that the child was getting the best care available. Most siblings stated they wanted to know "nothing" else, a few wanted more information about why the sibling needed hospital care and when they might be able to come home. Parents reported information, visiting the hospital, distractions, help from family and having the family together had been helpful for the sibling.
Wang, R-H, 1996, China	MM	Timepoint 1: 45 families (45 siblings, 19 females, 26 males), Timepoint 2 - 12 months later: 30 families (30 siblings, 15 females/males)	Parents and healthy siblings	Healthy siblings: 7-16, Parents: 25-64	Cancer	Families accessing paediatric oncology treatment centres	Longitudinal Semi-structured interviews/questionnaires: PHSCS, CBCL, FES	Interviews	Three themes were reported during interviews "*1) inadequate knowledge, manifested in fear of contagion, 2) reduced communication, 3) insufficient family support*". Timepoint 1: 28% of siblings thought cancer was contagious/hereditary, Timepoint 2: 16% thought the same. 5 siblings were unaware of their sibling's cancer. 60% of siblings reported they had not spoken to their parents or siblings about the cancer. Parents reported the siblings were too young to understand, they themselves did not like talking about the cancer, there was no time and parents did not want their children to know. Many parents stated they had spoken to the sibling, with these conversations being focused on the cancer progression.
Stallard, P, 1997, UK	MM	52 (27 females, 25 males)	Healthy siblings	5-19	Life-threatening conditions	Children living in the area (Bath), population sample	Semi-structured interviews / Questionnaires: SPQ, SQ, RBQ Child Scale A	Interviews, SPQ, SQ,	Siblings with a more recent diagnosis felt less able to talk with their parents (about school and general life), with no difference in the amount or type of information that siblings wanted. Younger children reported being less able to talk to other adults and friends, scoring lower on the communication subscale. 38% of siblings felt able to talk to their parents about their sibling's illness, 42% were able to talk to others, 24% with friends, 14% with grandparents and 4% with other siblings. 48% said they had no one to talk to about their sibling's illness. Many siblings wanted to know more about their sibling's illness and wanted this information to be provided by parents. Boys and younger children felt less able to talk to their parents and others. Siblings of children with greater functional impairment wanted to know more about their sibling's illness.
Bettoli-Vaughan, E, 1998, USA	QL	57 healthy siblings and 57 mothers	Healthy siblings and mothers	Healthy siblings: 5-17 (9.85) Parents: not reported	HIV	General paediatric and paediatric infectious disease clinic	Structured interviews and questionnaires: CBC, Vineland-ABS, FRS, FSS, SCL-90-R	Interviews	27% of healthy siblings had been told by their mothers about their sibling's HIV diagnosis. Siblings knowing about the HIV diagnosis did not impact sibling adjustment or adaptive behaviour.
Akobeng, A.K, 1999, UK	QL	20 parents, 7 siblings	Parents and healthy siblings	Parents: not reported Healthy siblings: 7-17	Inflammatory bowel disease	Paediatric Gastroenterology team	Focus groups	Focus groups	57% of siblings felt their parents were being secretive about their sibling's illness and had tried not to tell them. Siblings felt they were not fully informed.
Nehring, W.M, 2000, USA	QL	9 Biological mothers, 11 foster mothers	Mothers	Biological mothers: 21-39 (29.6), Foster mothers: 30-63 (48.8)	HIV	Paediatric HIV clinic	Semi-structured interviews	Interviews	The decision regarding what to tell the sibling was considered according to the child's developmental level. Siblings were noted to respond initially negatively about the diagnosis due to concerns their friends might reject them.
Freeman, K, 2003, USA	QT	87 families: 25 affected siblings, 46 healthy siblings, 87 parents	Parents, affected sibling, healthy siblings	Parents: not reported Affected sibling: 9-23 (15, 4.1) Healthy siblings: 9-30 (17, 5.5)	Brain tumour	Community, medical centres, brain tumour charities and organisations, support groups,	Survey	Survey	During the diagnosis stage, 39% of siblings reported an issue with the information they received about caused of tumour, 56% had issues with the way the doctors told them, 35% with the information they received from the hospital and, 33% with the way their parents gave them information. During the phase of hospitalisation/ surgery, 42% of siblings reported a lack of information about the prognosis. 35% stated there were issues with the information they received about their sibling's treatment post-hospital discharge/further treatment. 43% reported they lacked information during the last stages around the process of their sibling's death.

						newsletters, websites			
Sidhu, R, 2005, Australia	QL	8 families: 8 mothers and 1 father	Parents	Parents: not reported Healthy siblings: 4-16 Affected siblings: 6-12	Cancer	Parents whose children attended children's oncology hospital	Focus groups	Focus groups	Three themes reported "*Universality of Losses Arising From the Illness Experience, Behavioural Challenges and Adaptation, Parent-Sibling Communication*". All parents reported the amount and type of information they disclosed to the sibling differed depending on the child's age and personality but where possible this was communicated in a positive manner. Two parents stated their child had misinterpreted information provided (thought they were the cause of the illness). Parents noted trust and open communication as being important, and as the illness was noticeable it was difficult to hide from other siblings. Some parents reported they had discussed the potential death of their sibling. Parents reported a helpful intervention would be for staff to be available in the hospital to clarify information for siblings or attend a sibling camp.
Dighe, M, 2008, India	QL	20	Parents	Parents: not reported Affected siblings: 3-17	Terminal Cancer	Palliative Paediatric cancer clinic	Semi-structured interviews	Interviews	Siblings are often not informed of their sibling's diagnosis. Older siblings more likely to be informed due to caring and financial needs. Parents are reluctant to disclose or talk about cancer to the unwell child, despite feeling the child is aware.
Fanos, J., 2009, Lebanon	QL	14 (12 females, 2 males)	Healthy siblings	Healthy siblings: 16-27	Unknown - NICU Care required	Letters mailed to parents of children who died in Neonatal intensive care unit between 1980-1990	Semi-structured interviews	Interviews	6 siblings reported difficult family communication, noting the family kept things secret. Siblings born after the death of their siblings found it harder to receive information about what happened to their sibling, they relied on their parents to tell them. Siblings felt parents did not share information as a means of protecting the sibling, siblings noted they found this unhelpful. Some reported finding story books helpful. Siblings stated they tended to not talk to their other siblings about the death and process the situation independently. Some reported their families still don't talk about their sibling's death, with them now discussing this with other important people (partners) in their lives. Photos of sibling and keepsakes facilitated conversations between siblings and parents throughout their childhood.
Hames, A, 2009, UK	QL	25 families, 14 siblings (9 females, 5 males)	Healthy siblings and parents	Healthy Siblings: 8-26 Parents: not reported	Epilepsy	Paediatric neurology and epilepsy clinics	Surveys and written accounts	Written accounts, surveys	None of the families had received any specific information to provide to siblings. All would have been happy to receive some. Two siblings reported having information about their sibling's epilepsy reduced their own anxiety.
Plumridge, G, 2010, UK	QL	11 parents, 2 affected siblings, 6 siblings	Parents, Healthy siblings, Affected siblings	Children: 12-14 Parents: not reported	Duchenne Muscular Dystrophy	Voluntary and NHS support groups	Semi-structured interviews	Interviews	Parents thought it was their responsibility to tell their children. Mothers were considered to be the parent who provided the most information. Siblings were more likely to receive more information about DMD (including life expectancy) than the affected sibling. Older siblings had been provided with information at a younger age when compared to the affected sibling. Parents did not always go into detail about the condition and rarely discussed genetic or heredity information, despite parents stating the sibling had been told "everything". Conversations focused on the current situation and the practicalities of DMD. All families thought carriers should be aware of their status/genetic risk but only one parent thought this was information that should be provided to younger children. Parents felt their children wouldn't understand this information until they were teenagers. One sister was informed about their potential genetic risks, all the others had either not been told or would only be told when they were 16 years old. Siblings were aware they could openly ask questions about DMD to their parents, but they were not allowed to talk to, leave information around or involve the affected sibling (or younger siblings) in these conversations. Parents had informed siblings of their views in relation to what information they were able to share with their sibling, resulting in it being harder for siblings to have conversations with their affected sibling. Siblings thought the affected child should be provided with more information about their condition.
Graff, J.C, 2010, USA	QL	16 (14 mothers, 1 grandmother, 1 father)	Parents	Parents: 26-60 (40.6) Affected siblings: 2-17 (10.4)	Sickle cell disease	Families receiving support from	Focus groups	Focus groups	Parents supported siblings to learn about SCD by encouraging them to attend hospital and treatment appointments. Parents considered sharing information with siblings from the age of 8 years. Parents noted that siblings also learnt about SCD by asking questions, observing siblings, attending appointments and

					paediatric sickle cell centre			visiting the hospital, playing computer games about SCD, and spending time with extended family. Parents reported sometimes feeling frustrated by the questions siblings may ask but would always attempt to provide an answer. Returning from hospital appointments was an opportunity parents took to have conversations about SCD with siblings.
Plumridge, QL G, 2011, UK	33 families: 52 parents (34 females, 18 male), 44 children and young people (20 females, 24 males) - (24 siblings)	Parents, affected sibling, healthy siblings	Parents: not reported Children and young people: 8-18+	Cystic fibrosis, Duchenne Muscular Dystrophy, Familial Adenomatous Polyposis, Haemoglobinopathies, Huntington's Disease, Neurofibromatosis	Voluntary and NHS support groups	Semi-structured interviews	Interviews	Four themes were identified: "*Parents Talking to Siblings About the Genetic Condition*, *Understanding of Genetic Risk and Information Given by Parents*, *Emotional and Behavioural Outcomes for Siblings*, *The Importance of Family Communication for Siblings*". All children wanted to have access to information at a young age, at the point where they could notice the impact that the illness was having on the family. Children suggested the sharing of information should occur throughout their childhood with the aim of supporting continued understanding. No interviewees expressed any regret with any information that had been shared previously. Differences in the information parents shared with affected and unaffected children were observed. Siblings were more likely to be told more compared to their siblings with DMD. For all other conditions, siblings were told less. Siblings where they sibling had CF, HbO and NF were less likely to be told (compared to the affected child) about the genetic risks for themselves including carrier risk and reproduction. Parents noted this was because they thought the siblings knew this information rather than not disclosing the information on purpose. However, siblings reported not remembering when their sibling was diagnosed. They confirmed they were aware of the symptoms and daily impact of the condition, but this did not aid their understanding of the genetic risk to themselves or the prognosis of their sibling's condition. During the interviews, some parents became aware they may not have shared all the information with the sibling and that the siblings may know less than they had thought. Parents were surprised they had not realised this. Parents noted they would actively not share information with siblings about genetic/hereditary risk unless the sibling asked. Some parents thought the sibling did not need to know this information unless they were old enough to have a sexual relationship or make reproductive decisions. Parents noted they had not provided reassurance to siblings who had no genetic risk or developing the condition themselves. In a few families where the sibling had CF or NF, parents had attempted to have discussions with the sibling, but they declined to discuss it further. DMD families show different communication patterns: they discussed the condition more with the unaffected sibling, including information about life-expectancy of their sibling (not about genetic risks). As this was a family secret siblings tended not to speak to their sibling about the condition due to fears of sharing this secret. Genetic risk information was understood at different developmental stages for siblings. Around age 8 siblings showed some understanding of the heritability of the condition ("passes down"), ages 8-11 good understanding of the illness's impact on daily life but were not clearly able to explain the heritability of the condition and their genetic risk until the ages of 15-16+. Two siblings aged 15 (DMD) were not aware of their genetic risks. Some siblings, around 16 years old (CF, HbO), became aware of their own genetic risks when they were tested or became aware due to external sources (school, internet, support groups).The focus of family communication tends to be on daily impacts and less on genetic/hereditary risks. Siblings at genetic risk were unaware of this risk within the general population, unsure how likely they would be to meet a partner also at risk. Some siblings who had been genetically tested were unsure why this had occurred. Siblings tend not to talk to each other about the genetic risks of the condition. Siblings were more likely to be resentful of their sibling or withdraw from them and report being uncertain about the condition if the sibling's condition was not freely discussed within the family. Siblings where communication within the family was freely available, still stated they were uncertain about things, but they were able to be understanding towards their sibling and were more aware of their role within the family. Discussed issues with siblings were noted by some to change the sibling's behaviour towards their

									parents and affected sibling. Some siblings who were aware of the potential genetic risks for themselves chose not to focus on this as they were unable to change their genetics. Some siblings described giving their sibling more attention due to their understanding of the condition. Some siblings avoided discussion regarding their worries about themselves or their children developing the condition due to not wanting to upset their parents. Despite being told about their negative genetic status some siblings (NF, HD) were still unsure about this and would have valued additional conversations around this. Discussions with wider family members or peers tended not to occur due to concerns they would not understand. Most families noted limited access to support for siblings through health and social services. HbO and HD families noted siblings access support groups. Parents were aware they were able to spend less time with the unaffected sibling which meant they could spend less time communicating with and supporting this child.
Graff, J.C, 2012, USA	QL	12 families: 11 affected adolescents (5 females, 6 males), 11 siblings (5 females, 6 males), 12 parents (12 females)	Affected siblings, healthy siblings and parents	Affected siblings: 12-18 (14.09,2.12) Healthy siblings: 10-15 (12.91, 1.81) Parents: 31-58 (42.42,8.3)	Sickle cell disease	Families receiving support from paediatric sickle cell centre	Separate focus groups including affected adolescents, siblings and parents	Focus groups	Siblings will talk to their parents when they want to know more about sickle cell, when their sibling is unwell or when they notice their sibling can't join in with the "*typical*" activities for their age. Siblings noted depending on what their question was this would dictate whom they asked (parent or sibling). Parents noted talking to the sibling when the affected child was unwell, to provide diagnosis or genetic information or when the siblings asked a direct question. Siblings reported learning more about sickle cell by overhearing their parents having conversations with others about sickle cell.
Redshaw, S, 2012, Australia	QL	17 families: 17 mothers, 1 father, 3 siblings (1 female, 2 male)	Parents, healthy siblings	Healthy siblings: 4-15 Parents: not reported	Congenital heart condition	Children's hospital - Heart Beads programme	Structured Interviews	Interviews	Two themes were found: *"touching and explaining" and "collecting the beads to include a sibling".* The beads provided opportunities for siblings to be involved, to ask questions about their sibling and CHD, parents to provide information and allow the expression of jealousy from the unaffected child. The process was noted to be fun and manageable for siblings.
Prchal, A, 2012, Switzerland	QL	7 (5 females, 2 males)	Healthy Siblings	Healthy Siblings: 11-18 Affected siblings: 11-18	Cancer	Children's hospital	Semi-structured interviews	Interviews	Siblings reported clinical staff were open to providing them with information about their sibling. Siblings noted they would often have to answer questions from their friends and teachers regarding their siblings' cancer, leading some to feel uncomfortable. Siblings noted positive aspects when talking to their peers about the illness. Siblings reported their sibling's illness was often a constant topic of conversation within their family, and while they valued being informed, they noted being tired of talking about nothing else.
Price, J, 2013, UK	QL	35	Health and social care professionals	Not reported	Terminal Illness	Staff working in children's palliative care services	Focus groups	Focus groups	"*Truth-telling*" was the highest-ranked issue for professionals. Parents often didn't want to tell their child (including siblings) about their potential death. Professionals felt telling the truth was also the best approach, often resulting in tension between parents and professionals. Professionals reported finding it difficult to know how to support siblings before and after the death of their sibling. Sibling interventions included art therapy, storytelling and providing information regarding the current situation. Professionals noted their role in supporting parents to support siblings, recognising parents often felt guilty about the lack of time they could provide. Service development recommendation - increasing sibling support.
Steele, A.C, 2013, USA & Canada	QL	40 families: 36 mothers, 25 fathers, 39 siblings (25 females, 14 males)	Parents and bereaved siblings	Parents: Mothers (40.5, 7.4) fathers (43.9, 7.8) Healthy siblings: (12.3, 5.3)	Cancer	Cancer register	Semi-structured interviews	Interviews	Five themes reported "*1) improved communication with the medical team, 2) more compassionate care, 3) increased access to resources, 4) ongoing research, 5) offering praise for the medical team, hospital, and research*". Parents noted that siblings should be involved in conversations throughout their sibling's illness. Siblings wanted medical staff to communicate with them in an age-appropriate way. Support groups for siblings may be helpful.
Okashah, R, 2015, USA	MM	28 families: 28 parents (25 mothers, 3 fathers), 23 siblings (19 females, 4 males)	Healthy siblings and parents	Healthy siblings: 12-16 Parents: not reported	22q11.2 Deletion syndrome	Families from local and international support groups	Surveys	Surveys	96% of parents reported sharing information about 22q11.2 DS to the unaffected siblings. 34.3% indicated sharing information 1 or 2 times a month, 34.3% a few times per year. 57.1% shared information over time: 94.1% shared information as issues arose and 60% when siblings asked. 91.8% of parents supported siblings to learn about the condition by watching their siblings and 20% supported siblings to search online. A high percentage of parents had shared information related to medical concerns/treatment and behavioural differences but fewer parents shared information about the genetics of 22q11.2 DS (including

								inheritance and reproductive risks). 41.7% discussed with siblings about the potential future care needs of the affected child. Parents reported finding books/leaflets (n=13) helpful/would have helped share information with unaffected siblings, internet resources (n=13), support groups (n=8) and health care professionals (n=3). 87% of unaffected siblings first found out about the syndrome from their parents. Siblings reported the frequency of discussions occurring: daily (13%), 1/2 times a week (21.7%), 1/2 times a month (17.4%), every other month/few times a year (34.8%), and almost never (13%). 84% of siblings reported they had attended support groups.
Rosenberg, A.R, 2015, USA	QT	46 families, 58 siblings (40 females, 18 males)	Bereaved siblings	Bereaved siblings: time of survey: 18-46 (25.6,7.8), time of sibling death 1-31 (13.8,7.3), time of diagnosis 0-23 (10.9, 6.2)	Cancer	Children's Cancer Clinic - Siblings whose parents had participated in previous research	Adapted SBS	Adapted SBS	Out of 51 siblings, 41 said they had been satisfied with the information they received from their parents during the final month of their siblings' life. 10 siblings said they weren't satisfied with the information provided by their parents. Out of 43 siblings, 32 said they had been satisfied with the information they received from healthcare staff during the final month of their siblings' life. 11 siblings said they weren't satisfied with the information provided by healthcare staff. The siblings who were unsatisfied with the information provided by parents and healthcare staff had higher psychological distress scores and lower social support scores.
Lovgren, M, 2018, Sweden	QT	174 (101 females, 73 males)	Bereaved siblings	12-15 (18, 3.7) at the time of sibling death, 19-33 (24, 3.8) at time of survey	Cancer	Contacted from childhood cancer register or population register	Surveys and questionnaire: HADS	Survey	Siblings who reported being dissatisfied with the information they received about their sibling's illness were found to be at a higher risk for unresolved grief. This risk was present for siblings who had avoided talking to clinical professionals about their sibling's illness due to fears of what they might tell them. The risk of unresolved grief was noted to be higher for siblings who were informed 24 hours before the death of their sibling. Additionally, siblings who wanted to talk more about the death of their sibling were more likely to experience unresolved grief compared to those children who talked less.
Sarkar, S, 2018, India	QL	11 females	Mothers	Caregivers (30 +/- 5 yrs), Affected children: 5+	HIV/AIDS	HIV clinics	Semi-structured interviews	Interviews	Only one of the 11 affected children knew about their HIV status, the remaining had been told they have an illness. No siblings had been told due to mothers' fears that the affected child would be discriminated against.
Van Schoors, M, 2019, Belgium	QL	10: 3 females, 7 males	Healthy siblings	Healthy Siblings: 10-16 Affected siblings: 3-16	Blood Cancer	Families part of wider cancer study	Semi-structured interviews	Interviews	Two main themes *"Continuity Within Family Life and Beyond the Familiar: Facing Illness-Related Challenges"*. Siblings preferred to talk to their mothers for emotional support and for someone to talk to whereas they reported that their fathers were a source of distraction and fun. Siblings found it hard to talk about their sibling's diagnosis. They noted three things 1) they wanted answers to their questions from either their parents or health care staff, 2) they wanted their parents to make time to talk about the illness and its impacts (some did not want to talk about the illness), 3) siblings considered what information needs to be shared within the family (dependant of parental workload and capabilities). Siblings reported they did not need all the information however they wanted short and up-to-date information about their sibling and their illness. Some siblings did not communicate how they were feeling to their parents or siblings due to fearing they would upset others.
Lövgren, M, 2020, Sweden	QT	27 families: 53 parents (29 females, 24 males), 27 affected children (15 females, 12 males), 38 siblings (20 females, 18 males)	Healthy siblings, affected siblings, parents	Parents: 34-65 (45,6.4) Affected siblings: 1-17 (10, 4.1) Healthy siblings: 3-24 (12,5.2)	Cancer	Paediatric cancer clinic	Survey and questionnaire: FACES IV	FACES IV, Survey	44% of parents reported they had received enough information regarding support for the sibling. All siblings had been told about their sibling's illness and were happy to speak to anyone within their family about it. 45% wanted to know more about the illness. 12% had questions they had not asked their family. 79% of siblings said they had received enough information about their sibling's treatment. Siblings rated several topics as wanting more information or had not received any information: siblings' prognosis, how cancer could affect siblings' physical health and psychological health, knowing whom to ask questions about their sibling's care and what support they could receive themselves. Siblings reported that sometimes they don't say anything to a clinical professional due to the perception that what they say will be interpreted negatively. FACE-IV: Siblings' mean score was 36.6 indicating moderate family communication. Siblings rated family members talking to each other as most important. Percentages of

									siblings that agreed they had thoughts and feelings they don't want to share with other family members (51%), concerned about someone in their family (64%), can show someone in their family how they feel (84%), want to show how they feel more to someone in their family (24%).
Pieper, E, 2020, Australia	QL	6 families: 4 siblings (1 female, 3 males) and 3 parents (2 mothers, 1 father)	Healthy siblings and parents	Healthy siblings: 16-15 Parents: not reported	Spinal Muscular Atrophy	Population sample	Semi-structured interviews	Interviews	Siblings reported becoming aware of SMA around the ages of 6-7, typically after asking questions about why their sibling was different or needed to use a wheelchair. Around the ages of 8-13 years old, siblings reported speaking briefly about the inheritance of SMA. Siblings reported no ongoing conversations about the genetic risks for themselves. Siblings learned about SMA over an extended period from various resources. Communication with siblings often occurs in the context of significant life events. One sibling stated their parents had provided age-appropriate information, and two had received genetic counselling, with a focus on their genetic risks and reproduction options. Siblings valued family discussions about SMA. They noted this could be a difficult emotional experience. Around the ages of 16-22 siblings became aware of the severity/outcome of SMA, generating feelings of anticipatory grief, devastation and helplessness but strengthening their relationship with their sibling. Due to the severity of SMA, siblings found it difficult to talk to their parents due to fears of upsetting their parents resulting in some siblings seeking information online, one noted this may have caused incorrect knowledge about SMA. All parents had not yet told the unaffected siblings about their sibling's SMA due to feeling they were too young to understand (3-7 years). All parents intended to start conversations with the unaffected sibling around the age of 6, focusing on the causes of SMA and then focusing on the genetic risks between the ages of 8-14 years. Parents wanted to share information with the unaffected sibling over time, in an open and age/maturity-appropriate way. Parents wanted to consider the language they would use, one parent stated they would not use the word "*disease*" due to concerns that this word is difficult to understand. Parents reported having to consider protecting their children whilst also informing them. One parent expected it would be difficult to have the conversation regarding their sibling's life expectancy as they didn't want to scare the unaffected sibling. Most siblings and parents had attended sibling support days. Participants reported they wanted the awareness of SMA to be greater in the general population, with the hope that this would aid families to access greater social support. Participants suggested additional psychosocial support for siblings with SMA, age-appropriate communication aids and additional support from healthcare professionals.
Milo, F, 2021, Italy	QL	8 (6 females, 2 males)	Healthy siblings	14-35 (20.9)	Cystic fibrosis	Paediatric hospital	Siblings attended 6 group sessions, given info about CF and then focus group to talk about their experiences of growing up with sibling with CF	Focus groups	The illness changed the communication within the family. Siblings reported that families didn't talk about the potential death of the sibling. Siblings described a lack of communication and found sharing their feelings and emotions difficult. Siblings demonstrated a high level of disease-related knowledge but avoided the emotions generated by thinking about their sibling's illness. Siblings tended to keep their sibling's illness a secret, so they didn't have to think or talk about it, this helped compartmentalise and continued sense of normality.
Deakin, H, 2022, UK	QL	10 (6 females, 4 males)	Patients with perinatally acquired HIV	PHIV+ Siblings 17-23 HIV- Siblings 10-34	Perinatally acquired HIV	Children's hospital	Individual semi-structured interviews	Interviews	Most siblings were aware of diagnosis, some had been informed by family members, with the PHIV+ siblings being unaware that they were being told, loss of power and frustration experienced. Helpful to have another sibling who was PHIV+ enabled shared experiences. Communication between siblings about PHIV+ was very limited, often not discussed as a family. Information directly related e.g. medication and appointments discussed. Often the term PHIV+ was not used. Greater communication between siblings when first informed of the diagnosis and when sibling is unwell. Secrecy of diagnosis noted.
Eklund, R, 2022,	QL	19 children (11 females, 8 males)	Affected siblings	Survey respondents 6-17	Cancer	Paediatric cancer clinics	Surveys and semi-structured	Interviews, Surveys	Most children reported the intervention was beneficial and was offered at the "right time", they reported feeling listened to and understood by the clinicians, communication and understanding between family

Sweden		answered survey, 16 children were interviewed (7 females, 4 males)		(mean 10.1) Interview participants: 8-17 (mean 10.8)			interviews		members. Increased sibling communication was noted during and after intervention. Children reported it could be difficult for all voices to be heard during family meetings.
Iveus, K, 2022, Sweden	QL	28 siblings answered the survey, 28 were interviewed	Healthy Siblings	6-24 (11)	Cancer	Paediatric cancer clinic	Surveys and semi-structured interviews	Interviews, Surveys	Most siblings reported finding the intervention helpful and would recommend it to other families, most stated the number and length of sessions was good. 14% of children aged 8-12 and 46% aged 13+ reported they found it easier to talk to their sibling post-intervention. 86% of children aged 8-12 and 46% aged 13+ reported they found it did not change their communication with their siblings. Siblings stated it was nice to be able to talk to someone outside of their family and without their parents present, although some found it trickier to be at the centre of the conversation. Siblings noted their knowledge of the illness increased during and after the intervention. Additionally, they valued their parents also receiving more information about the illness. Siblings noted that they could relate their needs to their sibling's needs. Siblings reported having an increased understanding of their family members, how the illness affects them and noted it facilitated improved communication within the family, including previously unspoken things. Siblings reported receiving increased support at school after the intervention, making it easier to communicate about their needs and the illness to their school workers.
Jaaniste, T, 2022, Australia	QT	32 families: 48 healthy siblings (22 females, 26 males), 30 parents (28 mothers, 2 fathers)	Healthy Siblings and parents	Healthy siblings: 6-21 Parents: not reported	Life-limiting conditions	Paediatric palliative care services	Questionnaires: COMSIB,FCS, FES, Peds-QL, DASS-21,CYRM-12	COMSIB, FCS	58.7% of parents felt the siblings were aware their sibling would likely die earlier than is expected for unaffected children. When parents rated how often they start a conversation with them about the sibling's illness: 30.5% reported never or rarely, and 69.6% rated sometimes or often. When parents rated how often their child starts a conversation with them about the sibling's illness: 47.8% reported never or rarely, 52.2% rated sometimes or often. When parents rated how often their child talks about death: 52.2% reported never or rarely, and 47.6% rated sometimes or often. No significant associations were found between healthy siblings' gender and frequency of self-initiated illness conversations or between sibling gender and talking about death. A significant positive correlation between self-initiated conversations about death was found. 45.7% of parents rated being most satisfied/somewhat satisfied with the information they provided their child. Positive relationship between age of sibling and the amount of illness-related information provided by the parent as well as between the level of parental resilience resources and information communicated. Girls were noted to receive more illness communication compared to boys. Greater satisfaction with family communication was noted by parent and child compared to previously normed data. Only family cohesion was found to be a significant predictor of sibling satisfaction with family communication.
Kaneko, M, 2022, Japan	QL	158 (128 mothers, 11 fathers, 19 both parents)	Parents	Parents 25-65 (45) Affected siblings: 4-28 (12)	22q11.2 deletion syndrome, Beckwith—Wiedemann syndrome, Noonan syndrome, Russell-Silver syndrome, Kabuki syndrome, Williams	Children's out-patient medical clinic - Parents who had attended a group programme for genetic syndromes	Surveys Multiple choice questions	Survey	53 affected children had siblings, 50 of these had been told about their sibling's genetic syndrome. Most had told the sibling between the ages of 4-6 years, 70% of siblings were told by their mothers, 24% by both parents, 6% by fathers and 10% by other medical professionals, grandparents or support groups.44% of siblings were told due to parents perceiving them to be old enough to understand. 36% were told to help them understand why their sibling went to the hospital. Regarding information disclosed, 92% noted disclosure of symptoms and 76% noted diagnosis. 66% indicated they delivered this information in an understandable way and 56% reported being honest in the communication. In terms of how often discussions about the genetic condition with siblings occurred post initial disclosure: 43% always, 47% sometimes and 10% never. Of the 10%, the reasons included children not seeming interested in this topic or the topic being seen as not special. Of the siblings who had not been told (46%), 47% wanted to tell them in the future, 5% did not want to tell them and 3% did not answer the question.

				syndrome, Prader-Willi syndrome, and Sotos syndrome				
Rinaldo, C, 2022, Sweden	QL	13 (7 females, 6 males)	Healthy siblings who had donated stem cells	10-22	Cancer	Paediatric stem cell transplantation clinic	Semi-structured interviews	Interviews	Siblings felt they did not receive enough information about the other potential treatment options, resulting in them feeling like they had no choice in whether to donate. After the donation siblings did not tend to talk to their sibling about it afterwards, due to the procedure being successful. Siblings noted they were told by their parents about the diagnosis and about being a potential stem cell donor. None said they had been told by professionals. Siblings stated they did not fully understand the diagnosis but understood from their parent's strong emotions that they knew it was “bad”. Some siblings reported they searched online for potential survival rates. Siblings mentioned they were informed the best treatment option was for them to be a donor, some were told there were other options and others weren't. Some siblings were unsure why they were a match. Siblings stated they received enough information about the procedure but also stated that they did not fully know what would happen to them resulting in them feeling worried or scared. Siblings reported technical information was provided by clinical staff but did not always include the information they wanted such as the impact it would have on their sibling. Most of the siblings reported they would have liked more information before the donation, and they wanted to be more involved and understand the process better. Some said there was no need to know everything. Some siblings noted having a conversation with their parents about the potential lack of success with the procedure and how this wouldn't be their fault should it happen. No siblings reported talking about this with staff. Siblings mentioned sibling supporters were able to provide them with information about the process. No siblings took up the offer to speak with a psychologist or social worker. Their preference was to speak with their parents, healthy siblings or sibling supporters.
Turnwald, A, 2022, USA	MM	82 families: 82 parents (76 females, 6 males), 78 siblings (41 females, 37 males)	Parents and healthy siblings	Parent 24-78 (39, 11) Healthy siblings 5-39 (11, 6.4) Affected siblings 0.5-39 (7, 6.7)	Angelman syndrome	Social media and Chromosome 15 clinics	Surveys	Survey	Most parents had told the unaffected siblings about AS. 42.9% stated they first spoke with the sibling around the ages of 2-4 years. Half said the sibling had started this conversation by asking questions about AS. Most of parents explained these conversations continued after the initial conversation. Parents spoke about AS characteristics, genetics and similarities/differences with siblings. Of the 5 parents who had not told the unaffected sibling about AS all plan to tell them in the future, although 2 did not feel confident in their ability to discuss this with the sibling. No parents reported having conversations with siblings about why their siblings may need more support and attention compared to them. 61% of parents found it hard to give the sibling as much attention and 61% thought they didn't spend enough time with the unaffected sibling. 31% of parents said that a healthcare professional spoke to them about how they may tell their sibling about AS. 27% of parents used other resources to support discussions with the sibling. 73% of parents wanted access to children's books to support conversations, 60% wanted websites and 55% wanted videos created by siblings. 87% of siblings wanted to meet other siblings in the same situation. Parents stated resources that would validate the sibling's emotions and experiences would be helpful. 94% of siblings answered all of the knowledge questions about AS correctly, this was not dependent on age. 3 siblings thought they could get AS. 86% of siblings wanted more information about AS and 48% wanted to tell their school friends about AS. 41% of siblings had unanswered questions about AS, this was higher for younger siblings. Unanswered questions included AS symptoms, their sibling's future and molecular mechanisms of AS.
Boyer, A, 2022,	QT	48 parents (42 females,5 males)	Parents	22-66 (42.2, 10.06)	Cystic fibrosis	Parents from local and	Survey, Multiple choice	Survey	44 parents had informed the unaffected siblings about CF diagnosis. For the first unaffected sibling, diagnosis information was shared on average at 5.4 years old. Most parents discussed medical concerns

USA						international support groups, charities	questions		and treatment with the unaffected siblings, 79.5% discussed the social impact, 77.3% the lifestyle impacts, 70.5% genetic and inheritance information and 40.9% spoke about the financial impact of CF. Of the parents who discussed the medical concerns and treatment options with the unaffected sibling, all shared why the affected sibling will need to frequently visit the doctors, 97.5% spoke about the affected sibling needing more medication than unaffected siblings and 95% discussed the need for regular breathing treatments. Parents noted discussing genetic/ inheritance and the social and lifestyle impacts with unaffected siblings as difficulties arose. The main reasons parents chose not to disclose information were due to feeling their child was too young, followed by not feeling comfortable discussing this information with child and then not thinking to disclose information. Parents noted the most important topic to discuss was medical and treatment concerns, least important was the financial impact. Parents were significantly more likely to discuss financial, social, genetic and inheritance information as the unaffected siblings became older. Parent knowledge did not significantly impact the topics of information discussed.
Larson, C, 2023, USA	QT	36 families: 60 parents (35 mothers, 25 fathers) and 57 healthy siblings	Parents and healthy siblings	Healthy siblings: 7-11+ Parents: not reported	Chromosome 18 syndromes	Members of Facebook group, chromosome18 research charity	Survey, Multiple choice questions	Survey	64.2% of parents agreed/strongly agreed that the healthy sibling knew about their sibling's syndrome, 87.4% of parents said the siblings understand their siblings experience developmental delays, 73.9% agreed their unaffected child will ask questions about their sibling's additional needs, 96.8% noted the unaffected sibling will share information about their sibling's syndrome to others. All younger siblings said their parents talk to them sometimes/a lot about their sibling's syndrome and all knew their sibling had a syndrome, 73.7% said they ask their parents about their sibling's condition, 79% said they share what they know about the condition with others and 83.3% wanted to know more about the condition. For older siblings (11+ years) most said their parents talk openly to them about their sibling's condition, 83.8% shared information about the condition with others, 86.5% noted they would ask their parents questions about the condition, 72.9% said they wanted to know more about the condition. 45.4% wanted their family to talk more about their sibling's condition and 48.4% wanted to talk less about it. 60.5% noted they felt their family spoke enough about the condition with 23.7 saying this was too much.
Ayoub, M, 2024, Sweden	QL	52 parents (29 female, 23 male)	Parents	36-64 (44, 6.6)	Cancer	Paediatric cancer clinics	Survey and semi-structured interviews, questionnaires: FACE-IV, SRS-14	Interviews, FACE-IV	Family talk intervention was noted to increase family members talking more openly with each other, facilitating closer relationships and increasing understanding and acceptance. Parents noted feeling encouraged to talk about things they may have previously avoided discussing with their children. Parents noted using communication cards as a helpful way to have conversations as a family. Parents spoke about continuing to have a weekly family meeting to reduce conflict and improve communication. Parents found to have higher satisfaction in relation to conversations about the sibling's illness post-intervention.
Butler, A, 2024, Australia	QL	6 Parents (5 female, 1 male)	Parents	Not reported	Congenital heart disease	Heartchild social media channel	Semi-structured interviews	Interviews	Parents were asked to talk about their experiences of supporting well-siblings to visit an unwell sibling in a paediatric intensive care unit. Parents noted the importance of discussing the hospital admission with the siblings. Parents queried being unsure how to explain the admission and how much information to include, particularly with younger siblings. Parents stated the siblings would ask lots of questions about the hospital environment, whether their siblings were returning home or could die, with parents responding to these questions with basic age-appropriate information. Some parents used resources to share information such as photos, social stories, books, timelines and items from home. Parents would have liked more resources to support the sibling's understanding.

NB: QT: Quantitative, QL: Qualitative, MM: Mixed Methods, SCD: Sickle Cell Disease, DMD: Duchenne Muscular Dystrophy, CHD: Congenital Heart Disease, SMA: Spinal Muscular Atrophy, AS: Angelman Syndrome, CF: Cystic Fibrosis, HbO: Haemoglobinopathies, HD: Huntington's Disease, NF: Neurofibromatosis, HIV: Human Immunodeficiency Virus, PHIV+: Perinatally Acquired Human Immunodeficiency Virus, CBCL: Child Behavior Checklist, PSCM: Parent-sibling communication measure, PQ: Parent Questionnaire, SQ: Sibling Questionnaire, FSHQ: Family and Social History Questionnaire, SIQ: Sibling Illness Questionnaire, PIQ: Parent Illness Questionnaire, FES: Family Environment Scale, PHSCS: Piers-Harris Self Concept Scale, SPQ: Sibling Perception Questionnaire, RBQ: Rutter Behaviour Questionnaire, Vineland-ABS: Vineland Adaptive Behavior Scales—Interview Edition Survey Form, FRS: The Family Resource Scale, FSS: The Family Support Scale, SCL-90-R: Symptom Checklist-90-R, Adapted SBS: Adapted Survey for Bereaved Siblings, HADS: Hospital Anxiety and Depression Scale, FACES IV: Family Adaptability and Cohesion Scale IV, COMSIB: Parent-Sibling Communication Measure, FCS: Family Communication Scale, Peds-QL:

Pediatric Quality of Life Inventory, DASS-21: Depression Anxiety and Stress Scale, CYRM-12: Child/Youth Resilience Measure, RS-14: Short version of the Resilience Scale

Results

Descriptions of Studies

A total of 40 papers are included in this review, with publication dates ranging from 1989-2024. The majority of studies were qualitative (*n=25*), nine were quantitative in design and six were mixed methods. The total number of participants varied from 7 to 174. The population groups consisted of parents only (*n=9*), healthy siblings (*n=10*), affected siblings (*n=11*), healthcare professionals (*n=1*), parents and healthy siblings (*n=13*) and parents, healthy siblings and affected siblings (*n=5*). The age range for participants was as follows; parents 25-78 yrs., healthy siblings 4-46 yrs. and affected siblings 0-39 yrs. Studies were conducted in a variety of countries: USA (n=*13*), UK (*n=8*), Sweden (n=6), Australia (*n=5*), India (*n=2*), Belgium (*n=1*), Japan (*n=1*), China (*n=1*), Italy (*n=1*) Lebanon (*n=1*), Switzerland (*n=1*) and one study was conducted in two locations, Canada and USA.

Most studies recruited participants from children's/paediatric hospitals (*n=29*), followed by 11 studies from support groups/general population. The affected sibling's diagnosis was wide-ranging: cancer (*n=15*), HIV/AIDS (*n=4*), sickle cell disease (*n=2*), Angelman syndrome (*n=1*), 22q11.2 deletion syndrome (*n=1*), chromosome 18 (*n=1*), brain tumour (*n=1*), epilepsy (*n=1*), congenital heart condition (*n=2*), cystic fibrosis *(n=2*), Duchenne muscular dystrophy (*n=1*), inflammatory bowel disease (*n=1*) and spinal muscular atrophy (*n=1*). Seven studies included a range of illnesses and conditions.

Thirty-one studies used solely one method of data collection: interviews (*n*=15), focus groups (*n*=6), surveys (*n*=6) and questionnaires (*n*=4). Eight studies used a mixture of these approaches and one used both surveys and written accounts.

Communication with siblings was considered the primary focus for 25 papers; for the remaining papers (*n*=15) communication was a secondary outcome. Six measures aimed at assessing communication were mentioned. Three studies used part/all of the Family Adaptability and Cohesion Scale IV (31), a further two studies mentioned the Sibling Questionnaire (32) and the Parent-Sibling Communication Measure (33), and the following were included in one study each: Sibling Perception Questionnaire (34), Parent Questionnaire (32) and the Survey for Bereaved Siblings (35). For the remaining studies, this information was collected via interviews (*n*=17), surveys (*n*=7), focus groups (*n*=6) and written accounts (*n*=1). Six studies used a mixture of these methods.

Narrative Synthesis

1) What is the evidence that communication with children about sibling LTC is important?

Siblings want to know about their sibling's LTC

Several studies indicated that a high percentage of well-siblings had been informed and were aware of their sibling's condition (30, 35-40). However, this was not universal, with other studies reporting siblings were not aware or fully informed (22, 23, 25, 27, 41-43). Siblings reported wanting more information (21, 32, 40, 44), even in studies where they had been informed about their sibling's illness (37, 39, 40). For example, siblings wanted to know more about their siblings' prognosis, how the cancer would affect their sibling's physical and mental health, know who they could ask questions about their siblings' care and what support they could receive themselves (37).

Information regarding the diagnosis (36, 45, 46), symptoms (36, 39), treatment (30, 38, 46) and the daily impacts of the condition (18, 47) were more likely to be communicated

with siblings. Communication of genetic and hereditary risks (18, 30, 47) and the financial impact of the illness (46) was shared less often. Siblings often initiated conversations with parents by asking questions about the sibling's illness (19, 30, 39, 40, 45, 48), with conversations between parents and siblings continuing after the initial diagnosis was discussed (30, 36, 39, 49). However, this did not include all aspects of the illness and its implications; Pieper *et al* (49) found siblings reported no ongoing conversations about the genetic risk to themselves. Two studies considered the impact of time since the time of diagnosis on the amount of information that was shared with siblings and found differing results depending on who the sibling was communicating with. Deakin *et al* (38) reported communication between siblings was more frequent after diagnosis (38), whereas Jaaniste *et al* (5) found there was a low correlation between these variables when considering communication between siblings and parents.

At times parents and healthcare professionals were providing different information to siblings; stem cell donor siblings reported information about the procedure was provided by clinical staff, although this did not always include all the information they wanted such as the impact the donation would have on their sibling, whereas information about the potential lack of success of this procedure and that this would not be their fault was mentioned by parents (44).

Parents felt positive sharing information

In a qualitative study with parents who had a child receiving care in a paediatric/neonatal intensive care ward (*n*=14), most reported feeling "fine/good" *p.*54 about sharing information with their other children (19). Jaaniste *et al (5)* noted within their sample (*n*=48), 45.7% of parents rated being mostly satisfied/somewhat satisfied with the

information they provided their child, while 10% reported being somewhat dissatisfied. Additionally, in a qualitative study with 96 parents, and their affected and unaffected children with genetically heritable conditions, no participants expressed any regret in sharing information (47).

Parents want to share more information

When parents were asked, "*What else does the sibling need to know?*" *p.*54, they identified they wanted them to have more information about the sibling's illness and to be provided with reassurance that their sibling was getting the best available care (19). Two studies involving families of children with epilepsy (*n*=25 families) (50) and cancer (*n*=27 families) (51) reported that they had not received any or enough guidance around how to support the sibling's needs or the effect their child's illness could have on the healthy sibling.

Parents overestimating

Plumridge *et al* (47) interviewed 33 families where one child had a genetically inheritable condition. Some parents noted they thought the sibling was already aware of the child's illness through observing the effects of the condition, treatment and being present at the time of the diagnosis, however, this was not fully supported by the sibling's data, with siblings noting they did not always remember their sibling being diagnosed and while living with their siblings allowed them to understand the symptoms and the treatment of the condition, it did not help them understand the prognosis of the condition and their own genetic risks. During the interviews, some parents "*suddenly realised*" *p.*378 that they had not shared certain information with the siblings and that they may know less than they had thought.

Siblings misunderstanding

Siblings of children with cancer and Angelman syndrome sometimes held inaccurate beliefs about their siblings' condition leading to a fear they might have caused, caught, or inherited the condition (20, 26, 39). Siblings undergoing stem cell donation were often unsure why they were considered a suitable stem cell match; their self-generated hypotheses included being the same gender, from the same parents, or just random chance. Sibling donors felt they had received enough information about the procedure but towards the end of the interview reflected that they did not fully know what would happen to them during the donation procedure leading them to feel "*worried and scared*" *p.*4 (44).

2) What is the impact of communication on the well-sibling and unwell siblings' emotional, behavioural and health outcomes?

Well-sibling behavioural outcomes

Several studies examined the relationship between family communication and sibling behavioural outcomes. Families who scored higher on the Parent-Sibling communication instrument (33) were considered to have more open family communication about the siblings' illness and death. Siblings in these families were also reported to have higher social competence and experience fewer behavioural difficulties after the death of their sibling (17). Additionally, Evans *et al* (32) found the greater the sibling's knowledge of the illness the higher their social competence. Parents who reported the siblings to have greater knowledge about the illness, also reported fewer behavioural difficulties relative to siblings who were perceived as less informed by their parents. However, self-reported sibling knowledge was found to have no correlation with behavioural difficulties. Positive impacts for siblings after engaging with a family communication intervention were noted

within school environments; siblings were better able to communicate their needs and the impact of their sibling's illness on them and teachers were noted to offer siblings the opportunity to have more time to complete their work and move to a different room if they were struggling with their emotions (51-53).

Well-sibling emotional and health outcomes

Research has also investigated the positive and negative emotional impact of communication for healthy siblings. A study exploring grief for cancer-bereaved siblings (*n*= 174) via a Swedish postal survey found unresolved grief was more likely in siblings who had reported being dissatisfied with the information they had received about their sibling's illness and where siblings had only been told about the potential death of their sibling 24 hours before. Siblings who wanted to talk more about the death were noted to be at a higher risk of experiencing unresolved grief compared to children who did not want to talk about it (37). Rosenberg *et al* (35) noted that bereaved siblings who were dissatisfied with the information provided to them by their parents or healthcare professionals were found to have higher self-reported psychological distress and lower social support scores relative to siblings who were satisfied with the information they had been provided. A qualitative study (50) found some siblings felt less anxious when they received more information about their sibling's epilepsy, *"Mum didn't tell me anything at first but I worry less now that I know, because I know what to do" p.*700 (sibling, aged 10). Conversely, a mixed methods study exploring the impact of HIV within families reported the amount of information about the diagnosis shared by mothers to siblings did not correlate with siblings' adaptive behaviour or adjustment (22).

The emotional response of well-siblings when receiving information about their sibling's illness is extensively recorded within the literature. Siblings can experience a range of negative emotions when being told about their sibling's diagnosis, including feeling "*sad*" *p*.54 & *p*.240 (19, 32), "*anticipatory grief*, *devastated*, *helpless*" *p*.1265 (49) and "*sorrow*" *p*.380 (47). A qualitative HIV study found siblings reacted negatively to finding out their sibling's HIV status due to fearing that their friends would reject them (24). Whilst siblings found it uncomfortable to answer questions about their sibling's illness, they noted some positives to this experience such as providing a sense of "*relief*, *comfort and hope*" *p*.380 & *p*.136 (47, 54). Siblings also reported finding it difficult to share their emotions (55) or to speak with their sibling about the illness (56). Redshaw and Wilson (57) found siblings part of a programme where they received a bead to represent different treatments or procedures related to their sibling's chronic heart disease, noted it provided them with opportunities to talk about the "jealousy"*p*.58 they experienced (57).

Sibling-sibling relational outcomes

A number of studies have explored the impact of communication on the sibling-sibling relationship. Siblings who participated in a Family Talk intervention described being better able to understand the needs of their ill-sibling and that it improved communication with them (51-53). Furthermore, Plumridge *et al* (47) noted that where the siblings' condition was "*discussed more openly*" *p*.379 (no further definition provided) within the family, well-siblings spoke about their worries and showed a greater understanding of their ill-sibling's needs and demonstrated positive behavioural changes towards the affected sibling. Additionally, siblings who were described as "*well informed*" *p*.380 reported showing more attention and spending more time with their ill-sibling. Where the condition was

reported to not be "*openly discussed*" *p*.379, siblings reported being uncertain about the condition and the genetic implication towards themselves, withdrawing from their ill-siblings and being resentful of them.

3) What is the impact of communication between well-siblings and parents on parental and familial outcomes?

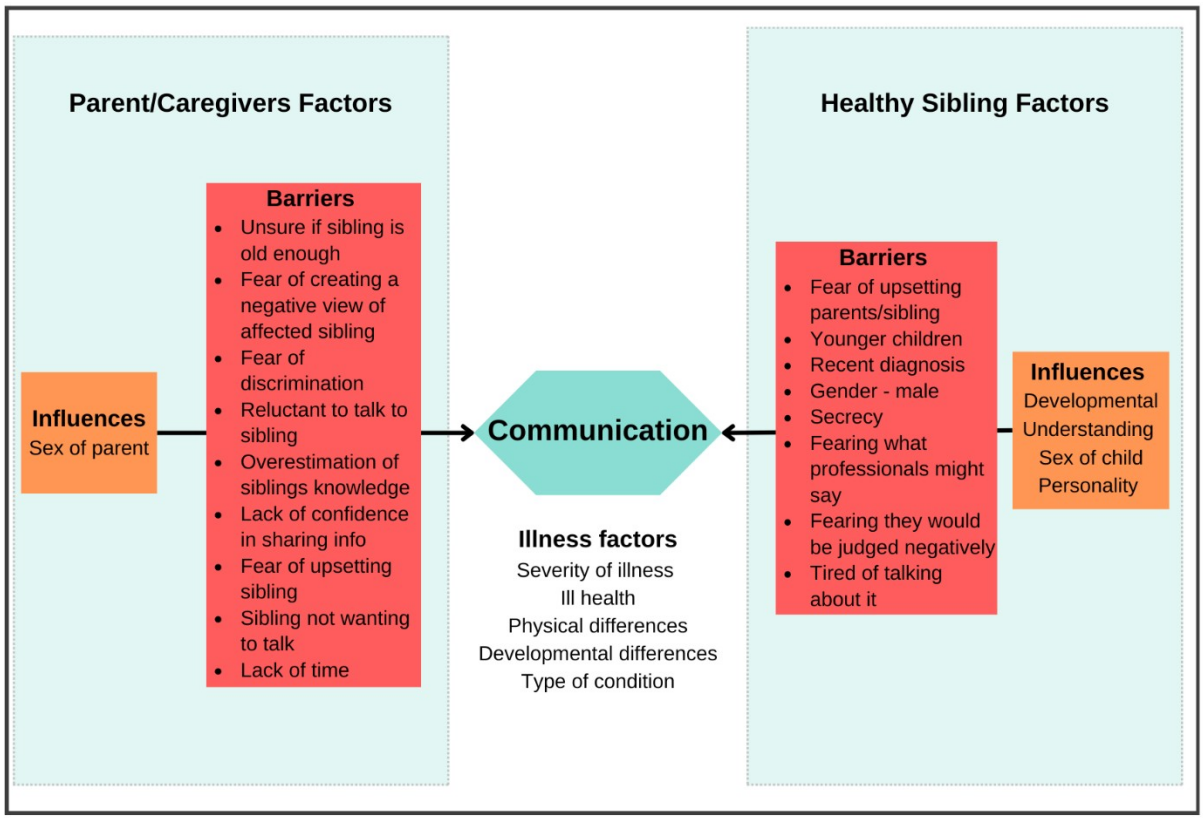
Four Swedish paediatric oncology studies (51-53, 58) considered the impact of delivering an 11-session family intervention (Family Talk) which aimed to improve family communication about the illness and increase parental understanding of their children's needs. Most well-siblings recommended the intervention to other families; they valued having the opportunity to talk to someone outside of their family and noted they felt understood by healthcare staff. The intervention was found to improve family communication and family members' understanding of each other (58), for example, some well-siblings mentioned how they now understood that their parents were experiencing "*feelings of guilt*" *p*.6 (53). Parents noted that post-intervention they felt encouraged to have difficult conversations with their children.

Family cohesion was found to be a significant predictor of sibling satisfaction with family communication, however, the direction of this relationship was not clear (42). Within families where the sibling condition was "*openly discussed*" *p*.379 well-siblings reported being more aware of their role within their family and positive behavioural changes towards ill-siblings and parents were noted. For example, one mother said the following about her daughter after sharing information about what was happening to her brother "*…she helps me now, and helps [affected brother], when I go out shopping, she'll look after him really*

nicely… it's a good family unit now; we all get on really well. So yeah, she does know everything now." p.380 (47).

4) What factors influence the process of communication? See Figure 2.

Figure 2. Parent/ Caregiver and Healthy Sibling Factors Which Influence Communication with Siblings Who Have a Sibling Who Has a LTC



Parental/caregiver influences

Siblings were often informed about their sibling's condition by their parents (30, 32, 44). Parents felt it was their responsibility to tell their children, with mothers sharing the most information (18, 32). In one study, parental knowledge of the illness was not associated with the type of information shared (46).

Healthy sibling preferences

Some siblings preferred to talk to their parents (21, 32, 56) while others reported preferring to talk with certain family members depending on their question (parents or siblings) (45) or the content of information i.e. siblings preferring to talk to their mothers for emotional support and their dads when they wanted a source of distraction or fun (39). Additionally, when some siblings were given the opportunity to speak with healthcare professionals, they declined (44).

Healthy sibling demographics-

Parents stated they either had told the well-sibling or intended to tell the sibling about the condition between the ages of 2-8 years (36, 39, 45-47, 49), as caregivers perceived them to be old enough to understand or to aid their understanding of why their sibling was in the hospital (36). Disclosure of information to siblings was sometimes dependent on developmental age (24) and the "personality"*p.*283 of the healthy sibling (26). One study reported siblings wanting information about the illness from a young age (some children state around the age of 3) when they started to notice the impact of the illness on their family (47). Jaaniste *et al* (5) and Boyer *et al* (46) found a positive correlation between sibling age and the amount of illness-related information parents shared. Regarding genetics and heritability risks, siblings aged between 8-13 years reported

understanding why their sibling had the condition, but not the genetic risk to themselves. At the ages of 16-22 years, siblings noted becoming aware of the severity of the illness and the heritability, and aged 23-25 years some siblings accessed genetic counselling to explore their genetic and reproductive risks (47, 49). This finding suggests that what a sibling is told about heritability is only shared in relation to the unwell sibling's condition and not related to their own needs. Pieper *et al* (49) and Plumridge *et al* (47) proposed that it is left to the sibling's own intellectual and emotional development to infer the risk to themselves and to ask for genetic counselling to explore the risk to themselves. Additionally, Okashah *et al* (30) reported older siblings were more likely to be informed of their sibling's cancer diagnosis due to the caring and financial implications. The birth order of siblings was also found to have an impact, with siblings who were born after the death of their sibling finding it much harder to receive information about what had happened to their sibling compared to siblings who were alive at the time (28). The biological sex of the sibling can influence the disclosure of information, with girls receiving more illness-related information than boys (42).

Severity/type of affected sibling LTC

Several studies reported on how the severity and type of the sibling's condition could influence communication. In families where the unwell child had a greater functional impairment, the well-siblings wanted to know more about the illness (21). An increase in communication with siblings was often prompted when the sibling became unwell (38, 45) or needed to go to the hospital (19, 36, 49). Siblings were reported to ask questions when they noticed their sibling was unable to join in developmentally appropriate activities (45) needed to use a wheelchair (49) or looked (19, 36) or acted differently to them (30, 49). The

type of illness affected how much information was given to the well-sibling compared to information provided to the unwell sibling. Those whose sibling had Duchenne muscular dystrophy (DMD) received more information compared to their unwell sibling (18) and those with other conditions (Cystic fibrosis, neurofibromatosis, haemoglobinopathies) received less (47).

5) What are the barriers and challenges to communication? See Figure 2.

Barriers reported by siblings

Siblings felt that their parents withheld information as a way to protect them which was considered unhelpful (28). Some siblings feared they would upset their parents so avoided or found it difficult to talk to their parents or siblings about how they felt, their concerns or ask additional questions about genetic risks (47, 49, 56). Siblings did not always ask questions to professionals due to 1) fears of what they might be told and 2) healthcare staff perceiving their questions as a negative criticism (51). Some younger siblings reported having more unanswered questions (39) and feeling less able to talk to their parents and siblings (21). Those whose siblings had a more recent diagnosis felt less able to talk with their parents (about their concerns, school, and general life) however there was no difference in the amount or type of information they wanted. Boys described being less able to talk to their parents/others (friends, grandparents, other siblings) about their sibling's illness and 48% (*n*=25) of siblings said they were not talking to anyone (it is unclear whether this was a choice or lack of someone to talk to about their sibling's condition (21). Keeping the sibling's illness a "*secret*" *p*.852 & *p*.850 was noted (23, 28), with unaffected siblings (38) and parents (18) requesting this information about the illness not to be shared.

Whilst some siblings valued being informed, others became tired of their sibling's illness always being a topic of discussion (54). Those with siblings who had cystic fibrosis reported keeping their sibling's illness a secret so that they did not have to think or talk about the illness which helped them compartmentalise and maintain a sense of normality (55). In other words, lack of communication can be a conscious coping strategy rather than an unmet need.

When considering barriers for siblings engaging with family talk interventions, siblings mentioned that despite the healthcare staff making them feel safe during the sessions it was "*hard to talk as they were not used to being the centre of attention*"*p.*6 (53).

Barriers reported by parents

Parents were noted to not want (20, 36) or being reluctant to talk to the well-sibling, despite feeling that the child was already aware of the illness (27). Parents did not always feel comfortable (46) or confident in their ability (the reason for this was unclear) to share information with siblings (39, 59) and wanted someone else to do this (19). They also expressed uncertainty about whether the well-sibling was old enough to understand the information (18-20, 46, 49, 59) or to make their own "*reproductive decisions*" *p.*378 (47). The language parents used when communicating was important, some chose to avoid certain words (e.g. disease) due to fears the sibling would not understand (49). Some parents withdrew information when things were going wrong for the affected sibling due to concerns this would create a negative view of the ill child (19) or that they would be discriminated against (41). Additionally, parents who had higher self-rated 'resilience resources' were able to share more illness-related information (42). The balance between

protecting and informing siblings was discussed, with some parents withholding information about life expectancy as they did not want to scare the well-sibling (49). Parents spoke about reduced opportunities to communicate with siblings due to the lack of time they spent with the unaffected sibling (20, 39, 47), and at times this created feelings of guilt for the parents (32, 43).

Barriers reported by healthcare professionals

Price *et al* (43) found healthcare staff advocated for well-siblings and affected child to be always told the "*truth*" *p.*76, however, this often created tensions between staff and parents as parents often wanted to protect their children by not disclosing the potential likely death of the sibling, whereas professionals felt telling the "truth" *p.*76 was the best option. Health care professionals found it difficult to know how to support siblings prior to and post the death of their sibling. They noted current practices included art therapy, storytelling and offering "*simple explanations*" *p.*78 about what was happening to their sibling.

6) What are the reported preferences of siblings and parents about the way diagnosis and information is shared?

Siblings and parents suggested several ways they would prefer to share and receive information about their siblings, these suggestions have been grouped under three main themes: information, emotional support, and source of information, see Table 4.

Table 4. Reported Preferences of Siblings and Parents About the Way Diagnosis and Illness-Information is Shared

Sibling preferences	Parental preferences
Information	

• Valued family discussions about their sibling's illness (49). • More information about their sibling's illness, their prognosis, how their sibling might be impacted by the illness, why their sibling needed hospital care and when they might return from hospital, who to ask if they have questions about their sibling's care and what support they can access themselves (19, 32, 39, 40, 51). • Wanted information to be developed specifically to address the needs of siblings (50). • Wanted brief, correct and up-to-date information (56). • Felt their ill sibling should be provided with more information about their own illness (18). • Information at a young age, at the point when they can notice the impact the illness is having on the family (47) • Information throughout their childhood to support their continued understanding of their siblings' illness (47) • More information for those affected siblings with greater functional impairment (21). • Healthcare staff to communicate in an age-appropriate way (29). • Photos of the sibling and keepsakes are useful to facilitate discussion between themselves, parents and ill siblings throughout their childhood (28).	• Information shared with siblings over time/course of sibling's illness in a developmentally appropriate and honest manner (26, 29, 36, 49, 59). • Healthcare professionals to discuss with parents how best to disclose information to their children (36, 49, 50). • Wanted siblings to receive more information regarding their sibling's illness and for them to be reassured their sibling is getting the best possible care. Parents did not specify who should provide the siblings with this information (19). • Language is important when communicating to siblings and parents should be given permission to change words which may be difficult to understand (49).
Emotional support	
• Some siblings wanted to share with someone in their family how they were feeling (50, 51). • Valued being able to keep their sibling's illness a secret as a way of compartmentalising and maintaining normality (55).	• Resources that would validate sibling's emotions and experiences are helpful.
Sources	
• Opportunities to choose which person	• Parents reported leaflets, electronic

they talk to e.g. parents, siblings or healthcare professionals (45, 56) • Opportunity to engage with a family talk intervention (53). • Some wanted to meet and talk with other siblings in similar situations (39). • Few wanted to tell their school friends about their sibling's illness (39). • Prefer speaking with their parents, healthy siblings or sibling supporters, few wanted information from healthcare professionals (21, 32, 44).	booklets, children's books, communication cards, photos, peer support videos, internet resources, and support groups helpful to support the sharing of information with siblings (30, 58, 59). • Some parents wanted staff to be available in the hospital to clarify information for siblings (26). • Opportunity to attend sibling camps where they can speak to other siblings in similar situations and with experienced staff (26, 29).

Discussion

Overall, greater communication with siblings was noted to hold several benefits for both parents and siblings, namely reduced child behavioural and emotional difficulties, improved social competence for unaffected siblings, improved family cohesion and positive changes to unaffected sibling's behaviour towards their unwell sibling. Family Talk interventions aimed at improving family communication were found to be helpful for all family members with siblings recommending them to other families (53, 58). Siblings and parents also reported the potential value of well-siblings having the opportunity to meet and talk with other siblings in similar situations to theirs.

The findings of this review indicate that siblings would like to receive more information about a range of different topics related to their sibling's illness, for example, their sibling's prognosis, how the illness might affect the ill child, why their sibling needed hospital care

and when they might return from hospital, who to ask if they have questions about their sibling's care and what support they can access themselves (19, 32, 39, 40, 51). Siblings often initiated conversations about their sibling's condition when they felt they had inadequate information, were aware their sibling was unwell or when they noticed they could not take part in developmentally appropriate activities (45). They preferred this communication to be with their parents over a period of time. It's also important to note that some siblings were not talking to anyone about their sibling's condition (21).

Parents wanted to be able to communicate in an age-appropriate way, however sometimes lacked the confidence in delivering this information. Therefore, there is a notable role for healthcare professionals to facilitate conversations with parents about when, what, and how to share information with siblings. This is consistent with other research indicating that healthcare professionals can play a valuable role in supporting parents (6, 7).

In relation to the Family Communication Patterns Theory (10), the findings suggest siblings and parents value high conversation orientation, where talk about illness happens openly, covering a range of topics. As well as high conversation orientation, a pluralistic family communication style; where conformity is low, would allow siblings to communicate when they would like to receive more information and reduce the chances of siblings misunderstanding, with siblings freely able to voice their views about their sibling's illness. Ensuring healthcare professionals have an understanding of this theory will allow additional provision to be provided to families to support them to move towards higher conversation and lower conformity orientation, thus benefiting sibling, parental and familial outcomes.

Limitations

Whilst this review adds to the current evidence base, the following limitations should be considered. It is difficult to make direct comparisons and therefore draw overall conclusions due to the significant variations between studies e.g. diversity of illnesses, different stages of severity and prognosis. Additionally, within some studies the information provided concerning the ages of participants is limited, further impacting the generalisability of findings. Fathers and wider family members (grandparents, other siblings, family friends) are significantly underrepresented within some of these studies. Considering research indicates that healthy siblings may spend more time with their fathers or with grandparents during their sibling's illness (32, 60), it is critical that future research includes the experiences of these family members. Whilst this review did not exclude studies that consider professional perspectives, only one study (43) considered the experiences of healthcare professionals around sibling communication. Therefore, additional research into the views of healthcare professionals is essential. As evidenced within the literature communication with siblings occurs on multiple occasions and it is not a single event, however, this is not reflected within the methodology of studies, with only two studies being of longitudinal design (17, 20). Furthermore, some studies within this review are retrospective collections of data and therefore may be impacted by participants' recall. Where possible prospective reporting should be considered. Finally, whilst the Mixed Methods Appraisal Tool enables the appraisal of qualitative, quantitative and mixed method design studies, the evaluation of qualitative and mixed methods studies requires greater interpretation and therefore, could less precise when compared to quantitative study designs.

Recommended research

Whilst the findings indicate information can be shared with siblings in a range of formats it should be provided in an age-appropriate way. However, no studies developed and tested developmentally appropriate resources and guidelines with families. Identifying what siblings need at different ages and at the various stages of illness is needed. The current literature varies significantly from information provided about the illness at diagnosis and death of the sibling with a range of different sibling ages. It would be helpful for future research to clearly indicate both the ages of well/ill siblings and the stage of illness. Additionally, there is a need to consider how parents respond to individual preferences of siblings as well as what support parents may need from healthcare professionals in relation to this.

Conclusions

In conclusion, the following recommendations are made:

- Parents should share information with siblings about a range of topics e.g. about their sibling's illness, their prognosis, how their sibling might be impacted by the illness, why their sibling needed hospital care and when they might return from hospital, who to ask if they have questions about their sibling's care and what support they can access themselves.
- Information should be shared with siblings as an ongoing process during a sibling's illness in a developmentally appropriate and honest manner.
- Healthcare professionals should support parents in having conversations with siblings to build parents' confidence in sharing such information.

- Healthcare services should provide a range of sibling information and interventions e.g. age-appropriate leaflets and websites as well as Family interventions and sibling camps.

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Service Improvement Project

Wellbeing in Trainee Clinical Psychologists on the University of Oxford Clinical Psychology Doctoral Course

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Internal Supervisor: Dr Matthew Hotton

External Supervisors: Dr Fin Williams

Proposed Journal: Clinical Psychology & Psychotherapy has been chosen as it contains research about clinical psychologists and psychotherapists. It has previously published research concerning the wellbeing of psychological staff. The journal uses APA reference style. Author guidelines can be found here: Clinical Psychology & Psychotherapy (wiley.com)

Abstract

The current literature indicates training to be a clinical psychologist can be a demanding process with the potential to experience a number of stressors. This project aimed to explore the wellbeing levels of the trainees on the Oxford Clinical Psychology Doctorate and to explore the potential barriers and facilitators in relation to wellbeing. A total of 82 trainees participated in the mixed-methods design which included a standardised self-report questionnaire, bespoke rating scales and qualitative survey responses. All qualitative data was analysed using thematic analysis. A significant negative correlation was found between the number of additional hours trainees worked and their wellbeing score. Three major themes were identified within the qualitative data: relationships, workload and diversity. A total of 40 recommendations were made to the Oxford course, in relation to these themes.

Keywords: Wellbeing, Trainee Clinical Psychologists, Workplace Wellbeing, Clinical Psychology Doctorate, Service Improvement

Background

Staff working in the NHS continue to report experiencing high levels of work-related stress and burnout (NHS, 2023). Systematic reviews have found poorer wellbeing and higher burnout rates are associated with poorer outcomes for patient care, higher staff sick days and turnover (Hall et al., 2016; Johnson et al., 2018). It is thought to cost the NHS annually 1.2 billion due to staff sickness and turnover (NHS, 2019b).

Summers et al. (2021) measured wellbeing within a workforce of psychological staff using the short Warwick Edinburgh Mental Well-being Scale (SWEMWBS, Stewart-Brown (2009)) and the Psychological Practitioner Workplace Well-being Measure (PPWWM, Summers et al. (2021)). Trainee Clinical Psychologists reported lower-than-average wellbeing (SWEMWBS = 20.54), below that of the national population. Whilst not specific to Trainee Clinical Psychologists, several negative correlations were found between PPWWM scores and other variables, for example, additional unpaid working hours, greater number of years in current post, older in age, and experience of harassment and bullying. Several further potential stressors have been reported, including academic and research responsibilities, poor work-life balance, poor supervision, professional isolation, limited social support, relationship difficulties, and physical and mental health issues (Cushway, 1992; El-Ghoroury et al., 2012; Jones & Thompson, 2017). When present, these stressors may make Trainee Clinical Psychologists, hereinafter called trainees, more susceptible to experiencing high levels of stress, with this having the potential to affect professional and personal development (Pakenham & Stafford-Brown, 2012). Furthermore, the British Psychological Society found 25% of full-time psychology students disagreed their course

workload was manageable, with females, non-binary people and students with a disability or long-term condition noting to struggle more. Furthermore, 25% of students felt their university had met their wellbeing needs either “very little” or “not met at all” (BPS, 2022). The report suggests universities should continue to consider how to reduce student workload and support wellbeing.

The NHS Long Term Plan (LTP) outlined the plan to continue to expand the capacity of the psychological workforce (NHS, 2019a). It is predicted an additional 2250 psychologists are required to be able to implement the LTP, this has resulted in the number of Trainee Clinical Psychologist positions increasing by roughly 25% each year (NHS, 2021). This expansion is likely to pose challenges for universities in relation to student wellbeing, for example, the need to provide more resources such as placements and supervisors as well as differing group dynamics and communication with larger cohorts.

The Alternative Handbook (BPS, 2022) for aspiring Clinical Psychologists, indicated that out of all 32 Clinical Psychology doctorate courses, the Oxford Institute of Clinical Psychology Training and Research (OXICPTR) course was rated the most challenging regarding finding support for trainee wellbeing (*n*= 40, 54% of total trainees), with 42.5% of trainees within this sample reporting finding it challenging to support their wellbeing while on the course. Additionally, 85% of trainees found it challenging to balance the demands of coursework and placements. Of the Oxford trainees who answered this survey, some identified a range of difficulties that could impact their wellbeing, namely: work-life balance, staff and trainee relationships, having to complete work outside of contracted hours, few study days, multiple deadlines in a close timeframe, high research expectations, lengthy

delays in ethics applications, poor communication, covid restrictions and differing social support. Similar themes were noted by Jones and Thompson (2017) who explored Trainee Clinical Psychologists wellbeing with trainees from two UK-based Clinical Psychology Doctoral programmes. Their findings suggested the relationship trainees have with their supervisor can either impact positively or negatively on their wellbeing, the benefits of peer support and the difficulties with finding a good work/life balance.

One model that has frequently been used to help explore wellbeing and job roles is Demerouti *et al's* (2001) Job Demands-Resources Model (JD-R). This model focuses on the level of demand an individual experiences within their job role (demand) and the resources an individual has access to such as "*physical*, *psychological*, *social*, *or organizational*" (*p*.501) resources that enable the achievement of work goals, reduces job demands and encourages career development and growth. The model suggests when job demands are high employees are more likely to experience exhaustion. When resources are low employees are more likely to disengage from their job. When these conditions are combined it is predicted that employees are more likely to experience stress and burnout. When considering this model in understanding stress and burn-out in trainees, demands could encompass a range of stressors, for example; balancing various demands, high academic and research requirements, financial pressure, poor communication and workplace conflict. Whereas trainee resources may include social support, autonomy, good leadership and collaboration between staff and peers.

This project is needed to identify trainees' current experiences of wellbeing in relation to their training, building upon previous information (e.g. alternative handbook) to

develop a richer understanding of trainees' wellbeing experiences and to identify any potential areas of improvement within the OXICPTR course.

Aims

1) To understand the overall wellbeing levels of trainees on the OXICPTR course.

2a) To understand what the barriers and facilitators are for trainees on the OXICPTR course in relation to their wellbeing. 2b) To consider what changes could be implemented to address these factors. 3) To better understand the demographics of trainees on factors known to be related to wellbeing e.g. gender, age, ethnicity, and disability.

Methods

Participants

All 104 Trainee Clinical Psychologists who were studying at the University of Oxford between May-August 2023 were invited to take part via email correspondence and during lectures.

Design

A mixed-methods survey design was implemented. The survey (see Appendix B3/4) consisted of questions around demographics, working hours, support networks, factors that serve as facilitators/barriers to supporting wellbeing and a wellbeing measure, the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS) (Stewart-Brown, 2009), as well as an opportunity for trainees to provide any recommendations they would like to make to the OXICPTR course to better support trainee wellbeing.

Procedure

The survey was sent to all trainees in April 2023 (Cohorts starting in 2020, 2021 and 2022) using Oxford Health NHS Foundation Trust's Audit Management and Tracking programme (AMat). The information sheet, consent forms and survey questions were developed by the project team and then refined through consultation with third-year trainees.

Measures

SWEMWBS, Appendix B6 (Stewart-Brown, 2009) – A 7-item self-report measure scored on a 5-point Likert scale "*None of the time*" to "*All of the time*", aimed at measuring well-being (subjective wellbeing & psychological functioning). A higher total score indicates better wellbeing. The SWEMWBS has been used within psychological workforces (Summers et al., 2021), is sensitive to change and has good convergent, discriminant and construct validity (Ng Fat et al., 2017; Shah et al., 2021). Based on general population data for individuals aged 25-35 from the Health Survey for England 2010 - 2013, the mean SWEMWBS score for women was 23.68 and for men was 23.53 (Ng Fat et al., 2017).

Data analysis

Demographic and wellbeing (SWEMWBS) data were analysed using descriptive statistics. SWEMWSB data was not analysed using inferential statistics given the small, and often largely different sample sizes. Instead, this was collected to primarily serve as a baseline ahead of any future improvement projects, and this data was summarised using descriptive statistics, except for the analysis of the association between hours worked outside of the 9-to-5 and wellbeing. This was analysed using the Spearman's Rank

Correlation, due to the number of hours worked not being normally distributed (positive skew). In addition, one participant's response regarding hours worked was removed from this analysis, due to being an outlier (3 SD -/+ mean).

All qualitative survey data was analysed using thematic analysis (Braun & Clarke, 2006, 2019), this process was inductive and descriptive, to closely represent participants' reported experiences. The 15-point checklist (Braun & Clarke, 2019) for completing good thematic analysis was followed. All themes are separate in their own right with no overlapping coding. To ensure researcher triangulation, all themes and codes were reviewed and agreed upon by all three researchers.

Project Team and Reflexivity

The project team consisted of one second-year female trainee (JW) who was studying on the OXICPTR course and two Clinical Psychologists. One of which was a female (FW) and was also a Course Tutor (Clinical) and Personal and Professional Development Lead. The other was a male and was also a Research Tutor on the OXICPTR course (MH).

Governance approval

This project was registered with, and approved by, the Oxford Health Quality and Audit Team.

Findings

Quantitative Findings

Out of a potential 104 trainees, a total of 82 (78%) completed the wellbeing survey (see Table 1), 44% were in their first year of training, 32% in their second year and 28% in

their third, which is largely reflective of the overall distribution of trainees across the three years. Of those who responded, 84.1% were female and 13.4% were male. The modal age range was 25-29 years old (75.6%). The total mean SWEMWBS score for all trainees was 21.11 (*SD* = 3.32), with females and males scoring 22.15 (*SD* = 3.25) and 20.89 (*SD* = 3.35), respectively. First-year trainees had the lowest mean SWEMWBS score (*M* = 20.28, *SD* = 3.01), followed by second (*M* = 21.01, *SD* = 2.21) and third-year trainees (*M* = 22.72, *SD* = 3.32).

In relation to perceived diversity or difference, a total of 10 trainees identified as being part of a potentially minoritized ethnic background. Three individuals also identified as having learning difficulties, while 27 trainees noted experiencing mental health difficulties. Trainees noting mental health issues reported lower wellbeing (*M* = 19.72, *SD* = 2.95) than those not reporting mental health difficulties (*M* = 22.08, *SD* = 3.33). A total of six trainees identified as having a neurodevelopmental difference (SWEMWBS: *M* = 20.53, *SD* = 1.47). Trainees (*n* = 3) who identified as having a visible difference had a lower SWEMWBS score (*M* = 20.53, *SD* = 1.62) compared to those trainees (*n* = 79) who noted no visible differences (*M* = 21.13, *SD* = 3.38).

Table 1

Participant Demographics

Characteristics	**N (%)**	**Mean SWEMWBS Score (*S.D*)**
Total Participants	82 *(100)*	21.11 *(3.32)*
Year of Training		
Year 1 – Cohort 2022/23	36 *(43.9)*	20.28 *(3.01)*
Year 2 – Cohort 2021/22	26 *(31.7)*	21.01 *(2.21)*
Year 3 – Cohort 2020/21	20 *(24.4)*	22.72 *(3.32)*
Gender		
Female	69 *(84.1)*	22.15 *(3.25)*

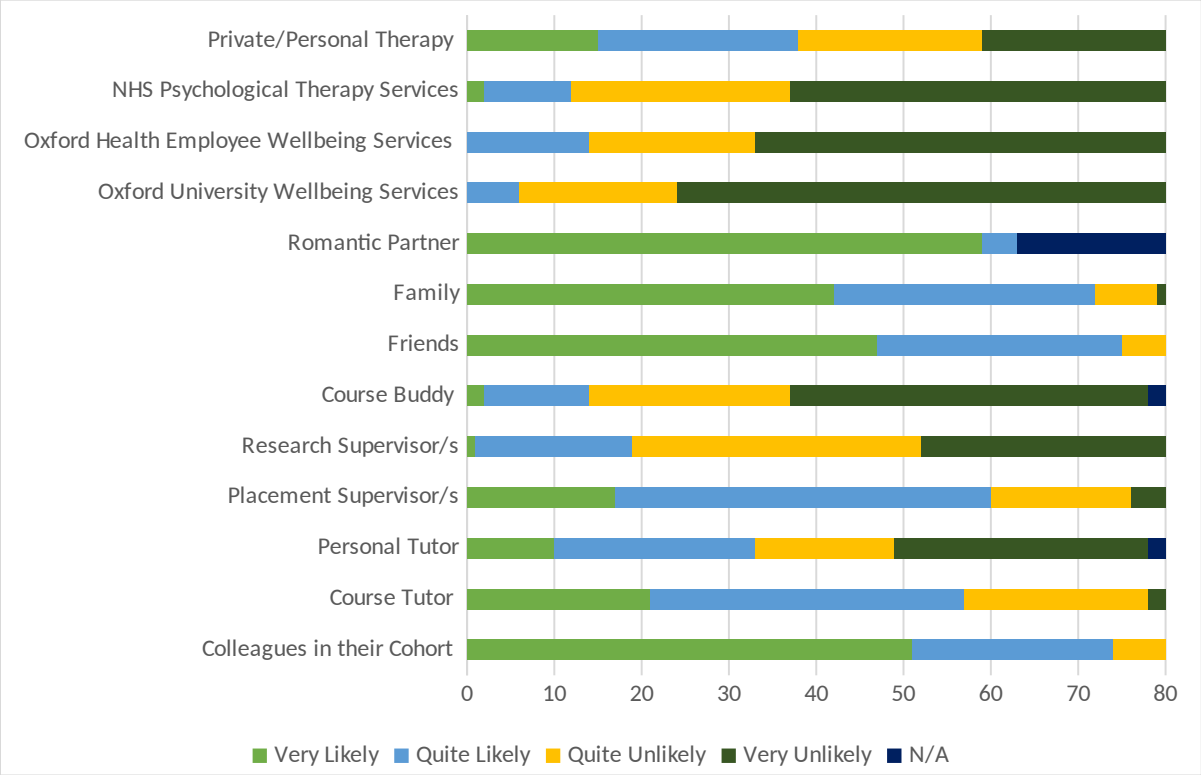
Male	11 *(13.4)*	20.89 *(3.35)*
Prefer not to say	2 *(2.4)*	22.81 *(1.82)*
Age		
20 - 24 years	4 *(4.9)*	22.40 *(4.86)*
25 - 29 years	62 *(75.6)*	20.95 *(3.17)*
30 – 34 years	13 *(15.9)*	21.46 *(3.94)*
35 – 39 years	3 *(3.6)*	21.11 *(2.62)*
Identify as coming from/ part of a potentially minoritized ethnic background		
Yes	10 *(12.2)*	21.19 *(2.97)*
No	67 *(81.7)*	21.24 *(3.38)*
Prefer not to say	3 *(3.7)*	18.94 *(4.50)*
Don't know	2 *(2.4)*	19.62 *(0.51)*
Identify as having any learning difficulties		
Yes	3 *(3.7)*	19.56 *(1.42)*
No	78 *(95.1)*	21.16 *(3.39)*
Prefer not to say	1 *(1.2)*	21.54
Identify as having any mental health difficulties		
Yes	26 *(31.7)*	19.72 *(2.95)*
No	47 *(57.3)*	22.08 *(3.33)*
Prefer not to say	6 *(7.3)*	20.95 *(2.64)*
Don't know	3 *(3.7)*	18.18 *(2.51)*
Identify as having any neurodevelopmental differences		
Yes	6 *(7.3)*	20.53 *(1.47)*
No	70 *(85.4)*	21.28 *(3.48)*
Prefer not to say	2 *(2.4)*	17.43 *(0.78)*
Don't know	4 *(4.9)*	20.83 *(2.21)*
Identify as having a visible difference, e.g. a visible disability, health condition or altered appearance		
Yes	3 (3.7)	20.53 (1.62)
No	79 (96.3)	21.13 (3.38)
Highest additional relevant academic qualifications		
PhD	9 *(11)*	22.34 *(4.53)*
Masters	49 *(59.8)*	20.42 *(3.10)*
Post Graduate Certificate	2 *(2.4)*	24.19 *(2.60)*
None	21 *(25.6)*	21.79 *(3.09)*
Prefer not to say	1 *(1.2)*	23.21
Years of relevant work experience prior to training		
1 year or less	6 *(7.3)*	22.43 *(3.06)*
2 years	27 *(32.9)*	21.57 *(2.98)*
3 years	23 *(28)*	20.83 *(4.60)*
4 years	8 *(9.8)*	19.90 *(2.45)*
5 years	7 *(8.5)*	20.80 *(2.74)*
6+ years	9 *(11)*	20.73 *(1.86)*
I don't know	1 *(1.2)*	19.98
Prefer not to say	1 *(1.2)*	23.21

Note: to maintain trainee anonymity in relation to age and work experience, categories where only one trainee SWEMWBS score was present, these data points have been condensed into the next suitable category.

How likely are you to turn to X for support around your wellbeing while on the course?

Figure 1

Stacked Bar Chart Displaying how Likely Trainees are to Turn to Different Support Systems in Relation to their Wellbeing.



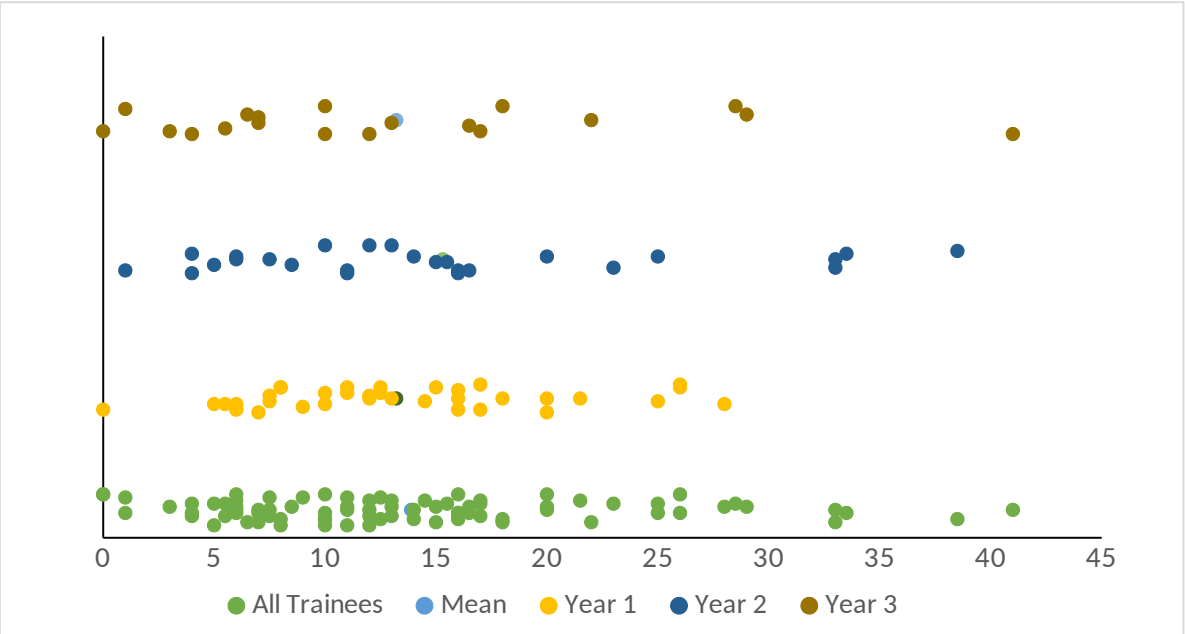
Trainees reported being mostly likely to turn to their cohort members, family, and friends and least likely to consider NHS psychological services, Oxford Health and Oxford University wellbeing services for support around their wellbeing (See Figure 1).

Number of hours worked a week outside of 9am-5pm hours

Across the three cohorts, trainees estimated that they worked on average a total of 13.71 hours (*SD* = 9.00, *Range* = 0 - 41) per week outside of 9am-5pm. Trainees completed more research hours (*M* = 6.22 hrs, *SD* = 4.87) relative to all other domains, followed by academic (*M* = 4.35 hrs, *SD* = 4.86), placement (*M* = 2.36 hrs, *SD* = 2.35) and then other tasks (*M* = .84 hr, *SD* = 1.06). Other tasks included logging expenses/supervision, performance reviews, emails, meetings with personal tutor, and peer supervision. Second-year trainees completed more total additional hours (*M* = 15.31 hrs, *SD* = 10.20) relative to first (*M* = 13.21 hrs, *SD* = 6.75) and third (*M* = 12.55 hrs, *SD* = 10.91) year trainees (see Figure 2 and 3). Spearman's Rank Correlation between total additional hours worked and trainees' SWEMWBS score was found to be significantly negatively correlated, $r(80) = -.43$, $p < .001$, meaning trainees who worked a greater number of hours outside of the 9-5 hours on average had a lower SWEMWBS score.

Figure 2

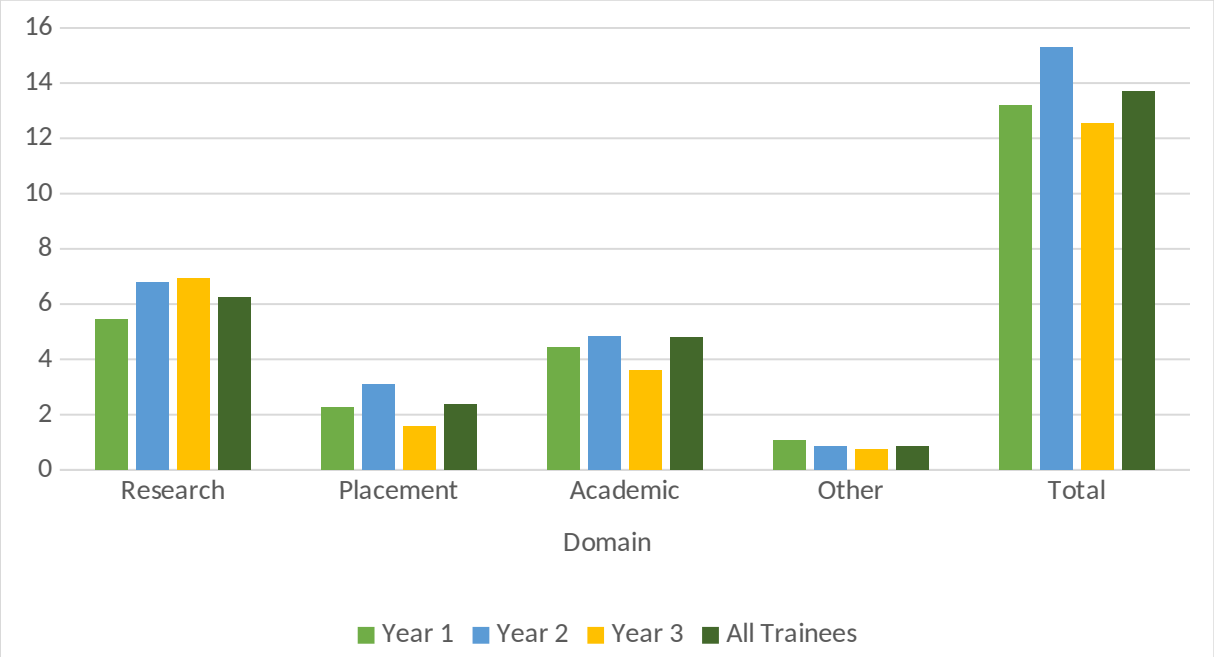
Jitter Plot of the Distribution of the Total Hours Worked by Trainees Outside of 9am-5pm by Cohort



Note: The large light blue dot indicates the mean.

Figure 3

Mean Number of Hours Worked a Week by Trainees Outside of 9am-5pm by Cohort and Domain.



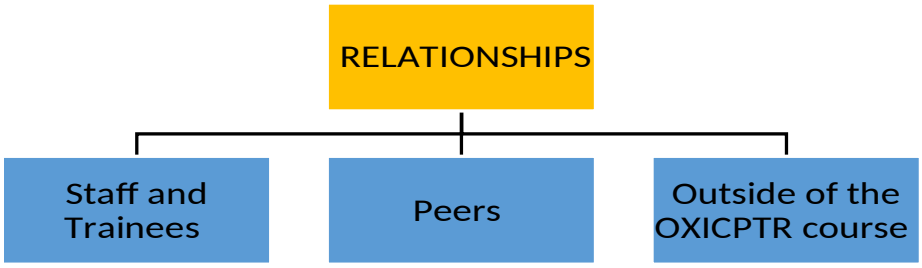
Qualitative Findings

Three main and 10 sub-themes were identified; namely 1) Relationships: Staff and Trainees, peer relationships and support outside of the OXICPTR course, 2) Workload: multiple demands and deadlines, teaching days, assignments, outside of the 9-5 and reflection and 3) Diversity: mental health and lived experiences and adjustments (see Table 3, Appendix B4 for example quotes).

Relationships

Figure 4

Overview of the Relationships Theme



All trainees spoke about the importance of relationships with others as a significant factor in their wellbeing and their ability to manage stress on the OXICPTR course (see Figure 4). When relationships were described as compassionate, reliable, and open, trainees found this to have a positive impact. When these characteristics were not present, it was noted to negatively impact wellbeing.

Staff and Trainees

Most trainees reflected on the relationship they had with clinical and course staff. Many trainees described their relationship with their course and personal tutor and their research and placement supervisor to be a compassionate and supportive relationship, providing a safe space to share any reflections or concerns. *"My course tutor has always been amazing. It has really helped how responsive they are and have enabled me to feel heard"*. On the other hand, several trainees noted relationships with staff can sometimes be *"highly critical"* and *"lacking in compassion and thoughtfulness"*, with *"strong power dynamics"* between course staff and trainees being reported. Some trainees reflected on how staff can respond in a "*defensive*" manner when raising concerns.

Many trainees stated they had experienced communication between staff and trainees as mixed or inconsistent. *"Conflicting information from the course can also add to stress and cause high levels of anxiety."*. Reference was made to mixed information linked to research projects and trainee's noting staff can appear to lack confidence in their own research knowledge. *"Feeling as though I couldn't get clear answers about research from supervisors who are less confident in this"*.

Some trainees spoke about the "*good enough*" narrative i.e. working to a high standard but not being perfect. Trainees were often unclear what "*good enough*" looked like making it difficult to know what standards are required. *"Whilst the course delivers a message of being 'just good enough' this does not match the experience as a trainee."* Trainees also noted hearing expectations from staff around how the OXICPTR course should be difficult and there is little that can be done to make it easier. *"Strong message received from the course that it's too hard/impossible to change most things"*.

Peers

The majority of trainees discussed the importance of their relationships with their peers on the OXICPTR course, this included peers from the same as well as other years. The majority of trainees also described their peers are "*a great source of support*" and facilitate "*normalising one another's experiences, hearing that you are not alone, learning from one another, reminding one another about tasks coming up.*". It's also important to note some trainees described their cohort as being "*quite lonely*", "*judgemental*", "*very cliquey*" and "*divided and not safe*", resulting in trainees being reluctant to voice their opinions. "*Sometimes a 'cancel culture' vibe amongst certain cohort members (trainees), which does not breed an environment in which people feel comfortable to share different opinions*".

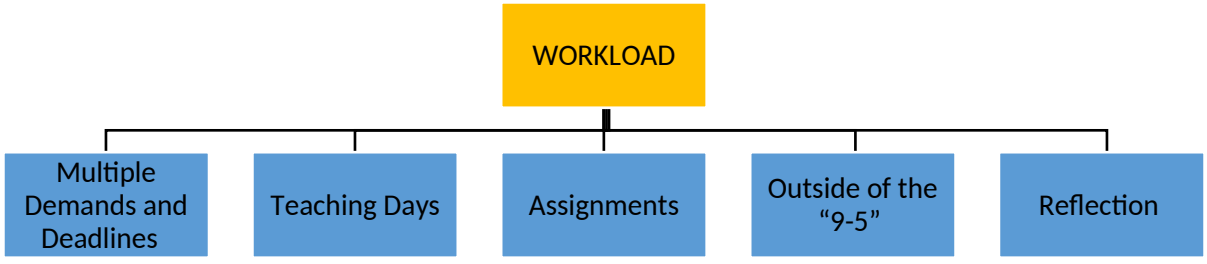
Support outside of the* OXICPTR *course

Many trainees valued the input they received from relationships outside of the OXICPTR course, for example, family, friends, romantic partners, and pets. "*Having a supportive and understanding partner and family who helped me through harder times.*"

Workload

Figure 5

Overview of the Workload Theme



Most trainees spoke about elements related to the workload across several domains, such as teaching days, assignments, reflections, working outside of 9am-5pm, multiple demands and deadlines (see Figure 5).

Multiple Demands and Deadlines

Most trainees found the OXICPTR course had several demands and deadlines to manage. Several trainees noted the research element of the OXICPTR course to be challenging to incorporate into the rest of the demands, "*research expectations/ demands are so high compared to the resource you are given (i.e. study days).*" Many trainees reported a lack of study days, some noted the introduction of three extra study days as being beneficial. *"The lack of study days in the context of all the work we need to do impacts on my wellbeing."*. Trainees identified additional study days, a checklist of all the upcoming assignment dates, a reduction in the volume of research requirements or enabling trainees to pick from pre-developed research projects rather than needing to develop them themselves as ideas that may support improvements in this domain.

Teaching Days

Many trainees discussed the structure and content of teaching days as well as the available facilities. Trainees described teaching days as "*long*" and "*intense*", with few noting their ability to concentrate fully from 9am-5pm was challenging, "*Teaching being for 8 hours each day - no one can stay engaged for this length of time and learn everything we are told so I often leave feeling drained, bored, and unenthused*". Some stated the teaching content could be *"repetitive"* or less relevant as they were not on the current placement the

teaching was aimed at. Several trainees made recommendations for the teaching day to be shortened (10-4pm), with this potentially being achieved by condensing the teaching material. Inadequate teaching facilities were discussed by some trainees *"Not having access to facilities to make lunch or hot drinks, on teaching days can make quite a difference to wellbeing."*. Some trainees identified having a set base for teaching with access to facilities such as parking, lunch space and access to hot drinks may help improve trainee wellbeing.

Assignments

Many trainees reflected on the format of the assignments on the OXICPTR course, as well as how extensions are managed. Several trainees valued how assignments are currently undertaken on the course (timed; summative or pass/fail; mirroring the role of a qualified clinical psychologist) as well as the value of being able to see examples of assignments. Several trainees valued knowing and being able to seek an extension, "*It helps to know that deadlines can be extended*."

Outside of the "9-5"

Most trainees spoke about the elements of the OXICPTR course that occur outside of the contracted 9-5 hours, including travel, leave and work completed outside of these hours. The majority of trainees highlighted it was common to work outside of the 9-5 day. Whilst some recognised this was part of "*doing a doctorate*", many expressed the volume of research played a significant role. *"Having to do a lot of work outside 9-5. I understand the need for some of this but there is a limit to how much extra we can work while having all the rest of our life necessary for maintaining wellbeing."*.

The majority of trainees reflected that travel to placement was either a significant barrier (long distance) or facilitator (short distance) for their wellbeing. Some reported travelling between 1-4 hours for placement each day. *"I think it's been quite challenging to commute quite long distances, because this takes a lot of time and energy out of my day,"*. Trainees suggested that placement distances be considered in relation to current home address.

Several trainees disliked having a fixed period of leave and being unable to take a small amount of annual leave during teaching time. *"It is also difficult not being able to have any teaching time off per year."*. They also valued staff encouraging and supporting them to take time off. Trainees made suggestions around having greater leave flexibility including time off during teaching days and ensuring discussions around annual leave is a standard agenda item within supervision.

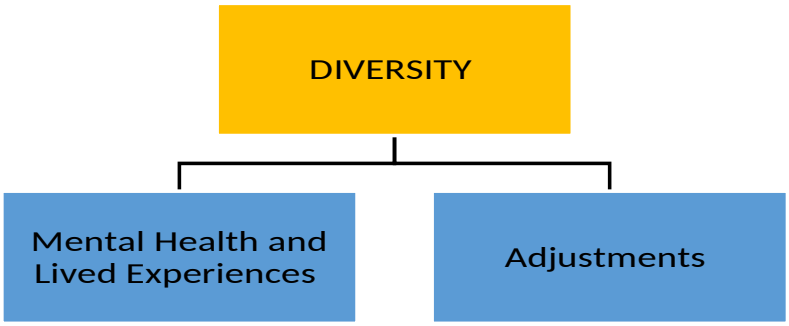
Reflection

Several trainees noted that, due to the level of workload, there was little opportunity to reflect together. *"There is very little meaningful reflection on the course … As Psychologists, the reflection tasks on the course often feel tokenistic."*. Trainees suggested that small reflective group sessions with opportunities to "c*onsider the emotive nature of the work and opportunity to think about the impact and how to best look after ourselves.*" would be beneficial.

Diversity

Figure 6

Overview of the Diversity Theme



Trainees spoke about diversity within the OXICPTR course and how this links to mental health/lived experiences and adjustments (see Figure 6).

Mental Health/Lived Experiences

Some trainees felt that mental health, wellbeing and lived experiences were not spoken about enough by the OXICPTR course. Sometimes when it was acknowledged, the response trainees received from staff was not what they wanted. "*My experience has been that we are told it is encouraged to speak about difficulties we are having, and the response from course staff then becomes about how you can help yourself manage rather than getting any actual support.*" Some trainees stated they valued staff members speaking openly about their own lived experiences. *"Disclosure from course staff/ lecturers on their own lived experience normalising mental health professionals experiencing difficulties."* Trainees explained having more information about accessing therapy including options outside of NHS Talking Therapies services would be beneficial.

Adjustments

Trainees requiring adjustment due to neurodiversity/mental health difficulties highlighted that adjustments are often not available or were not implemented in a timely fashion. *"Very minimal reasonable adjustments made for Trainees with disabilities, if any are made at all."*. Trainees suggested it would be beneficial for a service improvement project considering the needs of diverse trainees to be completed.

Discussion

The initial aims of this project were to explore the demographics of trainees linked to wellbeing and to consider the overall wellbeing level of trainees. The finding showed the overall mean SWEMWBS score for trainees on the OXICPTR course was 21.11 (*SD* = 3.32), which is somewhat lower than individuals in the general population aged 25-34 (Ng Fat et al., 2017) but similar (SWEMWBS = 20.54) to previous research with Trainee Clinical Psychologists (Summers et al., 2021).

When considering how wellbeing differs between cohorts, year one trainees were noted to have a lower SWEMWBS score, followed by year two and three trainees. This would suggest wellbeing in this sample seems to improve as the course progresses. It could be inferred from the data that this may be linked to a greater number of study days and fewer academic assignments in year 3. Alternative hypotheses concerning this finding could be the differing impacts of Covid, year 3 trainees having access to an additional three days of study leave or trainees developing more effective coping strategies as the course progresses. However, due to the cross-sectional design of this study, additional research would need to be conducted to explore these hypotheses further.

It was also noted that individuals who identify as belonging to a potentially minoritized group, for example having learning or mental health difficulties, neurodevelopmental or visible differences and being a male in a predominately female environment were found to have a lower wellbeing score. These findings are perhaps unsurprising when considering Meyer's (2003) Minority Stress Theory. This theory suggests individuals from a minoritized group experience multiple additional stressors related to their minority status, including external (discrimination, harassment, environmental) and internal (stigma, low self-esteem) stressors and fears of rejection. This minority stress can fundamentally result in individuals experiencing greater mental health difficulties and overall poorer wellbeing (Botha & Frost, 2020; Ehlke et al., 2020; Kuyper & Fokkema, 2011).

A significant negative correlation between the number of additional hours trainees worked and their overall level of wellbeing was noted. These findings are somewhat mirrored in Westwood *et al's* (2017) study, which found overtime worked was a predictor of burnout among Improving Access to Psychological Therapists (IAPT) professionals. Additionally, Turnbull and Rhodes (2021) identified overtime work as a contributor to stress and burnout in qualified Clinical Psychologists. Given this, staff and trainees should be mindful of the number of additional hours they are working and compassionately consider situations where this can be reduced.

The second aim of this project was to consider the barriers and facilitators for trainees in relation to their wellbeing and to explore whether they had any suggestions on how to enable/maintain wellbeing. Three main (relationships, workload, and diversity) and 10 sub-themes were identified. These findings can be understood in the context of the

Demerouti et al'S (2001) Job Demands-Resources Model (JD-R). Trainees noted several demands that were impacting their wellbeing namely; travel to placements, juggling many tasks, long teaching days and inadequate communication, working outside of 9am-5pm and research supervision. The course expansion is likely to have impacted the demand for placements resulting in some trainees requiring to travel further.

Trainees also described several resources that help them maintain their wellbeing such as good peer, staff and friend/family relationships and structured assignments. This is also noted within the qualitative data, with trainees reporting they would most likely turn to their cohort members, family, and friends for support. These findings reflect the existing literature base exploring workplace wellbeing for healthcare professionals. For example, Burke *et al* (2012) noted nurses who reported a greater level of support from their supervisors, colleagues, family and friends were found to have higher levels of psychological wellbeing. Consistent with the findings of this study, Galvin and Smith (2017) qualitatively explored the stressors and resources Trainee Clinical Psychologists experience. It was noted how the relationship trainees have with their supervisors are a valued support network and when this relationship is detrimental it can negatively impact trainee's ability to manage placements. Relationships with other trainees were reported to buffer against stress, however, there can be a worry from trainees that they do not feel competent in the eyes of their peers. Furthermore, relationships outside the OXICPTR course were found to be negatively impacted due to course demands, but these relationships were seen as essential to maintaining wellbeing.

Trainees noted ways they could improve their access to resources and reduce the level of demands. Some of the recommendations included the facilitation of reflective practice, a greater number of study days and shorter teaching sessions, and staff and trainee social mixers aimed at improving communication and relationships. These trainee ideas have been incorporated into the recommendations that have been shared with the OXICPTR course, see Table 2.

Limitations

Whilst over 78% of all trainees completed the wellbeing survey a proportion did not provide their viewpoint; this may have led to a biased sample. Furthermore, not all aspects of these findings may be generalisable to other doctoral Clinical Psychology courses due to the large variation between the structure and values of different courses. Notable heterogeneity within this dataset should be acknowledged, for example, some trainees completed no additional hours versus others who completed greater than forty. Additionally, due to the project being conducted by a trainee and staff members from the OXICPTR course, some trainees may have been reluctant to share openly and thus some comments may have been amended. Furthermore, due to the small and often very uneven sample sizes, inferential statistical analysis was not appropriate, and any interpretation of findings should be considered within this context. Future research could consider how this study design could be extended to consider the views of other trainees across the United Kingdom. Finally, it should be acknowledged that there may be limitations to the changes the OXICPTR course can make if trainees are still to emerge as highly skilled and competent Clinical Psychologists.

Service Improvement Recommendations

A number of recommendations have been developed, in line with the findings of the study. These have been refined in consultation with Trainee Clinical Psychologists and the senior management team of the OXICPTR course (see Table 2). Once implemented a review of these recommendations should be conducted in 6-12 months to consider the impact on trainee wellbeing. At this point, it may be helpful to reassess trainees' overall SWEMWBS.

Table 2

Recommendations Within a Start and Continue Framework (Cowan & George, 1999) Including Which Committee Should Take Responsibility for Actioning Recommendations.

Start	Continue
All Committees Recommendations	
• To review the barriers to trainee engagement within the committee structure *(Relationship – Staff and Trainees)*. • To review whether the planned expansion to Unipart house provides trainees with a suitable	• Staff to continue to attend peer compassionate reflective practice groups *(Relationship – Staff and Trainees)*. • To continue to identify CPD (Continuing Professional Development) opportunities in compassionate leadership *(Relationship – Staff and Trainees)*. • To consider how staff and trainees can engage more informally with each other e.g. away days, social mixers, physically based in the same building

teaching environment, including parking and kitchen facilities *(Workload – Teaching Days)*. • To support trainees to access courses and/or counselling on managing stress and work-life balance (Workload – Multiple Demands & Deadlines).	*(Relationship – Staff and Trainees)*. • Staff to continue to use non-director meetings and supervision structure to ensure they are up to date with relevant course information *(Relationship – Staff and Trainees)*. • To continue planned expansion to Unipart House ensuring trainees have a permanent teaching base and access to parking and kitchen facilities *(Workload – Teaching Days)*. • To continue to consult with experts by experience in relation to supporting trainees with lived experiences, considering how to also encourage the involvement of supervisors and trainees with lived experiences *(Diversity – Mental Health & Lived Experiences)*.
Programme Committee Recommendations	
• To review the usefulness of the new course tutor contract *(Relationship – Staff and Trainees)*. • To review how information is shared within the handbooks (query interactive handbook) including dates of when content is updated *(Workload – Multiple Demands & Deadlines)*. • To emphasise the extension process within the induction period at the start of the course *(Workload – Assignments)*. • To update wellbeing CANVAS page to include up-to-date information *(Diversity – Mental*	• To continue to implement the new course tutor contract, unless a review of its usefulness indicates otherwise *(Relationship – Staff and Trainees)*. • To continue to review the extension process within course tutor meetings *(Workload – Assignments)*. • To continue to highlight to trainees the mechanisms around requests for leave outside of the typically approved time windows and provide information concerning what circumstance this would be acceptable *(Workload – Outside of the "9-5")*. • To continue to ensure information related to how trainees can seek support in relation to their wellbeing through internal and external support opportunities is kept up-to-date *(Workload – Outside of the "9-5")*. • To continue to review within the Disability Task and Finish Group how the OXICPTR course supports trainees who seek adjustments, ensuring adjustments are discussed with Trainees (where possible) before their commencement on the course. Ideas included the completion of a service improvement project to consider this issue *(Diversity – Adjustments)*.

Health & Lived Experiences).	
Curriculum Committee Recommendations	
• To review the expansion to Unipart House and the impact this has on staff/trainee and trainee/trainee communication *(Relationships – Staff and Trainees & peers)*. • To explore further opportunities for additional protected structured reflection time. Ideas from trainees included a short, dedicated time within the teaching day to break into small groups, opportunities for peer supervision/reflection, a structured reflective practice space to consider the impact of being a trainee. Trainees felt this structured space would either need an external or a third-year trainee facilitator *(Workload – Reflection)*.	• To continue to review opportunities for protecting time for supervision *(Relationships – Staff and Trainees)*. • To continue planned expansion to Unipart House ensuring physical spaces where trainees (across cohorts) and staff can access jointly, enabling time to communicate with each other *(Relationships – Staff and Trainees & Peers)*. • To continue to review the helpfulness of the new 1st-year trainee reflective practice sessions facilitated by third years *(Workload – Reflection)*. • To continue to review the optimal ways of communicating key deadlines *(Workload – Multiple Demands & Deadlines)*. • To continue to consider generating more study time within the timetable to allow the completion of research tasks *(Workload – Multiple Demands & Deadlines)*. • To continue to consider if study days can be scheduled for a set day/time each week *(Workload – Multiple Demands & Deadlines)*. • To continue to consider implementing shorter 10am-4pm teaching days *(Workload – Teaching Days)*. • To continue to consider how to condense and redesign overlapping teaching content *(Workload – Teaching Days)*. • For staff to continue to model conversations around mental health, lived experiences and wellbeing *(Diversity – Mental Health & Lived Experiences)*. • To continue to review the self-disclosure Problem-Based Learning session currently offered to first-year trainees *(Diversity – Mental Health & Lived Experiences)*.
Research Committee Recommendations	

• To identify further CPD opportunities for internal and external research supervisors to develop their confidence in providing research supervision to trainees *(Relationships – Staff and Trainees)*. • To implement the planned Project Approval Session (PAS) training for internal staff *(Relationships – Staff and Trainees)*.	
Practice and Placement Committee Recommendations	
• To review the timeframe in which future trainees are informed of their base to provide time to consider where they would like to reside *(Workload – Outside of the "9-5")*.	• To continue to ensure discussions around wellbeing are a regular supervision agenda item. Ideas included rating stress levels, zone of proximal development and whether the supervision style needs to be amended depending on current well-being *(Relationships – Staff and Trainees)*. • To continue to develop an overarching document that summarises all clinical competencies *(Workload – Multiple Demands & Deadlines)*. • To continue to monitor the spacing of placement and academic deadlines to minimise competing demands *(Workload – Multiple Demands & Deadlines)*. • To continue to support placement supervisors to support trainees who consistently complete placement tasks outside of placement time. Ideas included behavioural experiments, reviewing of caseloads, encouraging trainees to finish on time, and reviewing the number of out-of-hours placement time in mid/end of placement reviews *(Workload – Outside of the "9-5")*. • To continue to offer location-based placements *(Workload – Outside of the "9-5")*. • To continue to review the benefits and challenges of

	location-based placements *(Workload – Outside of the "9-5")*. • To continue to ensure discussions around annual leave is a standard agenda item within supervision *(Workload – Outside of the "9-5")*.

Note: The information inside the brackets indicates the corresponding theme and subtheme.

Conclusions

These findings indicate trainees face several barriers and facilitators in relation to their wellbeing whilst studying on the OXICPTR course. It is hoped that this project has highlighted areas in which changes could occur to continue to support trainee wellbeing.

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Theory-Driven Research Project

The Impact of Social Media Comparison on Body Dissatisfaction and Disordered Eating in an Adolescent Population

Word count: 4898

Submission Date: April 2024

Internal Supervisor: Dr Ciorsdan Anderson

External Supervisors: Dr Joanna Adams

Proposed Journal: The Journal of Eating Disorders has been chosen as it covers a wide range of topics relevant to eating disorders. The journal uses Vancouver reference style. Author guidelines can be found here: Methodology | Journal of Eating Disorders (biomedcentral.com).

Abstract

Background

Social media use among adolescents is high, however, few studies explore the links between social media, appearance comparison, body dissatisfaction and eating disorders. The Tripartite Influence model suggests body dissatisfaction is developed and maintained by three sociocultural influences: media, peers, and parents, with this occurring through two mediating processes: internalisation of societal standards of appearance and social appearance comparisons. It is then hypothesised that this body dissatisfaction leads to disordered eating. This study experimentally investigates the impact of social media social comparison on body dissatisfaction and disordered eating in an adolescent population.

Methods

A repeated measure (body dissatisfaction), within (self and other social media comparison) and between (high vs. low eating disorder symptomology group) experimental groups design was used in which participants who self-reported as having high or low levels of eating disorder symptomology were asked to make comparisons of themselves and others in relation to social media images.

Results

One hundred and two UK-based females aged between 16 – 21 years old participated. Individuals with high levels of eating disorder symptomatology were found to have greater overall body dissatisfaction, and following the self and other comparison task, compared to those with low levels of eating disorder symptomology. The overall body dissatisfaction for the whole sample was greater following a self-comparison than the other-comparisons task.

Those with high levels of eating disorder symptomology experienced significantly greater body dissatisfaction following the self-comparison or the other-comparison task when compared to baseline. No significant difference in body dissatisfaction between self and other comparisons was observed. Those with low levels of ED symptomatology experienced no significant difference in body dissatisfaction following either social comparison task.

Conclusions

This study provides support for the Tripartite Influence model, suggesting adolescents with eating disorder symptomology experience greater body dissatisfaction after social media comparison compared to adolescents without eating disorder symptomology.

Keywords: *eating disorders*, *body image*, *body dissatisfaction*, *social media*, *experimental design*, *social comparison*, *Tripartite Influence model*.

Background

Despite the minimum age to use most social media platforms in the UK being set at 13 years old, 30% of 5-7 years old, 44% of 8-11 years old and 87% of 12-15-year-olds accessed social media platforms such as Snapchat, Instagram, and Facebook in 2020. Additionally, 97% of 5-15 years olds used video-sharing platforms such as YouTube and TikTok (1). The Children's Media Lives study found the majority of children described pressure to look a certain way online and reported editing their pictures to alter their looks (2). A recent systematic review of adolescent social media use found an overall positive correlation between the amount of time spent on social media and anxiety, depression and distress (3). However, the authors noted few studies measured mediating or moderating factors, such as sleep (4), social support (5), rumination (6) or personality traits (7).

An eating disorder is a serious mental health illness characterised by disturbances in an individual's eating habits and concerns about weight and body shape. UK studies regarding the prevalence of eating disorders and eating problems in adolescents suggest the prevalence of anorexia nervosa is 0.4%, bulimia nervosa is 1% and obesity is between 7-10%. Additionally, 35% of teenagers are thought to be engaging in dieting behaviours (8). The literature exploring the relationship between social media use and eating and body concerns is ever-expanding, with several reviews being conducted (9-13). Overall, mainly in adults (few adolescent studies: mean age range 11.2-33.9 years old), the reviews demonstrate a relationship between social media usage and body concerns/disordered eating, specifically the Saiphoo and Vahedi (12) meta-analysis indicated a small, positive significant relationship, $r = 0.169$. Larger effect sizes were found in relation to body concerns and appearance-focused social media use and a negative relationship was found

for age, suggesting younger individuals' body concerns are more affected by social media use (12).

However, it should be noted most of the literature for adults is correlational with very few experimental or longitudinal studies. For example, the Holland and Tiggemann (10) review captured 17 correlational, five longitudinal and only four experimental studies. The review highlights several theoretical frameworks that have been used to explore the link between social media and body concerns/disordered eating, namely Social Comparison theory (14), Objectification theory (15) and the Tripartite Influence model (16).

When exploring the literature specifically related to adolescent social media use and disordered eating a recent update paper (17) and scoping review (18) mirrors research with adults, confirming an association between social media usage, body image concerns and disordered eating behaviours. The review noted greater social media use is linked to greater body image concerns, eating disorders and poorer mental health, with these relationships being mediated by appearance comparison (defined as comparing oneself to others), internalisation of thin-ideals (conforming to societal norms of bodies needing to be slender and thin) and self-objectification (viewing self as an object rather than a person). Gender was noted to be a moderating factor with females aligning to thin-ideals, making greater comparisons of others and a greater focus on photos of themselves whereas males were found to align to the muscular-ideals with the aim of building strength and fitness rather than weight loss. Tiggemann and Slater (19) found girls who used Facebook scored higher on body image concern measures than girls who did not use Facebook. Additionally, they reported girls (aged 10-12) who spent more time online were more likely to score higher on measures relating to internalisation of thin-ideals, body surveillance, body esteem and

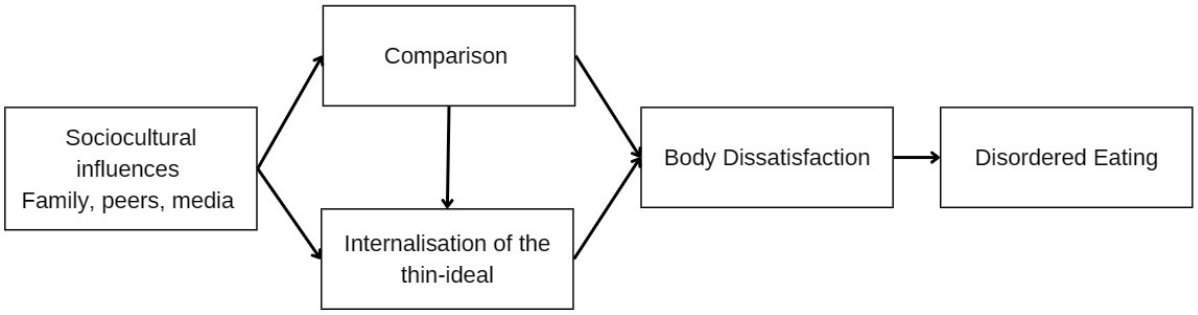
dieting, with internalisation of thin-ideals found to be the mediating factor (20). Furthermore, a study found teenagers who owned a greater number of social media accounts were more likely to score high on a disordered eating measure. Additionally, girls who spent more daily time on Instagram or Snapchat were more likely to score higher on the Eating Disorder Examination Questionnaire (21). Overall, this suggests an association between social media use, length of time online, and reported eating disorder symptoms.

An adolescent longitudinal study in 2008/ 2009 found greater social media use predicted greater body dissatisfaction 18 months later, and body dissatisfaction did not predict social media usage (22). Additionally, no gender differences were observed, and peer feedback related to appearance did not predict body dissatisfaction. These findings would suggest that appearance-related feedback from peers does not mediate the relationship between social media and body dissatisfaction (22). However, Nesi and Choukas-Bradley (23) found girls who experienced greater concern over receiving peer feedback about their photos of themselves (or “selfies”) reported lower body confidence. The level of personal investment in social media photos may enhance body-related concerns and disordered eating. McLean and Paxton (24) found adolescent girls scored higher on measures relating to restrictive dieting, body dissatisfaction, overvaluation of weight and shape, and internalisation of thin-ideas when they shared images of themselves on social media, compared to girls who did not post pictures of themselves. Of the girls who shared images, the ones who spent more time and effort on creating their pictures were more likely to report greater body and eating concerns. Additionally, Kleemans *et al* (25) explored the effects of exposing 144 adolescent girls to either edited or non-edited Instagram images. They found girls who viewed the edited image experienced lower body dissatisfaction, with

this being greater with girls who experienced higher social comparison tendencies, to the author's knowledge this is the only experimental study with adolescents in this area. Overall, this suggests a potential causal relationship between time spent online, and body dissatisfaction, and an unclear relationship between the role of peer approval and social comparison in that process.

Given the limited evidence in the adolescent population, the Tripartite Influence Model (16) appears to be the most appropriate to use to explore the link between social media use and body dissatisfaction and disordered eating in an adolescent population. The model suggests body dissatisfaction is developed and maintained by three sociocultural influences: media, peers, and parents, with this thought to be occurring through two mediating processes: internalisation of societal standards/thin-ideals of appearance and social appearance comparisons. It is then hypothesised that this body dissatisfaction leads to disordered eating (see Figure 1).

Figure 1. Tripartite Influence Model, Thompson et al, 1999 (16)



There is empirical evidence to support the use of this model in an adolescent population, specifically Jarman *et al* (26) found on the whole greater appearance-ideal internalisation and social comparison mediated the relationship between social media

usage, body dissatisfaction and wellbeing, this relationship was unaffected by gender. Additionally, they found social media with a higher focus on appearance (Instagram and Snapchat) was associated with lower body satisfaction and wellbeing. Furthermore, Scully *et al* (27) specifically looked at young females' appearance-related activities on Facebook, finding after controlling for age and self-esteem, social comparison significantly mediated the link between Facebook use and body dissatisfaction, with the internalisation of the thin-ideals mediating this link further. Furthermore, Keery *et al* (28) evaluated this model with a sample of 325 adolescent females, finding appearance internalisation and comparison partially mediated the relationship between body dissatisfaction and media exposure.

Given the lack of experimental studies considering the Tripartite Influence model with adolescents and the differences between gender thin-ideals, the following hypotheses were made specifically focusing on females (differing gendered stimuli would have been required if no gender was specified):

1) Young females with higher levels of eating disorder (ED) symptomology will experience greater baseline levels of body dissatisfaction compared to young females with lower levels of ED symptomology.

2a) Young females with higher levels of ED symptomology will experience lower levels of body dissatisfaction when they engage in self-comparison of social media images than when they engage in other-comparison of social media images.

2b) There will be no differences in body dissatisfaction between the self-comparison condition and other-comparison condition for young females with lower levels of ED symptomology.

3) Body dissatisfaction will increase following the self-comparison task in young females with higher levels of ED symptomatology, compared to young females with lower levels of ED symptomology, but not following the other-comparison task.

Methods

Design

A repeated measures (body dissatisfaction), within (self and other social media comparison) and between (high vs. low ED symptomology) groups design was used to explore whether body dissatisfaction differs between young females experiencing higher levels of ED symptomology compared to young females experiencing lower levels of ED symptomology when making comparisons with themselves or others in relation to social media images. Ethical approval was received from a subcommittee of the University of Oxford Central University Research Ethics Committee (R88903/RE001, see Appendix C1).

Participants

A total of one hundred and eight young people were recruited via social media posts, emails to schools, colleges and youth groups, charity websites and community information boards between December 2023 and March 2024. Participants met the following inclusion criteria: female, aged between 16 – 21 years old, residing in the United Kingdom, able to read and understand English and able to provide informed consent. Participants did not need a formal eating disorder diagnosis.

Sample size

A priori analysis was executed using G*Power 3.1 (29) based on the dependent variable, body dissatisfaction. To establish a 95% chance (p<.05) of adequately detecting a

medium effect, power 95%, a total sample size of 84 was indicated. Due to the limited literature base a medium effect size of 0.2 was used.

Measures

Table 1 includes all measures within this study, see Appendix C7 for all scales.

Table 1. Outcome Measures

Domain	**Measure**
Grouping variable	
Eating Disorder Symptomology	ED symptomology was measured using the Eating Disorder Examination Questionnaire (EDE-Q) (30). This is a 28-item self-report measure which assesses eating disorder symptomology such as restriction and eating, shape and weight concerns, with a higher score indicating greater eating disorder symptoms and severity. The EDE-Q demonstrates good consistency, validity and reliability in adult and adolescent samples (31). In this sample, internal consistency for the global EDE-Q score was excellent (Cronbach's α = .92).
Outcome variable	
Body Dissatisfaction	The Body Image States Scale (BISS) (32) was used to measure state body dissatisfaction. It is a valid and reliable (32) 6-item self-report instrument that measures an individual's perception of their body image at that moment. The areas covered include (dis)satisfaction with physical appearance, weight, attractiveness, body size and shape, how they usually feel and comparison with others, with a lower score

	indicating greater body dissatisfaction. The BISS has been used with adolescents (25, 33) and adult populations (34). In this sample, internal consistency at baseline was good (Cronbach's α = .88) and test-retest reliability over the three time points was excellent with a coefficient of correlation of r = .91, p<.001.
Clinical and demographic characteristics	
Demographics	Information on the participants' age, ethnicity and whether they were receiving any support/assessment/treatment/ therapy for psychological difficulties was collected, see Appendix C3.
Trait Depression and Anxiety	The Revised Children's Anxiety and Depression Scale (RACDS) (35) was used to measure known risk factors for EDs (36), trait levels of depression and anxiety. This is a 47-item self-report measure aimed at assessing the following domains: separation anxiety, generalised anxiety, social phobia, panic, low mood and obsession. A total score for each domain can be generated as well as a total anxiety and total internalisation score. The RACDS has good reliability and validity in both adolescent clinical (37) and non-clinical populations (38, 39). The following items were amended in line with the adult validation of the measure (39):(brackets indicate amendments) '*I worry about being away from my parents (loved ones)*', '*I worry that I will do badly at my school work (university/work)*', '*I have trouble going to school (work/university) in the mornings because I feel nervous or afraid*,' '*I feel afraid if I have to talk in front of my class (peers/cohort)*' and '*I have to*

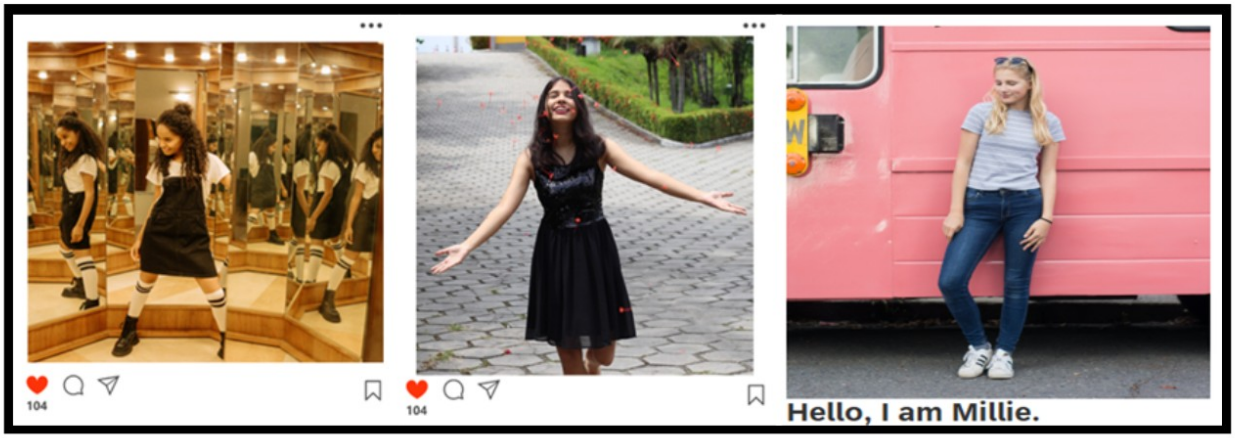
	think of special (specific) thoughts, like numbers or words, to stop bad things from happening.'" In this sample, internal consistency was excellent (Cronbach's α = .96).
Social Media Use	To measure social media use within the sample, participants were given a list of 13 social media platforms and asked to indicate which site they have/currently use. Participants were also asked how long they spend on average on social media a day and how often they check their social media accounts, see Appendix C3.

Materials

Ten mock-up social media posts were developed for this study (See Figure 2 & C5 Appendix). Each social media post included a picture of a young female in which her whole body was visible. The young people in the images ranged in ethnicity and body size (not subjectively underweight). Each post contained the same number of "likes" (104). The mock-ups were developed alongside experts by experience (sixth form students, 16-18 years old) to ensure images were not distressing, reflective of what they would see on their social media stream and appeared to look 16-21 years old. Stimuli images were sourced from publicly available stock images, due to copyright and ethical issues of using images directly from adolescents' social media accounts.

A fictional young person named "Millie" (see Figure 2 & C5 Appendix) was used as the main stimuli for the other-comparison condition, this enabled participants to directly compare Millie to the young people in the social media posts. Millie was developed to represent a young person aged 18.5 years old.

Figure 2. Examples of Mock-up Social Media Posts and Image of "Millie".



Below each social media post seven, 100-point VAS scales were present to facilitate social comparisons with themselves or a fictional young person, Millie on the following characteristics: Smaller/Larger, Lighter/Heavier, Older/Younger, Shorter/Taller, Weaker/Stronger, Less Confident/More Confident, Less Attractive/More Attractive. These dimensions were developed by the researchers, informed by the Adolescent Social Comparison Scale-Revised (40).

Five Sense Grounding Task. This task was used to reduce body dissatisfaction and distress before commencing the second experimental condition and post-completion of the study. This was adapted from procedures commonly used in dialectical behavioural therapy (DBT) to support young people to reduce emotional distress (41). Participants were shown an image of a nature scene and asked to imagine they were there (see Appendix C6). They were then asked to state five things they might be able to see, four things they might be able to hear, three things they might be able to feel, two things they might be able to smell and one thing they might be able to taste.

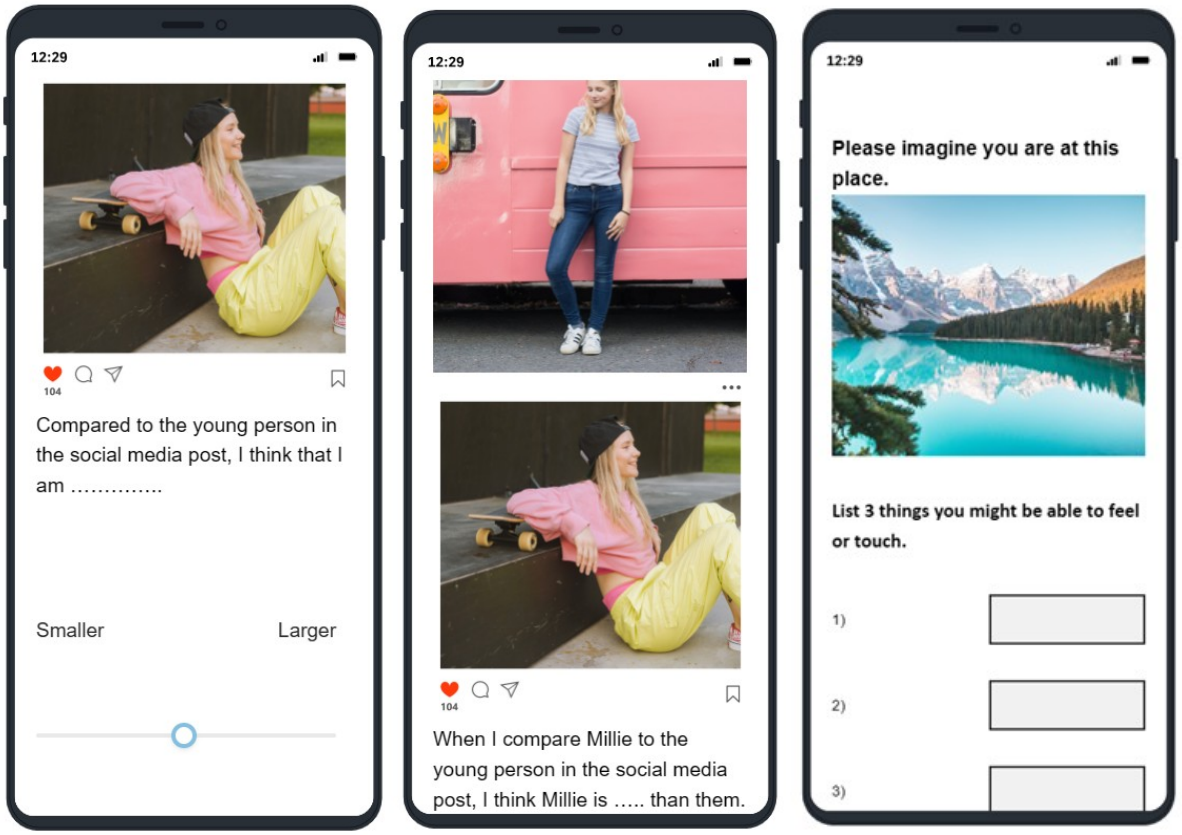
Procedure (see Appendix C8 for study flow chart)

Participants accessed the study via the online platform, Qualtrics. They read through the information sheet before using the checkboxes to indicate their understanding of each element of the information sheet and consent to participate (see Appendix C2).

Participants were asked questions about their demographics and social media usage. They then completed the EDE-Q, RCADS and BISS. Participants were randomly allocated to begin with either the self-comparison or other-comparison condition. The instructions the young person received varied depending on the condition:

- Self-comparison: *"Each social media post will contain an image of a young person. You will then be asked to compare yourself to the young person in the post. Compared to the young person in the social media post, I think that I am ….. Please indicate by placing a mark on the appropriate position of each horizontal line for the following items."*,
- Other-comparison: *"Each social media post will contain a young person. You will then be asked to compare Millie to the young person in the post. Hello, I am Millie* (next to the image of Millie). *When I compare Millie to the young person in the social media post, I feel Millie is ….. than them. Please indicate by placing a mark on the appropriate position of each horizontal line for the following items"*.

Figure 4. Examples of Self-comparison (left) and Other-comparison (middle) and Five Sense Grounding Task (right)



Each condition included the same 10 mock-up posts in a random order. After viewing each image participants were asked to answer the 7 VAS scales, comparing either themselves or "Millie" to the images (see Figure 4).

Participants then completed the BISS followed by a five-sense grounding task. They then completed the alternative (self or other) social-comparison condition. Finally, participants completed the BISS and a five senses grounding task. All participants received debriefing and signposting information following the completion of the study. Participants who scored over 3 on the EDE-Q were provided with a safeguarding prompt, suggesting they should speak to their General Practitioner or an adult they trust.

Statistical Analysis

All analysis was conducted using IBM SPSS, version 29 (42). A high and low ED symptomology group was created using a median split of EDE-Q global scores. To reduce the overlap of groups, one standard error -/+ from the median was removed. Cronbach's alpha was used to evaluate the internal consistency of measures. The BISS test-retest reliability was explored using absolute agreement, two-way mixed model intraclass correlations between BISS scores at baseline, self and other comparison conditions.

Descriptive statistics, chi-squared and *t*-tests were conducted to explore differences between ED groups. Where demographics variables had low expected frequencies to conduct a chi-square test, categories adjacent were combined. A 2x3 repeated measure ANOVA was conducted to explore the effect of social comparison (baseline vs self vs other) and ED symptomology (high ED, low ED) on body dissatisfaction, as measured by the Body Image States Scale (BISS). Bonferroni-corrected pairwise *t*-tests were then conducted to explore significant ANOVA results.

As participants were randomly allocated to complete either the self or other comparison condition first, a 2 x 2 between groups ANOVA was conducted to explore whether order impacted the dependent variable, body dissatisfaction.

Results

One hundred and eight young people met the inclusion criteria. The data set was median split into a high ED (n = 51) and low ED (n = 51) symptomology group, one standard error -/+ from the median (*median* = 3.263, *SE* = .174) was removed resulting in three participants being excluded. A further three participants were removed after two were

identified as EDE-Q outliers (3 SD -/+ mean) and one due to failing the spam indication test (ages did not match). Skewness, kurtosis, and sphericity assumptions were all met.

Descriptive statistics

All participants were aged 16-21 (*M* = 18.51, *S.D* = 1.72) with 89.2% (*n* = 91) identifying as White in ethnicity, see Table 2 for participant characteristics. Fifty-six (54.9%) individuals had a global EDE-Q score of above 2.8 indicating the likely presence of an eating disorder (43).

Comparison of ED symptomology groups for demographic and clinical variables

To explore differences between ED groups t-tests and chi-square were conducted, see Table 2. As expected, the high ED group scored significantly higher on the global EDE-Q score when compared to the low ED group, t(100) = 20.09, *p* = .009. The high and low ED groups did not significantly differ on the RCADS depression, t(100) = .177, *p* = .675 or anxiety subscale, t(100) = .265, *p* = .608 or the total RCADS score, t(100) = .356, *p* = .552. No significant differences were found between the high and low ED symptomology groups for mean height, weight, body mass index, ethnicity and time spent on social media. The high ED group were more likely to be accessing psychological support and checking their social media at a higher frequency compared to the low ED group.

Table 2. Demographic and Clinical Characteristics in the High and Low ED Symptomology Groups.

Characteristics		**Total Sample** (n=102)	**High ED symptomatology Group** (n=51)	**Low ED symptomatology Group** (n=51)		
Age			**Mean (*SD*)**			
		18.51 (1.72)	18.55 (1.71)	18.47 (1.74)		
					Chi-square	
Ethnicity			**n (%)**		***X*²**	***p***
	White	91 (89.2)	44 (86.3)	47 (92.2)	.917	.338
	Asian	5 (4.9)	3 (5.9)	2 (3.9)		
	Black, Caribbean or African	4 (3.9)	2 (3.9)	2 (3.9)		
	Mixed or Multiple	2 (2)	2 (3.9)	0		
Currently receiving any support/assessment/treatment/therapy for psychological difficulties			**n (%)**		***X*²**	***p***
	Yes	51 (50)	32 (62.7)	19 (37.3)	6.627	.010*
	No	44 (43.1)	14 (27.5)	30 (58.8)		
	Don't Know	5 (4.9)	4 (7.8)	1 (2)		
	Prefer not to say	2 (2)	1 (2)	1 (2)		
Which social media sites do/have you use/d?			**n**			
	Facebook	58	29	29		
	Instagram	100	50	58		
	BeReal	45	27	18		
	Twitter (X)	49	30	19		
	TikTok	74	39	35		
	Pinterest	78	40	38		
	Youtube	94	47	47		
	Snapchat	79	42	37		
	Reddit	38	23	15		
	Tumblr	23	10	13		
	WhatsApp	94	26	48		
	Discord	32	16	16		
Overall, how long do you spend on social media in a typical day?			**n (%)**		***X*²**	***p***
	5 minutes or less	0	0	0	7.291	.121
	15 minutes	1 (1)	1 (2)	0		
	30 minutes	3 (2.9)	1 (2)	2 (3.9)		
	1 hour	8 (7.8)	2 (3.9)	6 (11.8)		

	2 hours	21 (20.6)	8 (15.7)	13 (25.5)		
	3 hours	28 (27.5)	14 (27.5)	14 (27.5)		
	4 hours	14 (13.7)	6 (11.8)	8 (15.7)		
	5 hours	9 (8.8)	7 (13.7)	2 (3.9)		
	6 hours	9 (8.8)	6 (11.8)	3 (5.9)		
	7 hours	5 (4.9)	4 (7.8)	1 (2)		
	8 hours	1 (1)	1 (2)	0		
	9 hour	0	0	0		
	10 + hours	3 (2.9)	1 (2)	2 (3.9)		
How often do you check your social media accounts (even if you are logged on all day)?			**n (%)**		***X*²**	***p***
	Once a week	1 (1)	0	1 (2)	9.598	.022*
	Every few days	2 (2)	1 (2)	1 (2)		
	Once a day	9 (8.8)	4 (7.8)	5 (9.8)		
	Every few hours	41 (40.2)	14 (27.5)	27 (52.9)		
	Every hour	28 (27.5)	17 (33.3)	11 (21.6)		
	Every 30 minutes	9 (8.8)	6 (11.8)	3 (5.9)		
	Every 10 minutes	10 (9.8)	7 (13.7)	3 (5.9)		
	Every 5 minutes	2 (2)	2 (3.9)	0		
					T-test	
Weight (kg)			**Mean (SD)**		***t***	***p***
		60.21 (16.22)	59.10 (18.22)	61.31 (14.05)	-.665	.508
Height (cm)			**Mean (SD)**			
		167.52 (17.70)	166.45 (8.76)	168.57 (23.52)	-.603	.548
Body Mass Index		19.85 (7.58)	18.62 (8.04)	21.07 (6.96)	-1.642	.104
RCADS			**Mean (*SD*)**			
	Total Score	123.40 (27.90)	136.78 (24.84)	110.02 (24.30)	.356	.552
	Depression	27.75 (6.92	31.63 (5.61)	23.88 (5.88)	.675	.675
	Anxiety	95.65 (22.18)	105.16 (20.59)	86.14 (19.63)	.265	.608
EDE-Q			**Mean (SD)**			
	Global Score	3.10 (1.84)	4.72 (.70)	1.45 (.92)	20.09	.009*
			Mean (SD)		**ANOVA F(2,200)**	***p***
Body Dissatisfaction BISS	Baseline	21.31 (9.99)	14.75 (6.46)	27.88 (8.49)	3.06	.049*
	Self-Comparison	19.87 (10.55)	12.04 (4.56)	27.04 (8.51)		

	Other-Comparison	20.25 (9.92)	13.18 (6.67)	27.98 (7.65)

**Significance level p < 0.05.*
Where demographics variables had low expected frequencies to conduct a chi-square test, categories adjacent were combined. Not accessing psychological support, preferring not to say and don't know were combined, and all other ethnicities apart from white were combined. The amount of time spent each day on social media was aggregated to include 5 mins or less, 15 minutes, 30 minutes and 1 hour in one group and everything 4+ hours in another. Spent time checking social media; once a week, every few days and once a day were aggregated as well as every 30 minutes, 10 minutes and 5 minutes.
Abbreviations: RCADS, Revised Children's Anxiety and Depression Scale; EDE-Q, Eating Disorder Examination Questionnaire; BISS, Body Image States Scale; ED, Eating Disorder.
Body Mass Index calculated using the formula: weight (kg) / height^2.

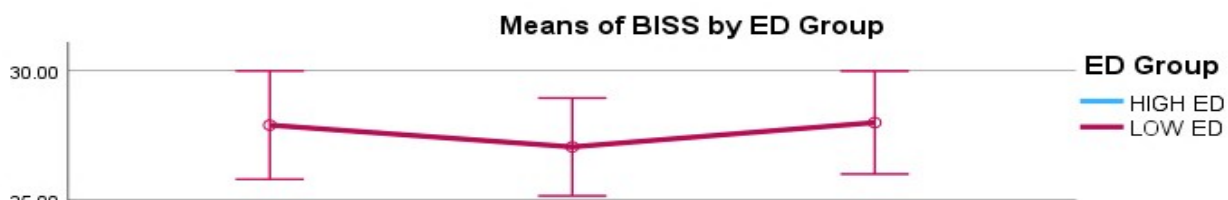
Interactions between body dissatisfaction, social comparison and eating disorder symptomology

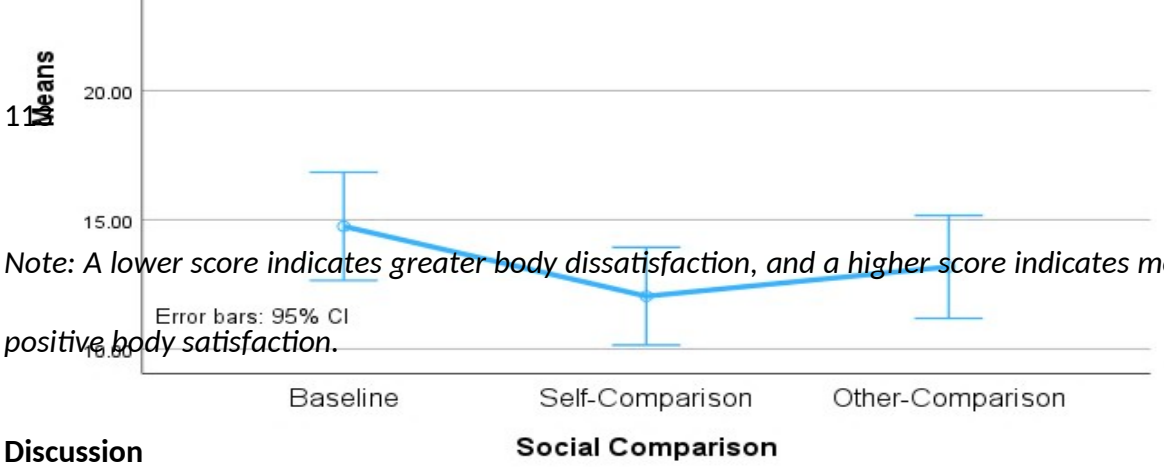
Means and standard deviations for body dissatisfaction are presented in Table 2. Mauchly's test indicated the assumption of sphericity had not been violated $X^2(2) = 1.235$, $p = .539$. A 2 x 2 between groups ANOVA was conducted for both the low ED group and high ED group separated into order of presentation of experimental condition (self vs other comparison). No significant effect of order was found for BISS scores for either group depending on which condition was presented first. A 2 (high vs Low ED symptomology) X 3 (social comparison: baseline, self, other) repeated measures ANOVA was used to explore changes in body dissatisfactions as measured by the BISS between the high and the low ED symptomology group at baseline, following self-comparison and other-comparison of social media images. Concerning body dissatisfaction, a significant main effect of ED group was found, $F(1,100) = 114.0$, $p<.001$, partial $\eta^2 = .53$. Bonferroni tests for pairwise comparison found the mean BISS score was significantly different between the high (M = 13.32, SD = .95) and low (M = 27.64, SD = .95) ED group (p <.001, 95% C.I. = [-16.973, -11.654]), indicating individuals in the high ED group experienced greater overall body dissatisfaction compared to the low ED group.

A significant main effect for social comparison was also observed, $F(2,200) = 9.30$, $p<.001$, partial $\eta^2 = .085$, meaning there was a difference in body dissatisfaction across the three conditions; baseline, self and other comparison (See Table 2 and Figure 5). Bonferroni test for pairwise comparison found the mean BISS scores across the whole sample (n = 102) were significantly lower for self-comparison (M = 19.54, SD = .68) when compared to baseline (M = 21.31, SD = .75), p <.001, 95% C.I. = [.714, 2.84], while mean BISS scores for the other-comparison (M = 20.58, SD = .71) condition were not significantly different from baseline, $p = .20$, 95% C.I. = [-1.70, .23]. However, mean BISS scores across the sample were found to be significantly lower for self-comparison when compared to the other-comparison condition, $p = .036$, 95% C.I. = [-2.03,-.05].

The interaction between ED group and social comparison conditions was found to be significant, F(2,200) = 3.06, p = .049, partial $\eta^2 = .03$. Bonferroni test for pairwise comparison found the high ED group scored significantly lower on the BISS at baseline, self and other comparison when compared to the low ED group in these conditions (all $p<.001$), indicating the high ED group experience greater body dissatisfaction in all conditions compared to the lower ED group. Concerning the high ED group, they scored significantly lower on the BISS following the self-comparison (p <.001, 95% C.I. = [1.21, 4.21]) and the other-comparison task ($p = .019$, 95% C.I. = [.20, 2.94]) when compared to baseline. There was no significant difference between self and other comparison BISS scores for the high ED group (p = .153). Additionally, there was no significant difference for the low ED group BISS score on self-comparison ($p = .522$) and other-comparison ($p = 1.0$) when compared to baseline or between self and other comparison ($p = .315$).

Figure 5. *Means of BISS by ED Symptomatology Group*





Note: A lower score indicates greater body dissatisfaction, and a higher score indicates more positive body satisfaction.

Discussion

The study aimed to explore the impact of social media comparison on body dissatisfaction for adolescents with high eating disorder symptomology compared to those with low eating disorder symptomology. The first hypothesis was found to be supported by the data and in line with previous research (44, 45), with the high ED symptomology group being found to experience greater body dissatisfaction at baseline when compared to the low ED symptomology group. The first part of the second hypothesis, that the high ED group would score significantly lower on the BISS following self-comparison than other-comparison was not supported, no significant difference was noted between the two conditions. However, the hypothesis related to the low ED group was supported, with no significant differences related to body dissatisfaction post self or other-comparison being observed. While a significant main effect of the ED group and comparison condition was observed, the data only partially supports the third hypothesis. The high ED group were found to have lower body dissatisfaction scores across all conditions when compared to the low ED group. However, within the high ED group, these scores significantly differed between baseline and both social comparison conditions, but no significant difference was observed between self and other-comparison. It appears the type of social comparison made does not differ in its impact on body dissatisfaction. This could be reflective of the design of the comparison tasks, it could have been the two comparison tasks were too alike, with young people likely making some kind of self-comparison when making comparisons with others. Alternatively, another explanation of the results could be that both self and

other comparisons equally negatively impact body satisfaction for adolescents with EDs. Future research would benefit from having a larger sample where participants complete either the self or other-comparison task, or including a question asking to what extend they were able to make a comparison, therefore reducing the chances of priming young people to consider themselves.

Whilst this is the first known study of this design type to consider the Tripartite Influence model the result should be considered in light of this study's limitations. Firstly, this study only included female participants residing in the United Kingdom, with the majority of the sample identifying as White in ethnicity, therefore the findings may not generalise to other populations and genders. A recent review indicated significant gender differences in social media use, noting females preferred thin-ideals images and engaged in greater social comparison whereas males were noted to favour muscular ideals focusing on fitness (18). Concerning ethnicity, the Tripartite Influence model has been noted to fit well when applied to White, Black, Latina and Asian females although differences were observed with White females experiencing greater internalisation of thin-ideals through media compared to Black females (46). Some studies also indicate ethnicity could be a protective factor against the internalisation of thin-ideals (47). Secondly, due to the ethical dilemma of using young people's social media posts for research purposes, all the social media posts were mock-ups of content young females might see. Whilst the mock-up posts were co-created with a group of young people they were not formally validated, future research should consider how they could seek consent from young people to use their content for research purposes and validate this content accordingly. The images within this study were chosen to not cause distress among young people, however, we know the content

adolescents are exposed to is likely to be extremely varied and at times distressing. As mock-up posts were used, participants were unable to engage with the content e.g. likes, saves and shares, this might have influenced how young people would typically engage with content online. Additionally, all questionnaires used within this study were self-report, having the potential to be biased towards socially desirable answers. Further research should consider seeking NHS ethics to conduct the study again with adolescents with a confirmed ED diagnosis. Whilst this study was the first to experimentally test the Tripartite model of Influence for adolescents with eating disorders symptomology, it only focuses on part of the model, future research would benefit from exploring the impact of the internalisation of thin-ideals alongside appearance comparison.

When interpreting these findings within a clinical context it would suggest that during the assessment and treatment of adolescents experiencing an eating disorder, attention should be paid to how these young people are using social media and the impact this could be having on maintaining body dissatisfaction. The Tripartite Influence Model may suggest if adolescents used social media less and therefore had less opportunity to make comparisons and exposure to thin-appearance-ideals, it could be said that this would have a positive impact on body satisfaction. Interventions aimed at supporting adolescents to be aware of the comparison risks of social media and how they can reduce the impact on themselves have shown promising results. Valle and Wade (48) conducted a pilot randomised control study implementing self-guided CBT interventions for self-criticism, comparison and social media curation. They noted a significant reduction in appearance comparison, disordered eating and an increase in body image flexibility following one week after the intervention. Additionally, McLean and Wertheim (49) explored the impact of a

social media literacy intervention for adolescents. They found an improvement in body esteem, dietary restriction, and media literacy. Further research is warranted for the continued development of these interventions.

Conclusions

This study provides support for the Tripartite Influence model with adolescents with EDs. It demonstrated female adolescents, when exposed to social media content and asked to make a social comparison did experience greater body dissatisfaction, with this being experienced more acutely by the higher eating disorder symptomatology group. These findings can be used to inform the importance of exploring social media use and its impact on body dissatisfaction with adolescents experiencing an eating disorder.

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Executive Summary

The Impact of Social Media Comparison on Body Dissatisfaction and Disordered Eating in an Adolescent Population

Background

Social media use among adolescents is high, however, few studies explore the links between social media, appearance comparison, body dissatisfaction and eating disorders. An eating disorder is a serious mental health illness characterised by disturbances in an individual's eating habits and concerns about weight and body shape. One model that can be used to explore social comparisons and body dissatisfaction is the Tripartite Influence model which suggests body dissatisfaction is developed and maintained by three sociocultural influences: media, peers, and parents, with this occurring through two mediating processes: internalisation of societal standards of appearance and social appearance comparisons. It is then hypothesised that this body dissatisfaction leads to disordered eating.

Given the lack of experimental studies considering the Tripartite Influence model with adolescents, this study wanted to explore the following: whether body dissatisfaction varies between young females with higher and lower levels of eating disorder symptomology and whether body dissatisfaction is impacted following young people comparing themselves or others to social media images, with the expectation that comparing themselves to social media images will result in greater body dissatisfaction for adolescents experiencing higher levels of eating disorder symptomology.

Methods

This was an experimental study. Young people who took part were initially asked to complete a range of questionnaires aimed at exploring aspects of social media use, body dissatisfaction and mental health difficulties, including depression, anxiety and disordered eating. Young people were split into two groups, individuals experiencing higher levels of eating disorder symptomology and those experiencing lower levels of eating disorder symptomology and compared on levels of body dissatisfaction. Participants were then randomly allocated to the self-comparison or other-comparison condition. For each condition, participants were asked to compare either themselves or a fictional young person "Millie" to ten social media images of other young people on the following characteristics: Smaller/Larger, Lighter/Heavier, Older/Younger, Shorter/Taller, Weaker/Stronger, Less Confident/More Confident, Less Attractive/More Attractive. Participants were then asked to complete the questionnaire that measures body dissatisfaction again. Young people then took part in a grounding relaxation task followed by the comparison condition they had not yet completed. Participants then completed the body dissatisfaction questionnaire again and finished with a short relaxation task.

Main Findings

One hundred and two UK-based females aged between 16 – 21 years old took part in the study. Overall, individuals with higher levels of eating disorder symptomatology were found to have greater overall body dissatisfaction, and following the self and other-comparison task, compared to those with lower levels of eating disorder symptomology. The overall body dissatisfaction for the whole sample was greater following a self-comparison than the other-comparison task. Those with high levels of eating disorder symptomology experienced significantly greater body dissatisfaction following the self-

comparison or the other-comparison task when compared to baseline. No significant difference in body dissatisfaction between self and other comparisons was observed. Those with lower levels of eating disorder symptomatology experienced no significant difference in body dissatisfaction following either social comparison task.

Conclusions

This study provides support for the Tripartite Influence model with adolescents with eating disorders. It demonstrated female adolescents, when exposed to social media content and asked to make a social comparison did experience greater body dissatisfaction, with this being experienced more acutely by the higher eating disorder symptomology group. These findings can be used to inform the importance of exploring social media use and its impact on body dissatisfaction with adolescents experiencing an eating disorder.

Connecting Narrative

I came into the doctorate with limited research experience so was particularly nervous at the prospect of developing three projects from scratch. I also could never see myself getting to the point where I would have written three publishable papers, as I don't consider writing to be one of my strengths. Whilst the topic of young people indeed connects two elements of this thesis, I believe there is one overarching theme – Communication. The impact of communication features within the SLR in terms of how others communicate information to siblings, within the SIP, difficulties with communication were noted and for the TDRP how information is communicated via social media was important. It has been fascinating to see how communication can impact one's wellbeing and how small changes can have a big impact. It has certainly made me think about how I communicate within my role as a Clinical Psychologist but also within my personal life.

SLR

The SLR was the project I was most nervous about. I never thought I would be able to produce something of this level. When developing this review, we felt it was a niche area and would be unlikely to return a high number of papers meeting the search criteria. However, as you can see above this became a large review. Whilst every paper included provides additional insight into this area, reviewing the search terms may have been beneficial. I was fearful of missing something out, hence the extensive set of search terms. Identifying which journal to publish this paper in was more complicated than the other two papers; did we want to submit it to something that focuses on communication or specific

life-limiting conditions or a wider audience journal such as a child/adolescents or paediatrics one? We felt a wider audience was more suitable for this type of review.

SIP

Staff wellbeing has always been of interest to me and before the course, I was the wellbeing lead within an Oxford Health Team. The project started off being developed as a TDRP in terms of delivering a wellbeing intervention to the current trainees. However, we quickly realised this would likely be associated with several ethical difficulties: the difficulty with fitting something "additional" into trainees already packed schedules; delivering an intervention as a trainee myself; and only providing half the trainees with an effective intervention. Given this, we felt the area of trainee wellbeing would fit better within a SIP framework. The previous wellbeing projects the University had facilitated yielded few participants, therefore, I was expecting recruitment to this project to be challenging, however, this was not the case, many trainees were passionate about professionally providing their views. I am very grateful to all the trainees who committed time and energy to this project. There was a clear passion and want for trainees to work collaboratively with the system to improve current and future trainee's experiences. One difficulty throughout this project was being a trainee alongside supervisors who were also within the same system I was collecting data on. I was always very mindful to remain objective when interpreting the data. It has been inspiring to see how the course has interpreted the findings and has begun implementing these.

TDRP

The clinical area of eating disorders and adolescents has always been a passion of mine. I was shocked to see that most of the research is carried out with adults and there was, and continues to be, a need to expand the evidence base for adolescents. Through developing this project, I realised the difficulties researchers face when working with young people. Our initial aim for the project had been to recruit young people aged 13-18, in line with the age individuals can open a social media account, however, the logistics of needing verbal parental consent for all under 16 meant this was not possible with the time available to complete this thesis. This project took the longest to design with many changes being made before finally deciding on the methodology. While I recognise the potential pitfalls with this project, I hope that it makes a helpful contribution to the current evidence base. I was very grateful we had gone ahead with recruitment through social media with the assistance of paid advertisements. This made the recruitment process smooth and time efficient. It was interesting to see that the number of young people who clicked on the link to enquire about the project was around half the amount that participated. It would be fascinating to know the reasons behind this.

Concluding remarks

Before this process, I viewed the research element of the course as something I "*just needed to do to become a psychologist*". I didn't think I would enjoy it very much and I expected it to result in a lot of hard work and stress. While the latter is somewhat true, I have noticed I have become passionate about research and enjoyed the research journey. I never thought I would be able to develop and write up something like this. This is something I am very proud of. I know it is my responsibility to publish and disseminate these findings. I am keen to continue to be involved in the research element and would be interested in

being an external supervisor for future SIPs or TDRPs. Despite the challenges experienced, I now appreciate the importance of continuing to develop the evidence base, particularly in areas of Clinical Psychology that I will work in and where high-quality research is lacking e.g. child and adolescent eating disorder services.

Acknowledgements

Firstly, I want to thank all the participants who took part in my SIP and TRDP, you gave up your valuable time and have proudly contributed to areas of research that need to be developed. Without your contributions, none of this would have been possible. So, thank you!

I would like to thank all my research supervisors who have been patient with my many research questions and for reading my drafts promptly to meet the deadline. To name everyone I would like to thank Dr Mathew Hotton, Dr Fin Williams, Dr Joanna Adams, Dr Louise Dalton, and Dr Elizabeth Rapa. Thank you all so much. I came into this process not knowing much about research and because of you, I can now say I know some things about research. A special thanks goes out to Dr Ciorsdan Anderson, my course tutor and research supervisor, you have been there every step of the way, and you have listened to my many over-enthusiastic ideas and frustrations. Thank you for always being there to have a chat, you must have heard me say many times “just plodding along” when you asked me how I was doing. You have certainly shaped me as a practitioner. I hope our paths will continue to cross for many years to come.

I want to wholeheartedly thank my partner for always being by my side throughout this process. He has ensured I was always fed and watered and was there to mop up my tears.

He has been there to remind me there is always life outside of the world of psychology. I honestly think there should be a partner's support group for all the things they have to manage. Thank you very muchly. I would also like to thank my mum and dad, my sister, my grandparents, and my friends for being patient with me when I forgot to message them back or when I had no head space to make plans. To my dancing friends and "climbing" friends, I hope after this I will be back at it.

Of course, it goes without saying that without my fellow trainees, this process would have been so much more difficult without you all. It has been a privilege to get to know you over the past three years and be exposed to the wealth of knowledge and passion you all hold. I can certainly say I have made life-long friends and I look forward to seeing where we all end up.

Appendices

Appendix A - Systematic Review of the Literature

A1: Search Strategy

1	(child* or schoolchild* or pediatric* or paediatric* or infant* or boys or girls or adolescen* or teen* or youth? or young people or young person? or neonate*)
2	(sibling* or brother* or sister* or stepsister* or stepbrother* or twin* or triplet* or sibling relations or well-sibling)
3	(truth disclosure or communicat* or talk* or tell or discuss* or disclose? or disclosure)
4	((communicat* or talk* or tell* or told or discuss* or disclose? or disclosure) adj3 (truth or diagnos* or prognos* or death or dying or terminal*))
5	(nurse-patient relations/ or physician-patient relations/ or carer-child relations/) and (communicat* or talk* or discuss* or disclose? or disclosure)
6	(family/ or parent-child relations/ or parent-sibling relations/ or father-child relations/ or mother-child relations/ or sibling-sibling relations/ or family relations/ or extended family relations/ or grandparent relations/) and (communicat* or talk* or discuss* or disclose? or disclosure)
7	((communicat* or talk* or discuss* or disclose? or disclosure) adj3 (child* or schoolchild* or pediatric* or paediatric* or boys or girls or adolescen* or teen* or youth? or young people or young person? or neonate*))
8	((communicat* or talk* or discuss* or disclose? or disclosure) adj3 (sibling* or brother* or sister* or stepsister* or stepbrother* or twin* or triplet* or sibling relations or well-sibling))
9	3 or 4 or 5 or 6 or 7 or 8
10	(attitude to death or terminal care or terminally ill or serious illness or advance directives or life limiting or lifelimiting or life shortening or lifethreaten* or life threaten* or terminal* or palliative care or paediatric palliative care or perinatal palliative care or palliative or hospice? or "end of life" or terminal or chronic illness or rare disease or genetic or advanced directive? or living will? or "do not resuscitate" or resuscitation order? or assisted suicide? or advance care plan or parallel planning or anticipatory care plan or intensive care unit or ICU or paediatric intensive care unit or PICU or neonatal intensive care unit or NICU or critical care or

	local hospital or community paediatrics or community children* nursing team* or children* hospice* or children* palliative care charit*)
11	((lifethreaten* or life threaten* or terminal*) adj2 (ill* or condition?))
12	((palliative or hospice? or "end of life" or terminal) adj2 (care or therap* or treat*))
13	((place or home or hospice) adj2 (die or dying or death))
14	(prematur* or cardiology or neurology or endocrine or autoimmune or immune or respiratory or pulmonary or chromosome or neurodegenerative or mitochondrial or metabolic or inborn error of metabolism or renal or congenital or musculoskeletal or oncology or haematology or neoplasms or breast neoplasms or colorectal neoplasms or testicular or leukemia or leukaemia or lymphoma or brain neoplasms cancer* or carcinoma? or tumour? or tumor? or malignan* or metasta* or hiv or HIV infection or human immunodeficiency virus? or haemorrhagic fevers or ebolavirus or congenital abnormalities or genetic diseases or inborn or anemia hemolytic or congenital or asthma or epilepsy or multiple sclerosis or Huntington disease or parkinsonian disorders or diabetes mellitus, Type 2 or diabetes mellitus or diabetes mellitus, Type 1)
15	10 or 11 or 12 or 13 or 14
16	1 and 2 and 9 and 15

A2: BMC Pediatrics Author Guidelines

Systematic Review

Criteria

Systematic reviews articles should describe meta-analyses, systematic reviews, scoping reviews or umbrella reviews that synthesize published research. We strongly encourage the use of the appropriate reporting guideline, including PRISMA.

Please note that non-commissioned pooled analyses of selected published research and bibliometric analysis will not be considered.

Registration of systematic reviews

BMC supports the prospective registration of systematic reviews and encourages authors to register their systematic reviews in a suitable registry (such as PROSPERO). Authors who have registered their systematic review should include the registration number as the last line of the manuscript abstract. We do not publish protocols for systematic reviews.

Data sharing

BMC Pediatrics strongly encourages that all datasets on which the conclusions of the paper rely should be available to readers. We encourage authors to ensure that their datasets are either deposited in publicly available repositories (where available and appropriate) or presented in the main manuscript or additional supporting files whenever possible.

Preparing your manuscript

The information below details the section headings that you should include in your manuscript and what information should be within each section.

Please note that your manuscript must include a 'Declarations' section including all of the subheadings (please see below for more information).

Title page

The title page should:

- present a title that includes, if appropriate, the study design e.g.:
    - "A versus B in the treatment of C: a randomized controlled trial", "X is a risk factor for Y: a case control study", "What is the impact of factor X on subject Y: A systematic review"
    - or for non-clinical or non-research studies a description of what the article reports
- list the full names and institutional addresses for all authors
    - if a collaboration group should be listed as an author, please list the Group name as an author. If you would like the names of the individual members of the Group to be searchable through their individual PubMed records, please include this information in the “Acknowledgements” section in accordance with the instructions below
    - Large Language Models (LLMs), such as ChatGPT, do not currently satisfy our authorship criteria. Notably an attribution of authorship carries with it accountability for the work, which cannot be effectively applied to LLMs. Use of an LLM should be properly documented in the Methods section (and if a Methods section is not available, in a suitable alternative part) of the manuscript.
- indicate the corresponding author

Abstract
The Abstract should not exceed 350 words. Please minimize the use of abbreviations and do not cite references in the abstract. Reports of randomized controlled trials should follow the CONSORT extension for abstracts. The abstract must include the following separate sections:

- **Background:** the context and purpose of the study
- **Methods:** how the study was performed and statistical tests used
- **Results:** the main findings
- **Conclusions:** brief summary and potential implications
- **Trial registration:** If your article reports the results of a health care intervention on human participants, it must be registered in an appropriate registry and the registration number and date of registration should be stated in this section. If it was not registered prospectively (before enrollment of the first participant), you should include the words 'retrospectively registered'. See our editorial policies for more information on trial registration

Keywords
Three to ten keywords representing the main content of the article.
Background
The Background section should explain the background to the study, its aims, a summary of the existing literature and why this study was necessary or its contribution to the field.
Methods
The methods section should include:

- the aim, design and setting of the study
- the characteristics of participants or description of materials
- a clear description of all processes, interventions and comparisons. Generic drug names should generally be used. When proprietary brands are used in research, include the brand names in parentheses
- the type of statistical analysis used, including a power calculation if appropriate

Results
This should include the findings of the study including, if appropriate, results of statistical analysis which must be included either in the text or as tables and figures.
Discussion
This section should discuss the implications of the findings in context of existing research and highlight limitations of the study.
Conclusions
This should state clearly the main conclusions and provide an explanation of the importance and relevance of the study reported.
List of abbreviations
If abbreviations are used in the text they should be defined in the text at first use, and a list of abbreviations should be provided.

Appendix B - Service Improvement Project

B1: Ethical Approval Confirmation

From: Liz Cheal via AMaT <no-reply@amat.co.uk>
Sent: 16 January 2023 09:26
To: White Jasmin (RNU) Oxford Health <Jasmin.White@oxfordhealth.nhs.uk>
Subject: Clinical audit - Audit approved

This email originated from outside of Oxford Health. Please consider carefully when choosing to open attachments, click links or deal with unexpected or unusual requests.

NHS
Oxford Health
NHS Foundation Trust

Clinical audit - Audit approved

Hi Jasmin,

A clinical audit has now been approved and can be accessed in YOUR AUDITS within the Clinical Audit & Improvement section on the AMaT system.

Audit title: Wellbeing and stress in Trainee Clinical Psychologists on the University of Oxford Doctorate in Clinical Psychology

Speciality: Corporate Services

Your role in this audit: Lead participant

Please follow this link to view this audit:
Click here to view this audit

Best regards,
Liz Cheal

B2: Participant Information Sheet

Wellbeing and Stress in Trainee Clinical Psychologists on the University of Oxford Doctorate in Clinical Psychology

Trainee Wellbeing Survey: Service Improvement Project

PARTICIPANT INFORMATION SHEET

We would like to invite you to take part in an online survey. Before you decide to take part, it is important you are aware of why this project is being conducted and what participation would look like. Please take your time to read this information sheet and discuss it with others if you wish. If you have any questions about the information sheet or you would like some further information about the project, please get in touch with me: Jasmin White (Year 2 Trainee) – Jasmin.white@oxfordhealth.nhs.uk

What is the purpose of the project?

Training to be a clinical psychologist can be a demanding process which can be relevant to one's wellbeing. Therefore, the aim of this project is better to understand the well-being of trainees on the Oxford Clinical Psychology Doctorate course, including exploring some of the factors that might influence wellbeing. The results will be interpreted in line with Demerouti et al's (2001) Job Demands-Resources Model (JD-R). This model focuses on the level of demand an individual experiences within their job role and the resources they have access to, that enables achievement of work goals, reduces job demands and encourages career development and growth. It is hoped that the project results will help inform the Oxford course on how best to support the wellbeing of its trainees.

Why have I been invited to take part?

You have been invited to take part in this project as you are currently a trainee on the Oxford Clinical Psychology Doctorate course. We are hoping at least 115 trainees would kindly take part in the survey. Your participation would be very much appreciated.

What will happen to me if I decide to take part?

Part 1 - You will be asked to complete a survey which will include a number of questions specific to trainee well- being on the course as well as demographic information and a questionnaire on general wellbeing and job demands.

Part 2 – At the end of the survey (using a separate link to maintain anonymity) you will be asked if you would like to be involved in a focus group. The aim of this would be to gain a more complete understanding of your well-being experiences while on the course. Focus group questions will be informed by survey responses. Three separate focus groups will be run (one for each cohort year) with these expected to take place over teams and last up to one hour. It is anticipated these will be held over the next couple of months.

How long will it take to complete the survey?

It is anticipated that it will take participants roughly 20-30 min to complete the survey.

Do I have to take part?

No. Participation is voluntary. If you do decide to take part, you may withdraw at any point for any reason before submitting your answers by pressing the 'Exit' button/ closing the browser.

How will my data be used?

All of the information collected will be anonymised and will not be attributable to you. It should be noted that some demographic questions may risk you being identifiable and therefore an option of "Prefer not to say" for each set of questions is available should you prefer not to answer a particular question.

The survey responses and the focus group will be coordinated and analysed by Jasmin White, a Trainee Clinical Psychologist. No member of the course team will see any data that is not already anonymised.

Your anonymised data will be stored securely on the Oxford Health NHS Foundation Trust 'Nexus 365 One Drive', a secure cloud storage facility, for a maximum duration of 5 years, before it will be deleted. To support the evidence base of research in this area, the data will be analysed, written up and submitted as part of Jasmin White's research portfolio, and examined as part of her evidence for the award of the Doctorate in Clinical Psychology. This will also be submitted to a peer-reviewed journal so that the wider community of Psychology can learn from, and develop further, the evidence supporting the well-being of Trainee Clinical Psychologists.

What are the possible disadvantages and risks of taking part?

For some, being asked to reflect on their wellbeing may lead to difficult thoughts and feelings about their current situation and therefore completing this survey could impact on current wellbeing. As you are unable to be identified from your responses the researcher will be unable to provide direct support. Therefore, the below link and information are provided should you need support.

It may be helpful to seek additional support from your course tutor.

Contact the Freedom to speak up guardian via FreedomToSpeakUp@oxfordhealth.nhs.uk or visit

Contact occupational health via Occupational.Health@oxfordhealth.nhs.uk.

Contact the Spiritual and pastoral care team via spiritual.care@oxfordhealth.nhs.uk

Check out the You Matter Staff Mental Health and Wellbeing Hub: https://youmatter-bob.nhs.uk/

Call SANEline, a specialist mental health helpline 0300 304 7000 6pm–11pm

Call Samaritans listening service any time 116 123

Call NHS 111 by dialling 111

Go to the local Accident and Emergency department if you are feeling suicidal or if you have self-harmed and are concerned about it.

Make an appointment with your GP

Who is organising the project?

As all trainees are employees of Oxford Health Foundation Trust the main oversight of the project is held by the trust. The project has been registered with the trust's Quality and Audit Team.

Further information and contact information

If you would like to discuss any of the above information further, or if you have any questions about participating in this project please contact:

Jasmin White - Oxford Institute of Clinical Psychology Training and Research (OxICPTR), The Isis Education Centre, Warneford Hospital, Headington, Oxford OX3 7JX

Oxford Health email: jasmin.white@oxfordhealth.nhs.uk

If you would like to talk a member of course staff involved in the project please contact either Matthew Hotton (matthew.hotton@hmc.ox.ac.uk) or Fin Williams (fin.williams@hmc.ox.ac.uk).

Additionally, if you would like to be involved in the focus groups, please send me an email expressing your interest.

I would like to take this opportunity to thank the previous third-year trainees who were involved in the development of the survey questions and information sheet.

Thank you for taking the time to read this information. Please ask any questions if you need to.

I can confirm I have read the above information.

Yes / No

I can confirm that I am happy to consent to take part in this project.

Yes / No

B3: Wellbeing Survey

- **What is your current year of training?**

Year 1 – Cohort 2022/23 / Year 2 – Cohort 2021/22 / Year 3 – Cohort 2020/21

- **What gender do you identify as?**

Female/ Male / Non-Binary / Prefer not to say / Prefer to self-describe

- **What is your age?**

20 - 24 years / 25 - 29 years / 30 – 34 years / 35 – 39 years / 40 – 44 years / 45 – 49 years / 50+ years

- **Do you consider yourself as coming from/ part of a potentially minoritized ethnic background, for example, Asian / Asian British, Mixed / Multiple ethnic groups, Black / African / Caribbean / Black British, or other ethnic groups?**

Yes / No / Prefer not to say / Don't know

- **Do you identify as having any learning difficulties?**

Yes / No / Prefer not to say / Don't know

- **Do you identify as having any mental health difficulties?**

Yes / No / Prefer not to say / Don't know

- **Do you identify as having any neurodevelopmental differences?**

Yes / No / Prefer not to say / Don't know

- **Do you identify as having a visible difference, e.g. a visible disability, health condition or altered appearance?**

Yes / No / Prefer not to say / Don't know

- **Other than your undergraduate degree (or equivalent i.e. accredited conversion course), what additional relevant academic qualifications do you have, please tick all the options that apply**.

PhD / Masters / Diploma / Post Graduate Certificate / None / Other, please specify / Prefer not to say

- **How many years of relevant work experience did you have prior to training? Examples of relevant experience can include working as an assistant psychologist,**

Improving Access to Psychological Therapies (IAPT) worker, research assistant, relevant voluntary work and some healthcare assistant/support worker posts.

None / Less than one year / 1 year / 2 years / 3 years / 4 years / 5 years / 6+ years / I don't know / Prefer not to say

- **How likely are you to turn to your X for support around your wellbeing while on the course?**

Colleagues in your cohort

Course tutor

Personal tutor

Placement supervisor/s

Research supervisor/s

Course buddy

Friends

Family

Romantic partner

Oxford University Wellbeing Services

Oxford Health Employee Wellbeing Service

NHS Psychological Therapy Services

Personal/private therapist

Very Likely / Quite likely / Quite unlikely / Very unlikely / Not applicable to me

- **What factors have served as facilitators in supporting your wellbeing while on the course? Please ensure you consider all aspects of the course (e.g. academic teaching and assignments, research, clinical placements, supervisory, facilities, staff, travel, personal factors and management).**
- **What factors have served as barriers in supporting your wellbeing while on the course? Please ensure you consider all aspects of the course (e.g. academic teaching and assignments, research, clinical placements, supervisory, facilities, staff, travel personal factors and management).**
- **What suggestions/ideas/recommendations would you like to make to the course to better support trainee wellbeing?**

- **On average, how many hours (to the nearest half hour) do you spend on course related research tasks per week outside the hours of 9am – 5pm, Monday – Friday?**
- **On average, how many hours (to the nearest half hour) do you spend on clinical placement tasks per week outside the hours of 9am – 5pm, Monday – Friday?**
- **On average, how many hours (to the nearest half hour) do you spend on academic tasks (including assignments e.g. ICR) per week outside the hours of 9am – 5pm, Monday – Friday?**
- **On average, how many hours (to the nearest half hour) do you spend on other course related tasks (that have not already been captured) per week outside the hours of 9am – 5pm, Monday – Friday? Please also specify what you have captured as other.**

Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS)

Please tick the box that best describes your experience in the last 2 weeks

- **I've been feeling optimistic about the future**

None of the time / Rarely / Some of the time / Often / All of the time

- **I've been feeling useful**

None of the time / Rarely / Some of the time / Often / All of the time

- **I've been feeling relaxed**

None of the time / Rarely / Some of the time / Often / All of the time

- **I've been dealing with problems well**

None of the time / Rarely / Some of the time / Often / All of the time

- **I've been thinking clearly**

None of the time / Rarely / Some of the time / Often / All of the time

- **I've been feeling close to other people**

None of the time / Rarely / Some of the time / Often / All of the time

- **I've been able to make up my own mind about things**

None of the time / Rarely / Some of the time / Often / All of the time

Thank you very much for taking the time to complete this survey. Your opinions really matter.
Part 2 of this project is to run separate cohort focus groups to discuss the overall themes generated by the survey result.

If you would be happy to be contacted to be involved in this please click/copy and paste the link to a browser - https://forms.gle/1idK2DNZAdZV9ce98

You will be redirected to a separate response box. This ensures all your previous answers remain anonymous.

Alternatively, please feel free to email me directly at, jasmin.white@oxfordhealth.nhs.uk

B4: Thematic Framework with Quote Examples

Thematic Framework with Quote Examples

Theme	***Subthemes***	***Example Quotes***
Relationships	Staff and Trainees	• **Barrier -** *"Some staff members are very blunt and can come across as lacking in compassion and thoughtfulness, especially in email correspondence"* • **Facilitator -** *"My course tutor has always been amazing. It has really helped how responsive they are, and have enabled me to feel heard and it has felt as though they have my best interests in mind."* • **Barrier -** *"Feeling as though I couldn't get clear answers about research from supervisors who are less confident in this meant I felt like I spent a lot of my little time in back and forth as messages changed. Channels of communication with people confident in different research (especially stats) methodologies can feel a bit like silent whispers and it can be tricky to feel confident in the advice you are being given after a while."* • ***Barrier*** *- "Placement supervisor who was unapproachable, highly critical and did not negotiate/change their style even after repeated attempts to explain how I would like to adapt our supervision (even when supported by course tutor)."* • ***Facilitator -*** *"For research, having supervisors who are confident in research and are available on the days we have study days is helpful. This facilitates work being able to be done efficiently and within the very limited time we have within study days."* • **Barrier -** *"Communication from the course has definitely improved over the course of training, but I think there is*

		still some significant problems with some trainees being told different things by different members of staff. I think this is particularly relevant for research queries, and has caused extreme levels of stress when there have been different messages about a very important aspects, e.g. statistical power." • **Barrier -** *"Whilst the course delivers a message of being 'just good enough' this does not match the experience as a trainee* • ***Barrier -*** *"strong message received from the course that it's too hard/impossible to change most things. Predominant narrative form course is 'just endure it and look forward to living your life well after graduation'."*
	Peers	• **Barrier -** *"I think I've also really felt the impact of having a larger cohort - it doesn't feel like this enables much closeness or opportunities to share about our experiences, and there have been several occasions where someone has said something or acted in a way that has made me reluctant to share."* • **Facilitator -** *"Contact with cohort - normalizing one another's experiences, hearing that you are not alone, learning from one another, reminding one another about tasks coming up and just generally supporting each other."*
	Outside of the course	• **Facilitator -** *"My own personal support systems of my friends and family have been a key facilitator in my wellbeing.* • **Facilitator -** *"Having a supportive and understanding partner and family who helped me through harder times has also been essential."*

Workload	Multiple Demands and Deadlines	• **Barrier** - "Not having nearly enough study time to think up and design three research projects (at least, as many had to be rethought part way through or fell through) and write case reports, BABCP presentations etc etc." • **Barrier -** *"Assessment bunching is frequently occurring - there seems to be poor planning with regards to how this is thought about to give us enough time around pinch points"*. • **Barrier - "***The lack of study days in the context of all the work we need to do impacts on my wellbeing. It is a huge workload given the number of study days to actually do the work. Just adding in one extra study day each month or every other month would make a huge difference"*. • ***Facilitators* - "***Flexibility with study days (e.g. recent change of taken 3 flexible study days on P5)"*
	Teaching Days	• **Barrier -** *"Teaching being for 8 hours each day - no one can stay engaged for this length of time and learn everything we are told so I often leave feeling drained, bored, and unenthused"*. • **Barrier -** *"Teaching, particularly in first year, is extremely intense and I wonder if I would have got more out of teaching if there was less of it or if days were shorter. I noticed such a difference in my ability to concentrate, engage and feeling less exhausted afterwards when days ran from 10am to 4pm. I know we are asked if there are overlaps in teaching to help with addressing this, but I often have no idea if there have been overlaps because the topics are so separate (e.g. health in the morning, risk in the afternoon, then nothing health-related for a month)."*

		• **Barriers -** *"The lack of facilities are also a barrier to wellbeing. Whilst small, not having access to facilities to make lunch or to hot drinks, on teaching days can make quite a difference to wellbeing"*
	Assignments	• **Facilitator - "***Reassurance about being able to request extensions for research assignments".* • ***Facilitator -*** *"I have found it helpful to have the timed pieces of work, rather than spending months on an assignment it is over in 24 hours!"* • ***Facilitators -*** *"The assignments on the course are one of the strengths - having timed assignments, rather than an essay that you could work on for days and days works best for me. I find this makes me worry less and improves my wellbeing. Also, not having exams is fantastic - I specifically chose this course because there were no exams. Exams would have worsened my wellbeing."* • ***Facilitators -*** *"I felt the extended essay works quite well. Liked knowing I'm being tested on real life skills I will apply as a CP, rather than being asked to write an essay. Short-term stress."*
	Outside of the "9-5"	• **Barrier -** *"The courses expectation that we work on our assignments / research projects outside of the 9-5 (PHD on top of DClin) rather than integrating this into our working day".* • **Barrier -** *"Having to do a lot of work outside 9-5. I understand the need for some of this but there is a limit to how much extra we can work while having all the rest of our life necessary for maintaining wellbeing."* • **Barrier -** *"Additionally, it is stated that clinical placements*

		should not take up any time outside of the Mon-Weds times, but this is also not realistic as clients and groups may require additional research to create treatment plans especially when we are adjusting to new placements and presentations, and this also needs to be done in our own time since we are required to have a caseload of 6-8 clients which takes up the whole three days of placement." • **Barriers –** *"Travel to placement (year long) has been the biggest barrier to my wellbeing having a 120 mile round trip (4 hour daily commute), this has massively impacted on my ability to do anything else on my placement days and my physical health is less of a focus with deadlines on top."* • **Facilitators -** *"For placement, being on a placement closer to home has also been really helpful as I have felt less tired and have had more time to rest and do things that support my wellbeing."* • **Barrier -** *"It is also difficult not being able to have any teaching time off per year. Whilst it is understandable that we need to attend teaching, it can feel we are being treated like children and it is not clear why we are unable to have a set number per year e.g. 2 teaching days, as per other courses."*
	Reflection	• **Barrier** - *"There is very little meaningful reflection on the course - we have a reflective group meeting in year 2 but we had little guidance on how to approach this task, and also had no feedback on the summaries of our process so far that we submitted. As Psychologists, the reflection tasks on the course often feel tokenistic."*

Diversity	Mental Health and Lived Experiences	• ***Barrier -*** *"Mental health and wellbeing is not spoken about enough on this course. Discussion about lived experience feels tokenistic. It can be quite lonely. I noted that my close friends on the course were also reluctant to share their own difficulties with mental health with me and each other. This suggests to me that mental health is still a stigmatized topic."* • **Facilitator -** *"Disclosure from course staff/ lecturers on their own lived experience normalising mental health professionals experiencing difficulties."*
	Adjustment	• ***Barrier -*** *"Reasonable adjustments being denied".* • ***Barrier -*** *"Very minimal reasonable adjustments made for Trainees with disabilities, if any are made at all".* • ***Barrier - "****I have a long-standing mental health difficulty that impacts my day-to-day life and have been advised by occupational health that this falls under the disability act. However, this was a very long process and reasonable adjustments were not put into place until my second placement, despite disclosing this in my original OH form (and being verbally signed off as 'fit to work with adjustments' with no formal report or recommendations)."*

B5: Key Practitioner Message

*To be included with abstract for publication***.**

- The number of additional hours trainees worked was negatively correlated to wellbeing. Therefore, it may be helpful for doctoral courses to be mindful of how many hours trainees are working and where possible support the trainee to be able to reduce the number of additional hours they work.
- Those who identified as coming from a minoritized background had lower wellbeing scores. Doctoral courses should consider how they provide additional support to these groups.
- The positive relationships trainees foster within and outside the course environment are an important factor in facilitating wellbeing.

Keywords: Wellbeing, Trainee Clinical Psychologists, Workplace Wellbeing, Clinical Psychology Doctorate, Service Improvement

B6: Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS)

Freely available from: https://www.corc.uk.net/outcome-experience-measures/short-warwick-edinburgh-mental-wellbeing-scale-swemwbs/

B7: Clinical Psychology & Psychotherapy Author Guidelines

Abstract

Enter an abstract of no more than 250 words containing the major keywords. An abstract is a concise summary of the whole paper, not just the conclusions, and is understandable without reference to the rest of the paper. It should contain no citation to other published work.

Key Practitioner Message

All articles should include a Key Practitioner Message of 3-5 bullet points summarizing the relevance of the article to practice.

Keywords

Please provide five-six keywords (see Wiley's best practice SEO tips).

Main Text

1. The journal uses US spelling; however, authors may submit using either US or UK English, as spelling of accepted papers is converted during the production process.
2. Footnotes to the text are not allowed and any such material should be incorporated into the text as parenthetical matter.

References

References should be prepared according to the *Publication Manual of the American Psychological Association* (6th edition). This means in-text citations should follow the author-date method whereby the author's last name and the year of publication for the source should appear in the text, for example, (Jones, 1998). The complete reference list should appear alphabetically by name at the end of the paper. Please note that for journal articles, issue numbers are not included unless each issue in the volume begins with page 1, and a DOI should be provided for all references where available.

For more information about APA referencing style, please refer to the APA FAQ.

Reference examples follow:

Journal article

Beers, S. R. , & De Bellis, M. D. (2002). Neuropsychological function in children with maltreatment-related posttraumatic stress disorder. *The American Journal of Psychiatry*, *159*, 483–486. doi: 10.1176/appi.ajp.159.3.483

Book

Bradley-Johnson, S. (1994). *Psychoeducational assessment of students who are visually impaired or blind: Infancy through high school* (2nd ed.). Austin, TX: Pro-ed.

Internet Document

Norton, R. (2006, November 4). How to train a cat to operate a light switch [Video file]. Retrieved from *http://www.youtube.com/watch?v=Vja83KLQXZs*

Endnotes

Endnotes should be placed as a list at the end of the paper only, not at the foot of each page. They should be numbered in the list and referred to in the text with consecutive, superscript Arabic numerals. Keep endnotes brief; they should contain only short comments tangential to the main argument of the paper.

Tables

Tables should be self-contained and complement, not duplicate, information contained in the text. They should be supplied as editable files, not pasted as images. Legends should be

concise but comprehensive – the table, legend, and footnotes must be understandable without reference to the text. All abbreviations must be defined in footnotes. Footnote symbols: †, ‡, §, ¶, should be used (in that order) and *, **, *** should be reserved for P-values. Statistical measures such as SD or SEM should be identified in the headings.

Figure Legends

Legends should be concise but comprehensive – the figure and its legend must be understandable without reference to the text. Include definitions of any symbols used and define/explain all abbreviations and units of measurement.

Figures

Although authors are encouraged to send the highest-quality figures possible, for peer-review purposes, a wide variety of formats, sizes, and resolutions are accepted.

Click here for the basic figure requirements for figures submitted with manuscripts for initial peer review, as well as the more detailed post-acceptance figure requirements.

Appendix C - Theory Drive Research Project

C1: Research Ethics Approval CUREC 2

MEDICAL SCIENCES INTERDIVISIONAL RESEARCH ETHICS COMMITTEE
Research Services, Boundary Brook House, Churchill Drive, Headington, Oxford, OX3 7GB
Tel: +44(0)1865 616575
ethics@medsci.ox.ac.uk

CONFIDENTIAL

Dr Ciorsdan Anderson & Jasmin White
Oxford Institute for Clinical Psychology Training
Isis Education Centre
Warneford Hospital
Oxford

13 December 2023

Dear Dr Anderson and Jasmin,

Research Ethics Approval - CUREC 2

Ethics Approval Reference: R88903/RE001

Study title: The role of social media images in body dissatisfaction and disordered eating in adolescents

Short title: Social media, eating and body image study

The above application has been considered on behalf of the Medical Sciences Interdivisional Research Ethics Committee (MS IDREC) in accordance with the University's procedures for ethical approval of all research involving human participants.

I am pleased to inform you that, on the basis of the information provided to the IDREC, the proposed research has been judged as meeting appropriate ethical standards, and approval has been granted from **13th December 2023** until **12th June 2025.**

Insurance-provided indemnity arrangements are in place for the duration of the approval stated above. It is your responsibility to ensure that you request an extension to the end date for indemnity to remain in place should you continue the research beyond the dates covered.

You will be required to submit an annual progress report on each anniversary of study approval, until the study is completed, and your study may be selected for review during an annual audit.

Amendments

Should there be any subsequent changes to the study, you should submit details to the MS IDREC for consideration and approval. Details of changes must be listed on an amendment form.

Yours Sincerely

DocuSigned by:
Leah Butts
9F14889D2BC549A...

Mrs Leah Butts
Research Ethics Administrator

for
Dr Helen Barnby-Porritt
Research Ethics Manager

C2: Young Person's Information Sheet

Social Media, Eating and Body Image Study

Young Person's Information Sheet

Ethics Approval Reference: R88903/RE001

If you would like to listen to this information sheet being read aloud, please click here.

We are inviting you to join in a research study. Our names are Jasmin White, Ciorsdan Anderson and Joanna Adams and we work at the University of Oxford in the Oxford Institute of Clinical Psychology Training and Research. We are interested in exploring the relationship between eating, body image and social media use.

Before you decide if you would like to join in, it's important to understand what the study is about, why we're doing it and what it would involve for you. Please read and think about this information carefully. Please feel free to talk to your family, friends, or the researchers about it if you want.

If anything isn't clear or you have more questions you or your parent/guardian can email us and we can discuss it with you and your parent/guardian.

1. Why is this study happening?

We currently don't know how social media affects young people in relation to their body image. As lots of young people use social media, it is important for us to continue to learn about this area. We hope that this study will help us better understand the relationship between social media usage, eating and body image concerns. By gaining a better understanding we may be able to help develop better treatments in the future.

2. Why am I being asked to take part in this study?

We are inviting you to take part in this study because you are a young person aged 16-21 years old. We are aiming for 101 young people to take part.

3. To take part in this study you must also:

- Born female and continue to identify as female
- Live in the UK
- Be able to read and understand English
- People who feel that they have eating and/or body image concerns (you do not need to have an official diagnosis), and also people who do not feel that they have eating or body image concerns.

4. Do I have to take part?

No. It is up to you to decide whether to take part. You can stop the study at any time by closing the internet page. You will not have to tell anyone why you did this. If you choose to leave the study before finishing the questions and tasks, any information you provided us with will not be used.

5. What will happen if you take part in the study?

Taking part in this study could take you around 20-30 minutes in total.

This online study will involve seven parts. You will first be asked to complete some statements agreeing to take part in this study. You will be asked some questions about yourself, your mental health, social media use and thoughts about your body and eating behaviour.

You will then take part in a task which asks you to look at a series of social media pictures of teenage girls and compare either yourself or another young person to the images on a number of physical or personal attributes.

You will then be asked to complete six questions about how you feel about your body and appearance after each comparison task. An example question is “Right now I feel…”, with answers to this question ranging from extremely physically attractive to extremely physically unattractive.

You will then be asked to take part in a short relaxation task. You will be asked to look at an image and imagine you are at this place. You will then be asked to list 5 things you might be able to see, 4 things you might be able to hear, 3 things you might be able to touch or feel, 2 things you might be able to smell and 1 thing you might be able to taste. You will then be asked to look at the social media pictures again and make some more comparisons with yourself or another young person on the same physical and personal attributes. You will then be asked to complete the same six questions about how you feel about your body and looks.

Finally, you will then be asked to take part in another short relaxation task. Again, you will be asked to look at an image and to imagine you are at this place. You will then be asked to list 5 things you might be able to see, 4 things you might be able to hear, 3 things you might be able to touch or feel, 2 things you might be able to smell and 1 thing you might be able to taste.

You can complete these online tasks on any device that has access to the internet and they can be completed anywhere and at any time. This study comes to an end when you have completed all the questionnaires and four tasks. After this, you won't be contacted again unless you would like a summary of the study's findings. If you would like to be sent a copy of the study's findings once it is available, please email: Jasmin.white@hmc.ox.ac.uk to express your interest. Your contact details will be retained in a secure database until the researchers are able to send you a copy. Please note this process can take a number of months after the study is completed.

6. What happens to the results of the study?

The information you provide during the study is the **research data.** All research data you provide will be stored for 3 years after publication or public release of the work of the research. Any data from which you can be identified (your email address, if provided), is known as **personal data**. Email addresses will be retained in a secure database until the researchers have sent you a summary of the research findings, then it will be deleted. The research will be written up as part of a student's work. We also aim to publish our findings in scientific journals, but this may be two to three years from the end of the study. We would also like to share a brief overview of the findings with some charities such as the McPin Young Peoples Network. No identifiable personal data will be published.

The research team will have access to the research data. Responsible members of the University of Oxford may be given access to data for monitoring and/or audit of the research.

7. What are the advantages/ disadvantages of taking part?

We hope that research will help us better understand the relationship between social media usage and eating and body image concerns. By gaining a better understanding we may be able to help develop better treatments in the future. However, there will be no direct benefit from taking part in this study to you.

8. Will anyone else know I'm doing this?

We will keep your information private. This means we will only tell those who have a need or right to know, such as the research team. You may, however, let others know you've taken part.

9. What if I don't want to take part in the research anymore?

You are able to stop participating in this research study at any point before submitting your final response by closing the Internet page. You don't have to give a reason and no one will be annoyed with you. It is YOUR choice.

10. Who has reviewed the study?

Before any research involving people can start, it has to be checked by a Research Ethics Committee to make sure that it is OK for the research to go ahead. This study has been approved by a subcommittee of the University of Oxford Central University Research Ethics Committee.

11. What should I do if I feel upset?

If reading this information or taking part in the study has made you feel upset or worried

about your mood, you should try and let your parent/guardian know. You can also talk to your GP or school nurse, they will be able to help find the support you might need.

Please tell us if you are worried about any part of this research, by contacting the researcher [Jasmin.white@hmc.ox.ac.uk]. You may also talk to your teacher/parent/guardian who will let the researcher know. If you are still unhappy or wish to make a complaint, either you or your teacher/parent/guardian can contact the chair of the Medical Sciences Interdivisional Research Ethics Committee at the University of Oxford: Email: ethics@medsci.ox.ac.uk; Address: Research Services, University of Oxford, Boundary Brook House, Churchill Drive, Headington, Oxford OX3 7GB

12. Data Protection

The University of Oxford is the data controller with respect to your personal data and, as such, will determine how your personal data is used in the study. The University will process your personal data for the purpose of the research outlined above. Research is a task that we perform in the public interest. Further information about your rights with respect to your personal data is available from https://compliance.web.ox.ac.uk/individual-rights.

A reCAPTCHA (Completely Automated Public Turing Test to tell Computers and Humans Apart) question will be used at the end of each consent form, this will mean you will be asked to confirm you are not a robot. This is a service offered by Google (a third party) to help ensure the study is completed by real humans and not by bots or malicious software. No information about you is sent to Google as part of this service.

13. What do I do next?

If you have decided you would **not** like to participate in this study, we would like to thank you for reading this information sheet. **If you have decided you would like to participate in this study, please complete the following tick boxes below.** Once completed you will be able to access the study website which will allow you to begin the study. If you would like to discuss the research or if you have questions afterwards, please contact:

Jasmin White
Trainee Clinical Psychologist
Oxford Institute of Clinical Psychology Training and Research
Isis Education Centre, Warneford Hospital, Oxford, OX3 7JX
Oxford University telephone number: +44 (0)1865 226431
Jasmin.white@hmc.ox.ac.uk

If reading this information or participating in the study raises any concerns regarding our wellbeing, please contact: Your GP or your school nurse (who can signpost to local services if appropriate).

Please note you may only participate in this study if you are aged 16 – 21 years old, born female and continue to identify as female and currently live in the UK.

☐ I confirm I am aged 16-21 years old, born female and continue to identify as female and currently live in the UK

☐ I confirm that I have read, considered and understood the above information.

☐ I understand that my participation is voluntary and that I am free to withdraw at any point until the end of the study, without giving any reason.

☐ I understand that I will be shown images of other females and will be asked to compare myself to the images (or to report how the images make me feel about my own body).

☐ I understand who will have access to personal data provided, how the data will be stored and what will happen to the data at the end of the project.

☐ I understand that I will not be identifiable from any publications or student theses.

☐ I understand how to raise a concern or make a complaint.

☐ Should I email the researcher to request a copy of the study findings, I agree that my contact details can be retained in a secure database until a summary of the findings has been sent to me.

☐ I agree to take part.

Before you proceed to the study, please complete the CAPTCHA below.

C3: Participant Characteristics Questions

Please answer the following questions, they aim to help us understand more about the young people taking part in the study.

What is your age?

What is your ethnicity? (Required to describe the demographics of participants in our research)

- Asian (any background)

- Black (any background)
- Mixed or Multiple ethnic groups
- White (any background)
- Prefer not to say
- Other. If Other, please specify.

Are you currently receiving any support/assessment/treatment/therapy for psychological difficulties?

- Yes
- No
- Don't Know
- Prefer not to say
- If yes, please describe

Which social media sites do/have you use/d? You are able to select more than one.

- Facebook
- Instagram
- BeReal
- Twitter
- TikTok
- Pinterest
- Youtube
- Snapchat
- Reddit
- Tumblr
- GroupMe
- Whatsapp
- Discord
- Other, please specify

Overall, how long do you spend on social media in a typical day?

- 5 minutes or less
- 15 minutes
- 30 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5 hours
- 6 hours
- 7 hours
- 8 hours
- 9 hours
- 10 hours or more

How often do you check your social media accounts (even if you are logged on all day)?

- Not at all

- Once a week
- Every few days
- Once a day
- Every few hours
- Every hour
- Every 30 minutes
- Every 10 minutes
- Every 5 minutes

C4: Recruitment Advertisement

PARTICIPANTS WANTED

FOR A SOCIAL MEDIA, EATING & BODY IMAGE STUDY

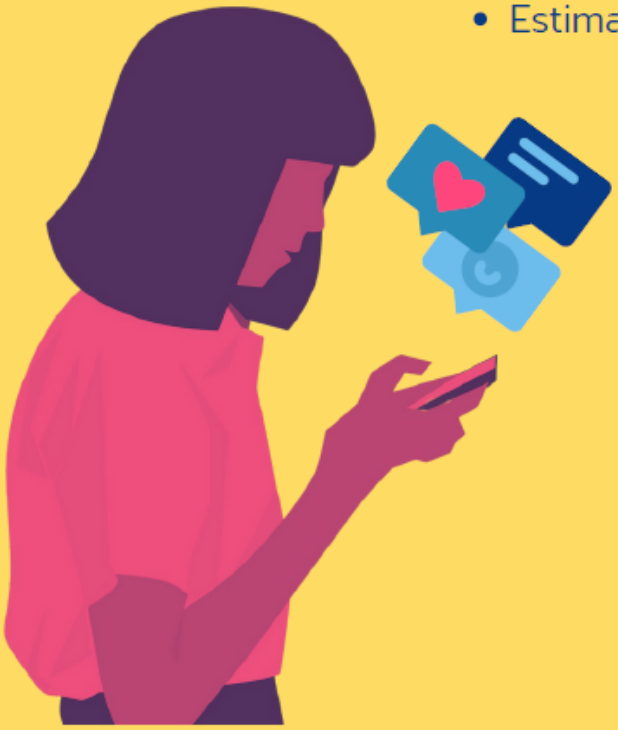
The University of Oxford is looking for young people to take part in an online study to help us understand the relation between social media, eating and body image

Are you...

- 16-21 years old?
- Female?
- Living in the UK?

What's involved?

- Comparison tasks
- Relaxation tasks
- Questionnaires
- Estimated time: 20-30 min



SCAN HERE

For more info and to take part, SCAN THE QR CODE or contact: Jasmin White, Trainee Clinical Psychologist:
jasmin.white@hmc.ox.ac.uk
http://tinyurl.com/yj3x5vud

This study is run by the University of Oxford - Ethics reference: R88903/RE001

UNIVERSITY OF OXFORD

C5: Experimental Stimuli – Mock-up Social Media Images



Social Media Image 1



Social Media Image 2



Social Media Image 3



Social Medial Image 4



Social Media Image 5



Social Medial Image 6



Social Media Image 7



Social Media Image 8



Social Media Image 9



Social Media Image 10



Social Media Image “Millie”

C6: Five Sense Grounding Task Stimuli



Five Sense Grounding Task Stimuli 1



Five Sense Grounding Task Stimuli 2

C7: TDRP Measures

Body Image States Scale (BISS)

Purchased from: http://body-images.com/assessments/biss.html

Revised Child Anxiety and Depression Scale (RCADS)

Freely available from: https://www.corc.uk.net/outcome-experience-measures/revised-childrens-anxiety-and-depression-scale-rcads/

Eating Disorder Examination Questionnaire (EDE-Q)

Freely available from: https://www.corc.uk.net/outcome-experience-measures/eating-disorder-examination-questionnaire-ede-q/

C8: Flow Diagram of Study Procedure



C9: Journal of Eating Disorders Author Guidelines

Abstract

The Abstract should not exceed 350 words. Please minimize the use of abbreviations and do not cite references in the abstract. The abstract must include the following separate sections:

- Background: the context and purpose of the study
- Results: the main findings
- Conclusions: a brief summary and potential implications

Keywords

Three to ten keywords representing the main content of the article.

Background

The Background section should explain the background to the study, its aims, a summary of the existing literature and why this study was necessary.

Methods

The methods section should include:

- the aim, design and setting of the study
- the characteristics of participants or description of materials
- a clear description of all processes, interventions and comparisons. Generic names should generally be used. When proprietary brands are used in research, include the brand names in parentheses
- the type of statistical analysis used, including a power calculation if appropriate

Results

This should include the findings of the study including, if appropriate, results of statistical analysis which must be included either in the text or as tables and figures.

Discussion

For research articles this section should discuss the implications of the findings in context of existing research and highlight limitations of the study. For study protocols and methodology manuscripts this section should include a discussion of any practical or operational issues involved in performing the study and any issues not covered in other sections.

Conclusions

This should state clearly the main conclusions and provide an explanation of the importance and relevance of the study to the field.

List of abbreviations

If abbreviations are used in the text they should be defined in the text at first use, and a list of abbreviations can be provided.