

1 **1. Introduction**

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3 The study of people with disabilities travelling by air has been limited to date however, to
4 the best of the authors knowledge no research has been conducted in this area that
5 focusses purely on children with disabilities. It is important that this research is carried out
6 to see if there are similarities or differences with previous research about the challenges
7 disabled children and their parents face whilst travelling generally so this research studied
8 children with mobility issues and other issues from the perspective of their parents.

9

10 **1.1 Disability Prevalence of Children in the United Kingdom (UK)**

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12 The Family Resources Survey (FRS) is a survey carried out by the Office of National Statistics
13 (ONS) on behalf of the Department for Work and Pensions (DWP) and UK Government
14 (Office for National Statistics 2018). The survey is a representation of the UK population
15 where 19,000 households were interviewed on a variety of topics and issues including
16 disability and care needs. The FRS estimates that there are 13.9 (22%) million people with a
17 disability in the UK, with 1.1 million of this population being aged between 0 and 19.

18

19 The National Health Service (NHS) in the UK provides wheelchairs for those who need them
20 through wheelchair services. England is the only country in the UK that currently collects
21 data regarding wheelchair users, with 66,209 children currently registered with wheelchair
22 services although there are no figures that split these numbers into the levels of need (NHS
23 England 2017).

24

25 **1.2 Aviation Growth in the UK**

26

27 The aviation industry has always experienced growth in terms of flights per year and the
28 number of passengers who go on them. The Civil Aviation Authority (CAA) collects data on
29 these aspects and since 2012, flights have increased at a rate of roughly 1% a year which
30 although sounds small equates to roughly 150,000 flights per year (Civil Aviation Authority
31 2012; 2017). The growth trend is even larger in terms of passenger numbers at a steady rate
32 of roughly 5% a year, equating to an extra 64 million passengers per year compared to 2012
33 (Civil Aviation Authority 2012b; 2017b). To place these numbers in perspective this equates
34 to an average of 8,780 aircraft movements and 789,155 passengers taking a flight every day
35 of the year (totals divided by 365 and rounded) (Civil Aviation Authority 2017a; 2017b). The
36 CAA does not publish data on passengers with disability who travel, although given that 22%
37 of the population have a disability it could mean that 173,614 people per day fly with some
38 form of disability.

39

40 **2. Aim and Objective**

41

42 Previous research has identified several issues that adult people with disabilities encounter
43 whilst travelling by air such as manual handling issues, being unable to access the toilet and
44 a variety of negative emotional issues (Poria et al. 2010; Saari 2015; Davies & Christie 2017).
45 These research studies focussed on adults and there is currently no published literature on
46 children with disabilities who fly. Historic transportation research on children with
47 disabilities who use a wheelchairs has found a difference between the minimum required

48 standard of safety and an observed reality of practice when travelling on ground
49 transportation (Everly et al. 1994; Yonkman et al. 2010). Further guidelines exist on the
50 transportation of children with special healthcare needs but do not mention or consider air
51 travel (American Academy of Pediatrics 2002).

52

53 The aim of this study was to explore the viewpoints of parents with children with disabilities
54 who utilise air transportation including preparing for flying, in and around the airport and on
55 board the aircraft. Although there are many disabilities, this research focusses on children
56 who are wheelchair users, aged between three and seventeen. The objective of the study
57 was to carry out semi structured interviews with parents of children with disabilities. This
58 was to find out if the issues identified in previous research on people with disabilities who
59 fly are different or the same between adults with disabilities and children with disabilities.
60 Consideration was given to interview the children directly however was decided against due
61 ethical concerns and that parents are often the primary care giver for their child which
62 offered an extra perspective from adults with disabilities.

63

64 **3. Methodology**

65

66 The social model of disability focusses on the idea that an individual is disabled by society
67 rather than by their impairment (Oliver 1990). There is more to understanding the needs of
68 people with disabilities than a health issue whilst interacting with an environment (O'Day &
69 Killeen 2002). A qualitative approach was considered the most appropriate solution to
70 obtaining the best quality data possible through the use of semi structured interviews to
71 collect participants knowledge and experience of a subject or theme (Creswell 2012). To
72 best collect and analyse the experiences, values and beliefs of the participants, content
73 analysis was used to interpret the textualized data through identifying themes (Hsieh &
74 Shannon 2005). This method of qualitative research is also favoured in the research of
75 marginalised groups of the population, particularly those with health conditions (Graneheim
76 & Lundman 2004; Erlingsson & Brysiewicz 2017).

77

78 **3.1 Participant Recruitment**

79

80 We aimed to recruit a variety of adult participants aged 18 years old and over. An appeal on
81 Twitter, a social media platform was used to advertise for participants. The advert was well
82 received which led to seven parents of children with disabilities emailing the author
83 enquiring to take part, all of whom did. Further recruitment of participants was not sought
84 at this stage because this was an initial study and the targeted group of people is very small
85 (Guest et al. 2006).

86

87 In compliance with the University College London (UCL) Research Ethics Committee (REC),
88 the participants were sent an information sheet and a consent form prior to being
89 interviewed as per the approved ethics application 10337/002. Semi structured interviews
90 were conducted with seven participants who agreed to offer their experiences as parents of
91 children with disabilities who travel by air.

92

93 **3.2 Interview Topic Guide**

94

95 A semi-structured topic guide was designed into seven sections to capture the experiences
 96 of the participants. The first section was a collection of ‘Individual Characteristics’, obtaining
 97 information about the participant whilst allowing the interviewer and participant to build a
 98 relationship. The next four sections were the main focus of the interview that included:
 99 Procedures, Preparation & Planning; Around the Airport; The Aircraft and Leaving the
 100 Airport & Equipment Issues. Two further sections followed that allowed the participant to
 101 offer their own recommendations to the aviation industry and to discuss anything else
 102 regarding flying with a disability.

103

104 **3.3 Interview Analysis**

105

106 The interviews were transcribed by a professional transcription company and then
 107 anonymised to remove bias so that the researcher could analyse the data neutrally.
 108 Inductive content analysis was used to identify themes as there were no previous studies
 109 found in this area of research and several themes were found amongst the seven transcripts
 110 (Elo & Kyngäs 2008). The data was coded manually, and another experienced researcher
 111 also themed a transcript to ensure consistency.

112

113 **4. Results**

114

115 The following section is a presentation of the results and themes identified in this piece of
 116 research.

117

118 **4.1 Participants**

119

120 Seven parents of children took part including two fathers and five mothers aged between 36
 121 and 61 years old. The average age of a participant was 47.71 years. All of the participants
 122 children have been disabled since birth and have complex care needs in addition to the
 123 primary diagnosis. The majority of the children had a wheelchair that required someone
 124 else to move it as they were unable to do it themselves. All of the children had professional
 125 personal assistance except for one child who was too young for them and still cared for by
 126 their parents.

127

Participant	Gender	Age	Childs Disability	Disabled from Birth	Chair Type	Personal Assistants
A	M	56	Undiagnosed	Yes	Powered	Yes
B	F	45	Cerebal Palsey	Yes	Manual (Attendant Propelled)	Yes
C	F	46	Cerebal Palsey	Yes	Adapted Pushchair/Buggy	No
D	F	36	Global Development Delay	Yes	Manual (Attendant Propelled)	Yes
E	M	61	Cerebal Palsey	Yes	Manual (Attendant Propelled)	Yes
F	F	47	Cerebal Palsey	Yes	Manual (Attendant Propelled)	Yes
G	F	43	Neuromuscular Disorder	Yes	Manual and Powered	Yes

128

129

130 *Table 1 – Participant Characteristics*

131

132 **4.2 Feelings Before Flying**

133

134 Parents of children with disabilities stated that they primarily fly for the purpose of going on
 135 holiday or for medical treatment. Participants were asked how they felt before they
 136 travelled by air, with the majority being worried due to being removed from familiar

137 settings and having to prepare for all potential eventualities. Those who travelled frequently
138 were less anxious because of their previous experiences.

139

140 'I suffer with a bit of anxiety and flying with a child, it makes me anxious for lots of different
141 reasons' [Participant D, Female, 36]

142

143 'I've travelled quite a bit so I'm not too anxious about it.' [Participant E, Male, 61]

144

145 **4.3 Preparing for Flying**

146

147 Preparing luggage for a child with a disability to go on a trip was described as difficult and
148 like a 'military manoeuvre'. This was to ensure that suitable equipment was available in
149 addition to having enough medical supplies to last the duration of the trip whilst absent
150 from a setting fit for purpose.

151

152 '... we've taken eleven plus cases, and the majority of them are [Name of wheelchair user]'s
153 obviously with all of the equipment that we have to take and fit into suitcases and pack and
154 the cross-infection gloves, wipes; everything, absolutely everything – hoisting, the lot.'

155 [Participant B, Female, 45]

156

157 '... we just deal with it as a normal everyday thing but it is definitely more things to think
158 about and carry and make sure that you've got because there's always the worry of things
159 going astray when you put suitcases in the hold so we try to make sure that things are in
160 different cases so that if one goes astray we've still got access to things that we need.'

161 [Participant G, Female, 43]

162

163 **4.4 Food & Drug Preparation**

164

165 Due to the complex care needs of the children in this research, many of them required
166 several different drugs to be taken routinely at the same time every day. This proved
167 difficult when the drugs were in liquid form or if there were a lot of them because not
168 having the drugs available would have a massive impact on the health of the child.
169 Spreading the medication over multiple bags and taking surplus medication were reasons
170 given to avoid being without.

171

172 'It's literally military precision with working out much drugs we have to take with us, getting
173 the permission letters from consultants and making sure that they're all labelled correctly
174 for customs to check, and the list of drugs, what doses they are, and emergency drugs we
175 have to carry with us on-board' [Participant B, Female, 45]

176

177 '... there were five of us travelling on the flight so I had to split 30 bottles of feed between
178 the five suitcases and just hope that none of them went missing.' [Participant C, Female, 46]

179

180 '... he's got problems with swallowing, he needs large portions of nutritional drink – we've
181 learned how to handle it in terms of liquids going through the Security system ... but you
182 need significant quantities of that and sometimes it doesn't really fit in with the baggage
183 allowances' [Participant E, Male, 61]

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4.5 Separation

The participants said that being separated from their children in certain scenarios could cause them and the child a high level of worry and anxiety. This was primarily a concern whilst going through security or when having to use an ambulift (a mechanical lift to transport people from the floor to the door of the aircraft) in the embarkation or disembarkation of the aircraft as it meant separation from the rest of the family.

‘So the ambulift people it’s like either their training was not very good or they had no clue about manually handling a severely disabled person from their aircraft seat into their wheelchair; it is a two man job minimum and they would not allow us to do that. They told me to get off the aircraft so I had to leave before my husband was even allowed to lift [Name of wheelchair user] up.’ [Participant B, Female, 45]

‘... because one person has to go through at a time, I had to push my daughter through and let them take over and then she freaked out because I wasn’t allowed to go through and stand with her until they’d checked through the wheelchair, so she was screaming and I then had to go back to go through and so they wouldn’t do it together, because of their security which is fine, but couldn’t also understand why I was annoyed that my child was screaming, so that bit is horrendous.’ [Participant D, Female, 36]

4.6 On Board Issues

Children with disabilities who used wheelchairs encountered the same major problem areas as adult wheelchair users, however there were some major differences between adults and children.

4.6.1 Manual Handling

The main difference between adults and children in terms of manual handling is that the parents of children with disabilities do the manual handling instead of the staff at the airport. This is because they feel that the staff do not have enough experience or because they know that their children will not like being handled by an unfamiliar hand.

‘... they’d be taken from a place of safety on a mobility device which is medically designed for your posture and your wellbeing, to be taken to – to remove from that is quite unnerving.’ [Participant A, Male, 56]

‘To be honest, we have to do it, it wouldn’t be safe for him to be lifted by somebody he doesn’t know so he does need to be lifted by people who know him so that you don’t cause him any problems, so it’s always been us that have actually done the physical stuff.’ [Participant G, Female, 43]

4.6.2 Seating

230 The seats on the aircraft were described as unsuitable for wheelchair users, and even more
231 so for children with disabilities. Aspects of seating were discussed including the difference
232 between economy and business class seating from a space and comfort perspective whilst
233 ignoring the obvious financial hurdles. Injuries to children and specialist seating were also
234 mentioned.

235

236 **4.6.2.1 Economy Seating**

237

238 Participants described seating on the aircraft as being unsuitable for children with
239 disabilities, however bulkhead seating was described as being preferential as it allowed
240 parents more space to attend to their children's needs. The middle seat was the preferred
241 seat for children as it meant that parents and carers could maintain their children's posture
242 and physically support them when required.

243

244 '... if I was sitting one side of my son or daughter and a friend was sitting the other side, at
245 least she's got support there' [Participant A, Male, 56]

246

247 '... we've been very lucky and got a bulkhead seat to Florida and back again so it was no
248 problem for us, it was very good with the seats and there was room, to get him in and out to
249 feed him, we could stand in front of him to feed him, to give him a drink, all of that.'

250 [Participant B, Female, 45]

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252 **4.6.2.2 Business Class Seating**

253

254 A business class seat was the preferred option available for the parent because of the space
255 and the adjustment the seat offered which included the option to lie down. A downside was
256 that although the seat offered more space, they could be too wide for a child and may not
257 offer enough postural support.

258

259 '... I'd take them first class so they could lie down and have a kip ... but I also know a first
260 class seat doesn't offer enough postural support, in other words, they're too wide'
261 [Participant A, Male, 56]

262

263 'A business class seat with double the leg room because you need to be able to stand in
264 front of them to help them' [Participant B, Female, 45]

265

266 '... you've got the adjustable seats, so you could – with some cushioning and support, [Name
267 of wheelchair user] could fly in a lying down position – I think probably quite well.'

268 [Participant E, Male, 61]

269

270 **4.6.2.3 Injuries from Seating**

271

272 A lack of space on board the aircraft led to the injury of children where they were incapable
273 of controlling their motor function.

274

275 '[Name of wheelchair user] would literally draw blood with the relentless kicking of the
276 chair in front of him because he hasn't got the leg room, so he needs the leg room to allow

277 his legs to do their thing and for us to stand in front of him to lift him safely into his chair
278 without dropping him.’ [Participant B, Female, 45]

279
280 ‘... his hips are sublux so they’re actually not connecting in the normal way, he was in so
281 much pain when he was sitting in the aircraft seat – he can’t sit on his own in that position,
282 so I was having to basically hold his body – it’s almost an impossible physical act to hold his
283 body steady and supported’ [Participant E, Male, 61]

284

285 **4.6.2.4 Special Seating**

286

287 Some of the children required full postural support at all times, with some options being
288 available including a tomato seat (Bergeron 2018) and a higher-fly go-to seat (Firefly Friends
289 2018) both of which had adjustable support and straps.

290

291 ‘... there’s four of us trying to get [Name of wheelchair user] from his wheelchair seat down
292 the skinny aisle and into the tomato seat and making sure he’s strapped in and trying to
293 bend him.’ [Participant B, Female, 45]

294

295 ‘Well, what she uses is called a higher-fly go-to seat and what that is is a light-weight
296 portable seat with lateral support, which goes around her chest, and it sits on top of the
297 aeroplane seat. It fastens around the back of the aeroplane chair and she gets fastened into
298 that.’ [Participant C, Female, 46]

299

300 **4.7 Toileting**

301

302 All of the participants referred to the toilet on the aircraft as being unsuitable for children
303 with disabilities.

304

305 **4.7.1 Experience of Going to the Toilet**

306

307 In comparison to previous studies where adults did not even attempt to use the toilet, the
308 children did go to the toilet although many failed to physically access the cubicle. Instead,
309 curtaining off an area of the aircraft was utilised as lying down is essential for the children to
310 be able to go to the toilet.

311

312 ‘I attempted to do it a couple of times which means carrying her to the toilet and sitting in
313 there with her to support her because she can’t sit on her own.’ [Participant A, Male, 56]

314

315 ‘But obviously you can’t get away from the fact that there’s going to be the smell of urine
316 and poo or whatever’s happened because you’re changing an incontinence pad. And it’s not
317 very nice for anybody. It’s very embarrassing for [Name of wheelchair user], like I say, he’s
318 very aware of what’s going on. And everyone is looking now going, “What’s going on?
319 They’ve made a tent around that person, what’s happened? Have they collapsed?” You can
320 hear it all, all the chatter.’ [Participant B, Female, 45]

321

322 'Yes, in one word – nightmare, 100% nightmare (laughs). They're not big, they're not set up
323 for disabled people, there's nowhere to lay her down to change her; it is one of the worst
324 experiences ever, it is terrible.' [Participant D, Female, 36]

325
326 'Really hideous. They curtained off a very small area near the galley, and my husband and I
327 would lift him down, carry him down to that little area, I would lie him down in this
328 curtained area, sort clothes, lift him up and then my husband would poke the toilet chair
329 into... so that my son could use the toilet and then again it would be same afterwards, I
330 would be trying to clean him up, lift him off, my husband would then have to deal with the
331 contents whilst I laid him back down in this relatively small space, sorted him out, got his
332 clothes back on and then we'd have to carry him back up the plane.' [Participant G, Female,
333 43]

334

335 **4.7.2 Experience of Not Going to the Toilet**

336

337 For some children, it was not possible to use the toilet on the aircraft and so they would
338 have to wait until after the flight. This risk can be reduced by using the toilet at the airport
339 as close to the flight as possible.

340

341 'If the toilets weren't available and her bowels moved mid-flight she would have to sit until I
342 got to the airport at the other end before I would be able to change her.' [Participant C,
343 Female, 46]

344

345 'So, really you have to organise the time so that he's had a change before he goes that's left
346 as late as possible' [Participant E, Male, 61]

347

348 **4.7.3 Coping Mechanisms to Avoid the Toilet**

349

350 To avoid using the toilet on the aircraft, several alternative methods have been used
351 including incontinence pads, catheterisation and fasting before a flight.

352

353 '... my son, he can't use the toilet, end of – he has a pad on and I attach a catheter, so that
354 he can sit there and the catheter bag fills up while we're traveling by air.' [Participant A,
355 Male, 56]

356

357 '... that's exactly what it is, it is a nappy. But when they get older, it's known as an
358 incontinence pad because he's an older child and he's not a baby.' [Participant B, Female,
359 45]

360

361 '... he has his own coping mechanism which was if something is going to be a long time he
362 will just not take fluids, but that's not good.' [Participant E, Male, 61]

363

364 **4.8 Wheelchair Issues**

365

366 Many of the participants reported that they had found elements of damage to their
367 children's wheelchairs. This was a key issue for children as they were unable to use the

368 airport wheelchairs due to them being unsuitable for them as they were too big or did not
369 provide the correct postural support.

370

371 **4.8.1 Damage**

372

373 Participants reported varying levels of damage to their children's wheelchairs, which was
374 devastating due to it being essential for mobility.

375

376 'Crushed in the hold and we've had another issue where they took all the wires out –
377 absolutely every single wire going, despite the fact that I'd made it inoperable, they just
378 carried on taking wires' [Participant A, Male, 56]

379

380 'I think they've lost one or two bits of parts of the chair but then we got wise and made sure
381 we detached things that were detachable, like footplates for example and said we were
382 going to put those in the overhead luggage and they agreed. [Participant E, Male, 61]

383

384 'Well, all four wheels were no longer on the ground, the back was so badly twisted you
385 couldn't have sat him in it, one of the lateral supports was broken, there were sharp edges
386 all over it, it was severely battered.' [Participant G, Female, 43]

387

388 **4.8.2 Baggage Claim**

389

390 Sometimes the baggage handlers do not return the wheelchair to the door of the aircraft.
391 This caused huge anxiety and stress due to the uncertainty of the location of the wheelchair,
392 in addition to extra manual handling from a physical perspective.

393

394 'Anyway they just kept us waiting for over an hour so in the end my husband – he was only
395 three – just picked him up and he carried him down to baggage where the buggy was, so
396 then we set it all up and got him in it. But, we couldn't do that now because he's twelve and
397 as tall as me.' [Participant B, Female, 45]

398

399 '... they had to get an adult wheelchair, I had to then carry my son, sit in the chair myself
400 and someone push us both because he couldn't have sat in that chair because he couldn't
401 support himself. So, he had to sit on my lap with someone pushing us both to get to where
402 we could reclaim his chair which was really embarrassing, uncomfortable and stressful
403 because you now don't know where your chair is.' [Participant G, Female, 43]

404

405 **4.8.3 Emotional Appeal**

406

407 In an effort to emphasise the importance of the wheelchair, some parents attached pictures
408 and messages to the wheelchair to remind the baggage handlers that it was more than just
409 a piece of equipment.

410

411 'I've made a sign with a big picture of [Name of wheelchair user] sitting in his wheelchair
412 saying, "Please be careful with my wheelchair"; it's been laminated, it gets attached to the
413 back of the wheelchair so that people just kind of humanise or realise that there's a little
414 boy who uses this chair' [Participant B, Female, 45]

415

416 **5. Discussion**

417

418 Participants views suggest that travelling with children who have disabilities was difficult but
419 manageable. The participants fulfilled both the role of parent and specialist caregiver and so
420 the study also found that the majority of assistance was given by the parents as they would
421 prefer to do it themselves. Service providers often provide physical assistance to people
422 with disabilities and often forget the emotional strain that can occur. Alternative assistance
423 to children with disabilities and their parents could be investigated, particularly in terms of
424 process issues around separation, loss of dignity and looking after the wheelchair.

425

426 The physical impact on parents is acute in terms of manual handling their children around
427 the aircraft and supporting their postural requirements or preventing injury whilst sitting on
428 the seat. Physically moving or supporting children with disabilities increases in difficulty over
429 time as the child grows and the parents age where one female participant stated that it got
430 more difficult after the onset of the menopause. This was of particular concern as there will
431 be a time when the parent will be unable to physically handle their child, that could lead to
432 the emotional and physical distress of both parent and child.

433

434 Previous research indicated that adults with disabilities will not attempt to use the toilet on
435 board the aircraft and instead use multiple coping strategies to avoid incontinence (Poria et
436 al. 2010; Davies & Christie 2017). Children with disabilities will employ similar tactics to their
437 adult counterparts to avoid needing the toilet, however their parents will help them go if
438 required. Considerable emotional distress was experienced if the child went to the toilet in
439 their seat with a tent over them or on the floor of the aircraft in the galley. The space inside
440 the cubicle remains a big issue as many of the children in this research were unable to sit
441 unsupported and therefore for a parent to physically support them proved difficult.
442 Depending on the children's care requirements, many of them required a commode or a
443 changing table in addition to a medical grade hoist so that they can lie down whilst being
444 attended to by a parent or carer.

445

446 The findings from this research could have an impact on disability legislation, policies and
447 service providers as flying with a disability is not the same as an able-bodied person.
448 Therefore the legislation that protects people with disabilities whilst flying such as The
449 Equality Act 2010, European Union Regulation (EC) 1107/2006 and The Air Carrier Access
450 Act 1986 could be at risk of being of being violated with the potential of many negative
451 outcomes (U.S. Department of Transportation 1986; Kingdom 2010; The European
452 Parliament 2006).

453

454 **5.1 Strengths and Weaknesses**

455

456 This study focussed on the children with the most severe disabilities and thus they
457 represent the most vulnerable group of users who choose to fly. The participants, who are
458 also the parents of the children provided a strong insight into the needs of the children as
459 they were fully able to articulate their children's disabilities and needs given that they are
460 also the primary caregiver. The sample was recruited through a social media campaign and
461 so were all fresh contacts to the researchers who were from all parts of the UK whilst having

462 children of varying ages. Although the sample size was relatively small, the total population
463 of these users will also be very small and so is not considered an issue.

464

465 **6. Conclusions**

466

467 Children with disabilities largely experience the same issues as adults with disabilities with
468 some differences. Fundamental issues included helping children with disabilities go to the
469 toilet either not having enough space or a lack of equipment; separation issues at security
470 and from their wheelchairs and the seats on board the aircraft being inappropriate. The
471 presence of parents largely renders the disability service provision redundant because
472 parents would prefer to help their children themselves.

473

474 **7. Recommendations**

475

476 The following recommendations are suggested to improve the transit of children with
477 disabilities who fly.

478

479 **7.1 Toileting Issues**

480

481 ➤ Standard disabled toilets are unsuitable for a child with complex care needs. These
482 should be changed where possible to or have access to the correct facilities, known
483 as a Changing Places toilet in the UK, at all areas of an airport (Changing Places
484 Consortium).

485 ➤ Airlines should show more sympathy in allowing additional hand luggage for
486 incontinence on board the aircraft

487

488 **7.2 Aircraft Design**

489

490 ➤ The seating position for children is vital and so a redesign of the seat, equipment or
491 aircraft should be considered for the comfort of the child and the parents that help
492 them.

493 ➤ A parent and child should always have the seat on the aircraft with the most space,
494 preferably a seat with the ability to be turned into a bed or flat surface.

495 ➤ Aircraft designers should investigate using a wheelchair as a seat on board the
496 aircraft.

497

498 **7.3 Policy Considerations**

499

500 ➤ Disability service provision at airports should think about how the service could be
501 different for children with disabilities and provide specialist training in this area in
502 conjunction with parents.

503 ➤ Legislators should investigate and consider the extent to which regulations are
504 currently being met or missed and advise changes if appropriate.

505

506 **8. Implications for Future Research**

507

508 The scope for further research in this area is vast. The double edge sword of being both a
509 parent and the primary caregiver has given a different insight into the way children with
510 disabilities fly and so further global qualitative research on this population should be carried
511 out. These views could also be enhanced by collecting the experiences of the airlines and
512 airports. Participants felt that the ultimate goal of their children being able to fly in their
513 own wheelchairs was essential and so research into all the aspects of this form of travel
514 should be investigated to see if it is possible.

515

516 **Acknowledgements**

517

518 The authors would like to thank the participants for their input and time.

519

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