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Facilitators and Barriers to Social Distancing for Young People living in Northern Ireland during the COVID-19 Pandemic

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1 Full title: Facilitators and Barriers to Social Distancing for Young People living in Northern Ireland
2 during the COVID-19 Pandemic

3 Short title: Facilitators and Barriers to COVID-19 Social Distancing

4

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18

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22

23 **Abstract**

24 This qualitative study explores the facilitators of and barriers to social distancing for young people
25 living in Northern Ireland during the COVID-19 pandemic. Qualitative data was collected as part of a
26 larger Qualtrics survey between July 28th 2020 and August 24th 2020. Eligible participants were young
27 people living on the Island of Ireland, aged 16-25 years. The survey design was underpinned by the
28 COM-B model of behaviour change. Semi-inductive thematic analysis was used to analyse comments
29 collected via three free-text survey items. The COM-B model provided a thematic framework to
30 organize subthemes extracted. A total of N=477 young people completed the survey, of which N=352
31 provided comments for at least one of three free-text survey items. The majority of respondents lived
32 in Northern Ireland (96%), the average age was 21 years, and most respondents were female (73%)
33 and were students (81%). Key barriers identified included Social Opportunity (other people not social
34 distancing), Physical Opportunity (lack of environmental support for social distancing), and
35 Automatic motivation (missing physical interaction from others). Key facilitators included Physical
36 Opportunity (environmental cues and space to support social distancing), Reflective Motivation
37 (awareness and understanding of risk of transmission), and Social Opportunity (observing others'
38 adhering to guidelines). These findings suggest that the actions of others, environmental supports, and
39 perception of risk have an important role in influencing social distancing behaviour among young
40 people. The COM-B factors identified in this study can inform the development of tailored
41 interventions using models such as the Behaviour Change Wheel.

42 Key words: Health Behavior; Physical Distancing; Young Adult; COVID-19

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48 **1. Introduction**

49 In response to the COVID-19 pandemic, social distancing guidelines were introduced in both
50 Northern Ireland (NI) and the Republic of Ireland (RoI) in March 2020 [1] and required fundamental
51 changes in how people interact with each other. Social distancing involves a wide range of strategies
52 designed to minimise the spread of the virus by reducing contact between individuals, involving but
53 not limited to, staying at home; reducing social contacts; and maintaining physical distance during
54 interactions with other people [2,3]. While guidance on whether individuals should remain one or two
55 meters apart differs across countries, the key principle is that individuals limit their contacts and keep
56 a physical distance between themselves and other people during any interaction.

57 Social distancing has been shown to be an important component of measures designed to reduce the
58 spread and impact of COVID-19. In NI, early distancing measures were estimated to have reduced the
59 R rate of transmissions from 2.8 to 0.8 [4]. A systematic review of early efforts to control the spread
60 of COVID-19 additionally estimated that physical distancing of over one meter was important in
61 reducing transmission (pooled adjusted OR 0.18, 95% CI 0.09 to 0.38) [5]. Furthermore, a review of
62 studies on the effect of social distancing alone on H1N1 also found a median reduction rate of 23% of
63 cases in the general population; combined with other measures this rose to a median reduction of 75%
64 [6].

65 While young people (e.g. <25) [7] who are deemed medically healthy may experience comparatively
66 lower risk of serious effects of COVID-19, they play an important role in preventing its spread.
67 Young people often have large social circles and are at a developmental stage in which social
68 interactions and relationship building are considered important [7]. Young people may be more
69 influenced by their peers, which may make adhering to social distancing regulations difficult should
70 other members of their social groups not comply with guidelines [7]. In NI in June 2020 there were
71 reports of large crowds of young people gathering on beaches and other public places raising concerns
72 that young people were not adhering to social distancing guidelines [8]. Recent research has also
73 indicated specific challenges faced by young people during the pandemic related to isolation,
74 loneliness and anxiety [7,9], which may impact on behaviours related to social distancing.

75 Understanding behaviours is key in order to change them. Behaviour change occurs when an
76 individual has the physical and psychological capability to make changes, the motivation to make
77 changes, and the physical and social opportunities to make changes (The COM-B model) [10].
78 Understanding the interactions between these variables, and what influences them, is important to
79 inform the design of interventions to support social distancing among young people; with the
80 principle that particular behaviours are most likely to occur when capability, opportunity and
81 motivation are present. Furthermore, identifying the mechanisms of action (the COM components)
82 underpinning social distancing behaviour, can inform the systematic selection of intervention
83 functions and allied policy supports, using the Behaviour Change Wheel as a guiding tool [10,11].
84 Given the importance of social distancing in reducing transmission of COVID-19, this paper explores
85 the psychological, social, and environmental factors which support ('facilitators') or thwart
86 ('barriers') efforts to maintain a distance from others outside the household among young people
87 living in NI or the RoI. The findings reported are based on a survey which was undertaken between
88 July 28th 2020 and August 24th 2020 [12], as lockdown measures were being eased, and thus reflects
89 on the societal and legislative context during this timeframe.

90

91 **2. Methods**

92 2.1 Design and participants

93 The cross-sectional survey collected anonymous quantitative data (via fixed response scales) and
94 qualitative data (open text questions) remotely via Qualtrics software. The survey was open July 28th
95 2020 – August 24th 2020. The survey closed on August 24th as this marked the start of the process of
96 returning to School/University/College which would introduce different contextual variance, thus
97 impacting the interpretation of results. Ethics approval was obtained through Queen's University
98 Belfast on July 27th 2020 and the study is pre-registered on AsPredicted.org (reference: #45900).

99 Convenience sampling was used to recruit young people/adults aged 16-25 years living in NI/ROI on
100 social media and via youth organisations, schools, and Higher Education institutions. Participants

101 were given the opportunity to enter into a raffle to win a £100 Amazon voucher for completing the
102 survey. As the primary analysis included frequency statistics (reported in full in Berry et al. [12]) and
103 qualitative analytic methods, we aimed to recruit as many participants as possible to facilitate this
104 analysis. Braun et al. [13] discuss an upper end of 100+ participants to support thematic analysis of
105 online survey responses, and, while this is largely determined by the richness of the data and
106 saturation, we aimed to recruit at least 100 participants.

107 2.2 Materials and procedure

108 The online survey was developed in collaboration with members of the HSC Research and
109 Development Division Behaviour Change Group [14], and was piloted by a representative group of
110 young people to inform further adaptations to support relevance and understanding [15]. The survey
111 items were guided by the COM-B model [10], to provide a theoretical framework a priori, and were
112 deemed relevant given the applications of the model in relevant contexts [11].

113 The survey was divided into five sections: 1) COVID-19 knowledge and behaviour 2) social and
114 environmental influences on social distancing 3) Attitudes and emotions about social distancing 4)
115 Exploring views and experiences of social distancing 5) Demographics and COVID-19 exposure.
116 Sections 1-3 and 5 were fixed response questions, which used yes/no or Likert scale answer formats
117 (data reported in Berry et al. [12]). The three open text questions in section 4 included: 1) ‘What
118 things make it difficult to stick to the COVID-19 guidelines on social distancing?’ 2) ‘What things
119 help you to stick to the COVID-19 guidelines on social distancing?’ 3) ‘What would make it easier to
120 keep a distance when you see your friends or family outside your household?’

121 Potential participants accessed the survey via a link, which directed them to the information page and
122 a series of consent statements. After providing consent participants were directed to the main survey
123 and were provided with a debrief form upon completing the survey.

124 2.3 Analysis

125 Descriptive statistics were used to capture the demographic composition of the sample, rates of
126 COVID-19 related exposure, and to explore common barriers to social distancing through frequency

127 statistics. A report has been produced for the Public Health Agency by members of the HSC R&D
128 Behaviour Change Group, which presents the descriptive statistics and frequencies across responses in
129 full and can be found online [12].

130 A combined approach to qualitative analysis was adopted to ensure that findings were
131 methodologically sound, while also providing practically and clinically useful results. Reflexive
132 thematic analysis [16,17], framed by a subtle realist approach [18], was used to inductively code and
133 develop subthemes. The qualitative analytic approach was informed by a review undertaken by
134 McGowan and colleagues [19], which recommends that behaviour change theory should be applied
135 flexibly in qualitative work, to ensure that codes and prospective themes are not limited by the
136 framework applied. This enabled the primary qualitative analysts in the team (EB and SA) to
137 inductively code, and develop subthemes liberally from the data. The analysis process followed the
138 key steps outlined by Braun and Clarke [16] which includes transcription and familiarisation with the
139 data, generation of initial codes, examining codes for themes, reviewing potential themes, defining
140 themes, and formulating the report. The data was coded initially by SA and crosschecked by EB.
141 Discussions took place to review codes, which led to the removal, addition, or amalgamation of codes.
142 Parent codes were reviewed and the units of meaning they represented helped to develop subthemes
143 that remained bound to the source code but provided a higher degree of abstraction. This was an
144 iterative process to ensure that the subthemes adequately captured the codes and were valid reflections
145 of the data. Acknowledging the subjective nature of the analytic process, thoughts and observations
146 were noted throughout the analysis and perspectives and interpretations were discussed during team
147 meetings to support a comprehensive reflexive process [20].

148 The next phase of analysis followed a thematic content analysis approach [21]. This consisted of a
149 deductive mapping process in which the COM-B was used as a thematic framework to organize
150 subthemes extracted. Subthemes extracted were categorised under the COM components of the COM-
151 B model, where they were deemed to conceptually fit [19]. Data analysts SA and EB remained
152 observant of subthemes that deviated from the COM-B framework. The COM-B thus provided a
153 framework for overarching themes i.e. following the initial inductive coding and subtheme

154 construction themes were assigned deductively. Both data coders are trained qualitative researchers
155 and have a sound understanding of the COM-B model and its applications. EB, SA, and CJ
156 contributed to the interpretation of themes and production of this report. Findings are reported in line
157 with Consolidated criteria for reporting qualitative research guidelines in keeping with best practice
158 (Tong, Sainsbury, & Craig, 2007) [22].

159 Deductive mapping of the more focused subthemes to COM components facilitated public health
160 professionals in the identification of intervention functions, policy categories, and behaviour change
161 techniques according to the Behaviour Change Wheel [10]. While the purpose of this study was not to
162 propose explicit intervention strategies, the mapped subthemes provide direction as to which
163 intervention functions and policy supports can facilitate behaviour change in this context.

164

165 **3. Results**

166 A total of 477 young people completed the survey. Of these, 96% were residents of Northern Ireland
167 and 73% were female. The average age was 21 years with a standard deviation of 2.4 (range= 9).
168 Eighty-one percent of young people were living in their family home at the time of completing the
169 survey; 3% lived in owned accommodation; 2% lived in student rented accommodation; and 12%
170 lived in privately rented accommodation. Most respondents lived in households with 3-5 people
171 (73%). One in 6 young people reported living with a chronic health condition, 10% reported having
172 experienced symptoms consistent with COVID-19. Most young people reported that they were not
173 shielding themselves or others in their household (96% and 81% respectively). See Berry et al. [12]
174 for further information.

175 Of the total 477 survey respondents, 352 respondents provided at least one free text response (this
176 subsample did not differ significantly from the total sample across relevant demographic factors).
177 Thematic analysis of the each free text question led to the development of subthemes, which pertained
178 to the perceived ‘barriers’ and perceived ‘facilitators’ of social distancing. Perceived facilitators was
179 explored in the context of what is *currently* helpful to support social distancing *and* what would

180 *further* help to support social distancing *more* (the latter is discussed in brief but full list of subthemes
181 and supporting quotes can be found in Table 3). Subthemes extracted inductively are described under
182 the Capability, Opportunity, and Motivation components, to which they have been conceptually
183 mapped.

184 3.1 Barriers to social distancing (Q1)

185 Barrier-related subthemes mapped onto all three COM components, with the exception of physical
186 capability (see Table 1).

187 *Psychological capability*

188 Psychological capability refers to an individual's knowledge and skills to engage in the behaviour,
189 and includes elements of self-regulation [10]. Three subthemes aligned with psychological capability
190 [42 total comments in total]: 1) 'Lack of clear guidance about expected behavior', 2) 'Challenge of
191 regulating behavior', and 3) 'Effect of alcohol on ability to maintain behavior'. The first subtheme
192 relates to the lack of confidence in and understanding of the formal guidelines around social
193 distancing. There was uncertainty about what the instructions to social distance mean in reality, with
194 messages described as "vague" (participant 9), and young people also felt like the messages were
195 contradictory. Moreover, young people reported feeling confused because of the "Changing messages,
196 scattered dissemination of information" (participant 271).

197 "Working as a key worker with friends, then meeting up with them outside work - it is nigh
198 on impossible to socially distance in work and masks are only just coming in, why would we
199 bother distancing if we go for food after work whenever we have just been closer than
200 distancing in work?" (participant 144)

201 Regarding subtheme two, young people mentioned that it can be "easy to forget" to keep a distance
202 from others while socialising because it's not a habit (participant 25). This challenge of opposing
203 entrenched social habits extends to the normative social behaviour people engage in while in the
204 presence of others such as hugging others and shaking hands.

205 “Habits - i.e. being able to freely hug family members before, reaching for something in a
206 shop where someone is also looking at the same item” (participant 352)

207 Subtheme three overlaps with subtheme two, capturing young people’s thoughts around alcohol
208 consumption. Some young people felt that alcohol makes it more likely that people will revert to old
209 habits and forget to distance.

210 “When people simply disregard the rules and get close to you. Alcohol also makes it difficult
211 to stick to social distancing due to the loss of awareness.” (participant 198)

212 *Social opportunity*

213 Social opportunity refers to the impact of an individual’s social and cultural ‘milieu’ on behaviour
214 [10]. One subtheme extracted aligned with social opportunity: ‘Actions of others’ as a disincentive’
215 [147 comments]. This was the most frequently reported barrier to social distancing and relates to
216 observing other people not keeping their distance from others in public spaces. Being physically
217 around other people who are not following the distancing rules makes it hard for young people to feel
218 compelled to practice social distancing themselves. Seeing friends or other young people not keeping
219 distance from others on social media is also discouraging as it implies that none of their peers are
220 doing it.

221 “Pubs and restaurants not providing distancing at tables - have only met up with two friends
222 since March, once for a walk and once to chat at a distance in a garden, and I left when the
223 others went inside. Also, Instagram: everyone is posting pictures of themselves all over their
224 friends at parties etc. and it’s so prevalent it sometimes makes me wonder if I’ve just
225 imagined the whole pandemic? Why do I stick so strongly to the guidelines when nobody else
226 I know seems to?” (participant 118)

227 *Physical opportunity*

228 Physical opportunity refers to an individual’s surroundings and physical resources that influence
229 behaviour [10]. One subtheme extracted aligned with physical opportunity [103 comments in total]:
230 ‘Lack of environmental support for social distancing’. Many young people mentioned aspects of their

231 physical environment that make it harder to distance. In particular, young people find it hard to keep a
232 distance in small or busy spaces such as retail environments, friends' homes, and workplaces.

233 "Small spaces in shops, corridors, work, friends houses etc... it isn't always possible to
234 effectively socially distance in certain places. Some people are also not very considerate of
235 your own space" (participant 161)

236 Some young people also mentioned having to car share as an unavoidable barrier to keeping distance.

237 "Most of my friends don't drive so they have to get into my car" (participant 83)

238 *Automatic motivation*

239 Automatic motivation refers to feelings, habits, and 'innate dispositions' that affect behaviour [10].

240 One subtheme extracted was categorized as automatic motivation [71 comments in total]: 'Absence of
241 physical affection and contact'. The motivation to keep a distance from others was diminished due to
242 young people missing physical affection and contact from friends and family. Young people missed
243 being with friends/loved ones in-person and expressed feeling lonely because of the lack of in-person
244 contact.

245 "I live in a rural area, and I was the loneliest I have ever been during lockdown. I was almost
246 desperate to get back to Belfast to see my friends and boyfriend, who I hadn't seen in four
247 months." (participant 315)

248

249 *Reflective motivation*

250 Reflective motivation refers to the range of more conscious processes such as planning, making

251 evaluations and risk perception [10]. Two subthemes extracted aligned with reflective motivation [21

252 total comments in total]: 1) 'Difficulty accepting the pandemic' and 2) 'Sense of low risk of

253 transmission/contraction'. With respect to the first subtheme, young people reported that keeping

254 distance can feel unnatural and strange, which influences their motivation to social distance.

255 “The pandemic being a new, unfamiliar situation in strange circumstances, causing it to feel
256 unnatural to have to stay away from my friends etc., as I am used to closer contact with them -
257 hugs, etc.” (participant 322)

258 Regarding the second subtheme, a smaller group of young people found it difficult to perceive the risk
259 of not social distancing for reasons including disbelief of the infectiousness and seriousness of
260 COVID-19 and feeling that measures taken such as forming a social “bubble of people to chat” meant
261 they did not have to distance from friends (participant 344).

262 “The fact that none of my friends or I have ever caught it despite not social distancing. Can be
263 hard to appreciate its importance” (participant 220)

264

265 3.2 Facilitating social distancing (Q2: existing supports)

266 Subthemes related to facilitators to social distancing behaviour were mapped onto all three COM
267 components, with the exception of physical capability (see Table 2).

268 *Psychological capability*

269 Two subthemes aligned with Psychological capability [42 total comments in total]: 1) ‘Clear and
270 consistent guidelines’ and 2) ‘Adapting (pre-pandemic) lifestyle behavior’. Relating to the first
271 subtheme, young people felt that keeping a distance from others in social settings is easier when
272 public spaces like shops have clear instructions about how people are expected to behave and when
273 there is “Consistent guidance from the government on the news and social media” (participant 52).
274 Thus, clarity of instructions was important at a lower, rudimentary level e.g. shopping behaviour,
275 however, there was also the sense that coherent messages from authorities was also important.

276 “Clearer views and instructions from the government as the people I know have varied
277 knowledge of what’s the most up to date information.” (participant 284)

278 Some young people reported that adjusting their daily lifestyle by, for instance, “staying at home as
279 much as possible” (participant 287) and only going out when necessary helps them to keep distance

280 by avoiding situations where they need to ensure that they keep a distance from others. A small
281 number of young people also mentioned that adjusting forms of communication with family and
282 friends, for example talking to “friends through social media” and changing the setting of social
283 meetings by “meeting up with friends in quiet parks” (participant 233) helps them to avoid close
284 contact.

285 *Social opportunity*

286 One subtheme extracted aligned with social opportunity [55 comments in total]: ‘Actions of others as
287 an incentive’. Many young people noted that it is easier to keep distance when others also keep
288 distance, and it was felt that others supporting this behaviour by “acting as good role models”
289 (participant 66) encouraged them to practice social distancing. The message underpinning this
290 subtheme compliments the social opportunity barrier previously acknowledged.

291 “Seeing others distancing make me distance” (participant 124)

292 *Physical opportunity*

293 One broad subtheme extracted aligned with physical opportunity [146 comments in total]:
294 ‘Environmental support for social distancing: cues and space’. This subtheme suggests that physical
295 environment has a large impact on young people’s perceived ability to keep distance and their
296 capacity to remember to keep distance. One element of this subtheme related to how young people felt
297 that environmental cues and reminders and physical prompts facilitated their ability to keep a distance
298 from others and reminded them to keep a distance from others.

299 “Stickers on the ground, spaced out tables when eating, reminders on social media/billboards
300 etc” (participant 155)

301 Another aspect of this subtheme related to the need to have adequate space to practice social
302 distancing, which suggested that young people felt that keeping a distance from others is easier when
303 the physical environment aids this, for example by restructuring indoor spaces or meeting others in
304 outdoor settings.

305 “Meeting outside, or in spaces/restaurants with good safety precautions and spacing”
306 (participant 182)

307 *Automatic motivation*

308 One subtheme extracted aligned with automatic motivation [22 comments in total]: ‘Enforcement and
309 perceived repercussions’. A number of young people also mentioned that they keep distance when
310 they are made to. This primarily related to circumstances when (shop/other) staff enforce it or
311 “implementing laws” (participant 168), in which case the risk of punishment is visible.

312 “when there are strict rules in shops/ businesses that easily instruct you what to do before
313 entering. However I only actually do it if there is a member of staff at the door reminding
314 everyone to use the soap dispenser.” (participant 321)

315 *Reflective motivation*

316 One subtheme extracted aligned with reflective motivation [95 comments in total]: ‘Awareness of risk
317 of transmission’. Young people frequently mentioned an awareness of risk as a motivation to keep a
318 distance from other in social situations. They reported feeling motivated by a drive to keep themselves
319 or others safe, to avoid deaths and “helping stop the spread” (participant 92). Some said they kept
320 distance because it was “the right thing to do from the news” (participant 228), which may relate to a
321 number of factors including news reports of contagion and death rates, as well as news coverage on
322 government guidelines around social distancing behavior.

323 “Knowing I’m less likely to make myself/others sick” (participant 64)

324 A small group of young people also reported feeling more motivated to keep a distance from others in
325 social situations after “Noticing that daily cases of covid are increasing” in their own “council area”
326 (participant 251).

327 3.3. Facilitating social distancing (Q3: further supports needed)

328 The final question asked respondents what could be improved or put in place to further facilitate
329 social distancing behaviour. Subthemes for this question were mapped onto all three COM

330 components, with the exception of physical capability and automatic motivation (see Table 3).
 331 Subthemes largely complimented the subthemes identified for current/existing facilitators, with regard
 332 to greater clarity of guidelines in different social circumstances, increased environmental supports,
 333 increased visibility of the supportive behaviour of others, the need for more enforcement of ‘rules’,
 334 and the importance of knowing the risks of contagion and contraction.

335 However, one subtheme, which aligned with reflective motivation, conveyed a different perspective to
 336 any of the subthemes described previously [71 comments in total]: ‘Sense that nothing (more) can
 337 help’. The comments that led to the development of this subtheme tended to relate to the perspective
 338 that there is “nothing that can make it [social distancing] easier” and that distancing from others was
 339 “common sense” (participant 183), or indicated an uncertainty about what can further help or the
 340 sense that nothing can help.

341 “Nothing. To be honest I have no ideas on how it could be made easier.” (participant 317).

342

343 **Table 1:** Barrier themes clustered under COM-B components and supporting quotes (Q1)

COM-B component	Subtheme	Sample quote
Psychological capability	Lack of clear guidance about expected behavior Challenge of regulating behavior Effect of alcohol on ability to maintain behavior	“ Vague statements about distancing because people can interpret it in different ways” (participant 9) “It’s just culture that you hug people when you see them so sometimes you get caught up you forget.” (participant 199) “It’s difficult when others don’t do it or when any alcohol is consumed.” (participant 185)

Physical capability	-	-
Social opportunity	Actions of others as a disincentive	“People ignore the regulations and guidance. So if someone passes close to me then it defeats the purpose of me doing it if very few are watching their distance around everyone.” (participant 235)
Physical opportunity	Lack of environmental support for social distancing	“Too many people in shops, too many people in general, not knowing what way to go in a shop” (participant 202)
Automatic motivation	Absence of physical affection and contact	“Seeing your friends and family after so long and not being able to hug” (participant 26)
Reflective motivation	Difficulty accepting the pandemic Sense of low risk of transmission or contraction	“My family, friends, partner. Also, the fact i am sick of hearing the social distancing radio adverts constantly like propaganda. For me, the more i hear it, the less i listen.” (participant 307) “I want to be close to people I care about, to hug them, it's hard if other people don't as it feels pointless especially when transmission is very low” (participant 77)

344

345 **Table 2:** Facilitator (existing supports) subthemes clustered under COM-B components and

346 supporting quotes (Q2)

COM-B component	Subthemes	Sample quote
-----------------	-----------	--------------

Psychological capability	Clarity and consistency of guidelines and instructions Adapting (normal) lifestyle behavior (include adapting usual forms of communication)	“Restrictions on everybody, clear and visible instructions” (participant 326) “Limiting how much time I actually spend with people outside my household. The more time you spend with people it’s easy to become used to it and forget about distancing” (participant 268)
Physical capability	-	-
Social opportunity	Actions of others as an incentive	“Having friends that are strict as well. If majority of people don’t, it makes you feel self conscious” (participant 15)
Physical opportunity	Environmental support for social distancing: cues and space	“Rules in shops, tape on floors etc. that give me guides on where I should be standing.” (participant 159)
Automatic motivation	Enforcement and perceived repercussions of not social distancing	“If it’s a legal requirement” (participant 1)
Reflective motivation	Awareness of risk of transmission	“The knowledge that it is the right thing to do to keep people safe.” (participant 349)

347

348

349 **Table 3:** Facilitator (*additional supports needed*) subthemes clustered under COM-B components and
 350 supporting quotes (Q3)

COM-B component	Subthemes	Sample quote
Psychological capability	Clear and consistent guidelines Adjusting lifestyle and social activities	“Clearer guidelines. There are too many contradictions about!” (participant 177)
Physical capability	Environmental supports to facilitate and encourage behaviour	“Perspex glass divisions in indoor spaces, areas marked with tape outside, maybe a technological reminder that youre standing too close to someone? Like an app” (participant 305)
Social opportunity	Supportive beliefs and values of others	“If everyone had the same goal in mind. Lots of people don’t believe in the virus or in the prevention measures” (participant 130)
Physical opportunity	-	-
Automatic motivation	-	-
Reflective motivation	Enforcement of rules with repercussions Increasing awareness of the benefits versus risks	“More clear or strict guidelines, if it is necessary. If everyone is forced to do it, then it would be easier.” (participant 139) “More public understanding of the severity of coronavirus. Most people are bored of it now and seem to act like it doesn’t exist anymore.” (participant 158)

	Sense that nothing (more) can help	“Nothing it’s always going to be hard” (participant 68)
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351

352

353 **4. Discussion**

354 This study explores the commonly experienced barriers to and facilitators of social distancing
355 behaviour in young people predominantly from Northern Ireland, using the COM-B model to
356 organize and make sense of the data. This study focuses on a sample of young people, primarily
357 students, who recognize the supports needed to endorse social distancing behaviour, but who
358 experience a range of factors which impede the extent to which they implement this behaviour in
359 daily life. As reported in Berry et al. [12], while a large number of young people social distance
360 frequently, a substantial proportion reported that they do not. This is consistent with previous
361 evidence indicating that adherence to social distancing guidelines is generally lower in younger
362 populations [23,24]. The frequency data reported in Berry et al. [12] suggests that actions of peers,
363 forgetting to keep a distance from others, environmental constraints, and unhelpful emotions
364 contribute to intentions to, or perceived ability to social distance (see Berry et al. [12]). Qualitative
365 analysis of free-text survey responses provided the scope to further explore these observed
366 frequencies.

367 A large number of responses in relation to the barriers and facilitators of social distancing revolved
368 around physical opportunity, and more specifically, the importance of context, cues, and prompts in
369 helping young people to social distance. This is an important area to consider when designing
370 interventions to prompt behaviour and can be particularly effective when combined with clear and
371 simple guidance. Social distancing behavior among young people is influenced by the structure and
372 organization of businesses. For example, pubs, restaurants, and shops not accommodating and/or not
373 enforcing social distancing guidelines was a commonly reported factor among young people.

374 Correspondingly, visual cues and reminders, guidance from staff, and premises following guidelines
375 were consistently highlighted as enablers for social distancing.

376 Observing the actions of peers/others not distancing was also a commonly raised challenge for young
377 people. Additionally, seeing friends/others posting photos on social media in which social distancing
378 was absent was another important barrier to social distancing which specific messaging and normative
379 interventions could target. Moreover, the requirement to maintain physical distance from friends,
380 partners, and family, and the emotional difficulties this caused, further contributed to the wider social
381 challenges experienced by young people. Certainly, evidence demonstrates the negative psychological
382 impact of continued isolation for young people in particular [25,26]. It is essential that future
383 interventions and public health campaigns for young people appreciate this reality and utilize
384 strategies to help young people navigate these challenging psychological and social dynamics. A
385 number of young people indicated that they found it difficult to accept the ‘reality’ of the pandemic,
386 which, since the first lockdown ensued has resulted in drastic change to day-to-day life. It is notable
387 that there was an absence of reported feeling of invincibility to engage in life as they would have pre-
388 COVID-19. With this in mind, it is understandable why some young people find it more difficult to
389 follow guidelines on social distancing if they are less able to accept the lifestyle changes and
390 sacrifices advised. For the most part, however, many young people reported feeling worried about
391 catching the virus or transmitting it to others and, in fact, this increased awareness of risk was a
392 commonly suggested enabling factor for social distancing in young people.

393 This study captures the experiences and perspectives of young people living in NI/ROI during an
394 unforeseen and unfamiliar societal trauma. The survey aimed to capture the factors which thwart or
395 support social distancing, however the content of themes highlight the wider psychosocial challenges
396 experienced by this group, such as the absence of physical affection and feeling jaded by social
397 structures. The results bare relevance for the ongoing challenge of maintaining physical distance,
398 particularly as lockdown restrictions ease. Using the Behaviour Change Wheel as an extended
399 theoretical framework [10], the barriers nested within each of the COM components can be targeted

400 through a series of intervention functions and policy supports, which evidence suggests can support
401 behaviour change.

402 The findings of this paper strongly indicate that interventions intended to encourage social distancing
403 must go beyond informing young people about the need to social distance (of which they demonstrate
404 high levels of understanding already) but must focus on social, emotional, and environmental enablers
405 and barriers. It's important to note that changing behaviour is not just about 'delivering the message'
406 to young people to try to convince them to do the right thing. Nor can we assume that young people
407 are less invested or interested in public health advice. Public health practitioners will be more
408 successful in influencing the actions of young people if they address the unique barriers identified for
409 this important demographic group, adopting a holistic approach, which acknowledges the range
410 behavioural influences and considers the unique challenges that COVID-19 poses for young people.

411 This requires having empathy for young people and ensuring that their needs and concerns are at the
412 heart of the design of any intervention strategy. Otherwise, engagement is likely to be low or short-
413 lived. Local and international reports affirm the need to capture to voices of young people to help
414 shape governmental decisions and policy to support engagement and also mitigate the long-term
415 impact of COVID-19 for the younger generation, who are likely to be more harshly affected by the
416 psychosocial and economic repercussions of prolonged periods of lockdown [27,9].

417 It is important that the efforts made by young people are not undervalued and that incidents of young
418 people not adhering to guidelines are not sensationalized by the media (e.g. scenes of young people
419 gathering in public spaces, house parties), which, as conveyed by the 'social opportunity' theme,
420 inadvertently reinforces the undesirable behaviour. In other words, the more that young people are
421 provided with these *less helpful* role models, the less incentivized they will be to engage in social
422 distancing [28,29]. There is also a need to rebuild or maintain trust in civil society organizations,
423 which may have decreased for young people (among other demographic groups) as result of unclear
424 decisions, conflicting messages, and frustration [27].

425

426 4.1 Limitations

427 This study was conducted during the graduated easing of the first lockdown during the summer of
428 2020 and thus is reflective of the thoughts, feelings, and behaviours which occurred in this context.
429 Behaviour is likely to evolve throughout the pandemic. The findings from this study should be seen as
430 indicative of important trends, but further research to validate the findings would be useful. Further
431 qualitative research would be additionally useful in deepening understanding of the themes presented
432 within this study, since the survey format limited the extent to which responses could be expanded
433 upon. This cross-sectional study also restricts the findings to a single snapshot of social distancing
434 perceptions and behaviours at the time data was collected. Longitudinal work would provide the data
435 to examine change in perceptions and behaviour overtime, which is valuable to measure the stability
436 of these variables.

437 Moreover, respondents from the survey were almost exclusively from Northern Ireland. Even though
438 many findings may be similar for young people in the Republic of Ireland, generalizing such findings
439 should be treated with caution. Information on ethnicity was also not collected. Given the
440 disproportionate impact of COVID-19 on BAME communities [30,31], further research within
441 cohorts of young people from minority ethnic groups is important. The average age of participants
442 was 21 years old, so our study provides limited insight into the experiences of younger participants
443 aged between 16-18 years old. And only 27% of respondents were male, again highlighting a group
444 towards which future research may be targeted. Other research has indicated that social distancing
445 adherence is lower in men [24], further indicating the importance of understanding responses and
446 behaviours among younger men.

447 4.2 Future directions and conclusion

448 This study provides a novel glimpse of the determinants of social distancing among young people
449 living in NI/ROI, providing information relevant for the design of targeted public health interventions
450 using frameworks such as the Behaviour Change Wheel [10]. As lockdown measures are eased, it is
451 important to understand current social distancing behaviours and intentions to maintain these where

452 necessary in the longer-term, especially as the nature of the pandemic is inherently unpredictable and
453 the emergence of new variants a potential risk on the horizon. Moreover, with the vaccine rollout, it is
454 possible that perception of risk may decrease, thus influencing transmission-preventative behaviour.
455 While vaccine behaviour in itself is an important public health matter, we also need to consider how
456 receipt of the vaccine impacts willingness to maintain social distancing recommendations as we
457 progress through 2021 and beyond. Given the pace of social change during the course of the
458 pandemic, regular research should be conducted on how young people’s behaviors are changing in
459 response to different social distancing requirements and legislative changes.

460

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471

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