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**Maternal Guilt and Shame in the Postpartum Infant Feeding Context: A  
Concept Analysis**

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### *Study highlights*

Guilt and shame possessed unique attributes, antecedents, and consequences

Guilt and shame also shared overlapping attributes, antecedents, and consequences

Constructed definitions evidence overlapping and concept-exclusive characteristics

Definitions can be used to address risk factors, to prevent guilt and shame

Future research should aim to empirically support concept analysis relationships

1 Maternal Guilt and Shame in a Postpartum Infant Feeding Context: A Concept  
2 Analysis

3 *Abstract*

4 *Background*

5 After birth, guilt and shame are differentially experienced by breastfeeding  
6 and formula feeding mothers. Despite this, currently utilised guilt and shame  
7 definitions lack context specificity, leaving concepts open to misinterpretation.

8 *Objective*

9 The current study aimed to develop infant feeding-specific definitions of  
10 postpartum guilt and shame.

11 *Methods*

12 Study selection involved a three-stage systematic screening process, outlined  
13 in Jackson et al (2021). Walker and Avant's (2005, 2019) concept analysis  
14 framework was then applied to included articles to identify guilt-specific, shame-  
15 specific, and overlapping attributes, antecedents, and consequences.

16 *Results*

17 A guilt-specific, shame-specific, and overlapping definition were generated  
18 based on exclusive and overlapping antecedents, attributes, and consequences.  
19 Guilt and shame belonged to the empirical referent *Moral Emotions*, which may  
20 explain some of the overlapping antecedents, attributes, and consequences  
21 identified during analysis.

22

23 *Conclusions*

24           The overlapping definition provides a broad scope for shared characteristics,  
25 while specific definitions allow for more in-depth and focused investigations of guilt  
26 and shame experiences within an infant feeding context. Utilising context-specific  
27 definitions may serve to improve research homogeneity. Shame was found to be  
28 uniquely associated with postnatal depression. As such, suggestions are made for  
29 future research to further investigate the relationship between shame, infant feeding,  
30 and maternal wellbeing outcomes.

31 *Implications*

32           Identified antecedents may be used by healthcare professionals to provide  
33 additional support to mothers at risk of experiencing guilt and shame, to prevent the  
34 occurrence and consequences of these emotions.

35 *Keywords*

36 Breastfeeding

37 Infant formula

38 Postpartum

39 Guilt

40 Shame

41 Morals

42

43

44

45 *Introduction*

46 Breastfeeding is associated with positive maternal and infant health outcomes  
47 (Horta et al, 2015a, 2015b; Victora et al, 2016). As such, the World Health  
48 Organisation (WHO) recommend exclusive breastfeeding for the first six months  
49 postpartum and continued breastfeeding up to two years postpartum (UNICEF,  
50 2017a). The disparity between breastfeeding intention and initiation and  
51 breastfeeding duration to six months postpartum is present in many developed  
52 countries (Australian Government: Department of Health (AGDH), 2019; Chalmers et  
53 al, 2009; Centers for Disease Control and Prevention (CDCP), 2019; Theurich et al,  
54 2019). For example, according to the last UK Infant Feeding Survey, 66% of  
55 pregnant women intended to exclusively breastfeed, and an additional 10% intended  
56 to breastfeed to some extent (McAndrew et al, 2012). Despite high rates of  
57 breastfeeding intention and a large proportion (81%) of UK women initiating  
58 exclusive breastfeeding, few (1%) exclusively breastfeed to six months postpartum  
59 (McAndrew et al, 2012). Given these trends, exploration of the barriers to successful  
60 breastfeeding should be of paramount importance for infant feeding research.

61 For many women, the inability to meet breastfeeding intentions is a perceived  
62 transgression of motherhood (Harrison et al, 2018). The widespread understanding  
63 that exclusive breastfeeding is optimal for maternal and infant health among mothers  
64 can consequently lead to feelings of guilt and shame for women who cannot or do  
65 not want to breastfeed (Lagan et al, 2014; Lee, 2007a; Thomson et al, 2015). Guilt  
66 and shame arise due to discrepancies between breastfeeding expectations in  
67 pregnancy and unanticipated postpartum challenges (Fahlquist, 2016; Hanell, 2017).  
68 Perceived lack of support from social networks and healthcare professionals (Fallon  
69 et al, 2019), and perceived pressure to breastfeed due to promotional strategies

70 (Leeming et al, 2016; Marshall et al, 2011) contribute towards unrealistic  
71 breastfeeding expectations and poor emotional wellbeing outcomes (Flaherman et  
72 al, 2012). The Baby Friendly Initiative (BFI) is an accreditation programme which  
73 aims to create an informative and supportive breastfeeding environment (UNICEF,  
74 2017b). However, a systematic review of 11 studies examining the effectiveness of  
75 BFI compliant care in the UK found that current delivery of infant feeding support  
76 fails to sufficiently prepare mothers for the realities of breastfeeding challenges and  
77 may contribute towards feelings of guilt for those who struggle to overcome these  
78 difficulties (Fallon et al, 2019).

79 Guilt and shame have differential outcomes for maternal wellbeing (Hvatum &  
80 Glavin, 2017). Although guilt and shame can both originate from the same perceived  
81 or actual transgression, guilt is behaviour-directed, while shame is self-directed  
82 (Lazare, 1987; Tangney et al, 1996). In an infant feeding context, guilt has been  
83 associated with feeling defensive about one's infant feeding method (Fallon et al,  
84 2016), whereas shame has been associated with dissociation from one's maternal  
85 identity (Asiodu et al, 2017). Despite differential outcomes for maternal wellbeing, a  
86 recent systematic review of 20 studies found that only 2 papers exploring maternal  
87 guilt and/or shame in relation to infant feeding outcomes sought to define these  
88 concepts (Jackson et al, 2021). Of studies which defined them, general definitions  
89 were utilised, which lacked context specificity.

90 Thomson et al (2015) use Niedenthal et al's (1994) general definition of guilt,  
91 "When guilty, people are consumed with the idea that they did a 'bad thing' (or failed  
92 to do a good thing)." (pg.587, in text) and shame, "Shame involves an evaluation of  
93 the self. Although a specific failure or transgression may trigger a shame reaction,  
94 the implications of the event are attributed to the self." (pg.586, in text). Although

95 general definitions provide some clarity concerning operationalisation of lived  
96 experiences, lack of context-specificity leaves constructs open to potential  
97 misinterpretation.

98 In Jackson et al's mixed-methods systematic review (2021), some included  
99 literature grouped guilt and shame in thematic analysis, which risked leading to  
100 concept misattribution (e.g., Asiodu et al, 2017). For example, dissociation from  
101 one's maternal identity in response to early breastfeeding cessation, and associated  
102 feelings of depression and anxiety which were reported under Fahlquist's (2016)  
103 theme '*feeling like a failed mother*' (pg.234), would seem to be in line with a definition  
104 of shame (Niedenthal et al, 1994). Similarly, in Lee (2007b), mothers spoke of feeling  
105 like a "bad mother" (pg.303), feeling "not good enough" (pg.304) and engaging in  
106 avoidance behaviour in the form of hiding formula feeding bottles from healthcare  
107 professionals (Lee, 2007a, 2007b, 2007c; Lee & Fuerdi, 2005). Despite such  
108 accounts being detailed under the theme, '*Worry, guilt, and failure*', these accounts  
109 would seem to reflect the internalisation of perceived transgressions to the self,  
110 specific to shame (Niedenthal et al, 1994). Therefore, constructing academic  
111 definitions of concepts is necessary to improve construct validity.

112 Other infant feeding literature differentiated between shame and guilt  
113 accounts in thematic analysis, but without explicitly outlining how concepts were  
114 distinguished (Asiodu et al, 2017; Crossley, 2009; Hvatum & Glavin, 2017; Lagan et  
115 al, 2014). Additionally, examinations of guilt in quantitative infant feeding literature  
116 have involved binary response options, which risks offering a reductionist view of this  
117 complex psychosocial experience and limiting conceptual understanding (Chezem et  
118 al, 1997; Fallon et al, 2016; Komninou et al, 2016). Walker and Avant's (2005, 2019)  
119 systematic, analytical framework demonstrates utility in creating clearer boundaries



120 between what does, and does not constitute a concept occurring, and in clarifying  
121 distinctions between concepts. Applying this framework involves the identification of  
122 specific Attributes i.e., characteristics most commonly associated with the concept to  
123 help the reader distinguish the concept experience from similar, related, and  
124 dissimilar concepts; Antecedents i.e., events which must occur prior to the concept  
125 occurring, for the concept to be present; and Consequences i.e., events which occur  
126 as a result of the concept occurring (AACs; Walker & Avant, 2005, 2019) with the  
127 ultimate aim of generating workable, academic definitions for concepts whereby a  
128 phenomenon is otherwise ill defined.

129         Also integral to concept analyses is the consideration of context: AACs  
130 (Walker & Avant, 2005, 2019) may differ in an infant feeding context (e.g., Hvatum &  
131 Glavin, 2017) compared with other contexts evocative of guilt and shame e.g., being  
132 tested for Sexually Transmitted Infections (e.g., Balfe et al, 2010). Recently  
133 published perinatal literature has also utilised concept analyses to extend definitions  
134 of phenomena to an infant feeding context e.g., self-objectification (Toledo & Cianelli,  
135 2018) and to the context of postpartum mental health e.g., pregnancy-related anxiety  
136 (Bayrampour et al, 2016). However, to the author's knowledge, there have been no  
137 previous attempts to create postpartum infant feeding-specific definitions of guilt and  
138 shame. Creating such definitions would allow precise measurement of constructs  
139 and potentially lead to better research homogeneity. The current study aims to: a)  
140 construct academic definitions of postpartum guilt and shame in the context of infant  
141 feeding, and b) understand the unique and overlapping AACs of postpartum guilt and  
142 shame.

143 *Methods*

144 *Stage 1: Study selection*

145 Studies were selected for inclusion following a three-stage systematic  
146 screening procedure (Jackson et al, 2021). A search strategy was developed in line  
147 with Population Exposure Outcomes criteria (PEO; University of London, 2020) and  
148 was applied to The University of Liverpool's DISCOVER database, powered by EBSCO.  
149 Key terms utilised in the search strategy were determined using a scoping literature  
150 search. Boolean operators were used to blend keywords, and truncation was used to  
151 identify variations of keywords e.g., 'breastfeed\*'. Identified articles were then  
152 screened using inclusion criteria at title, abstract, and full-text stages. See  
153 supplementary document 1 for the list of databases which the search strategy  
154 derived, and frequency counts for number of articles identified at the initial stage of  
155 study selection, split by database. See Jackson et al (2021) for full details of study  
156 selection, screening, and inclusion.

157 *Stage 2: Framework application*

158 Walker and Avant's (2005, 2019) theoretical framework was then applied to  
159 eligible papers (see Table 1 for details of analysis steps). This framework was  
160 chosen because it uniquely aims to create workable academic definitions of a  
161 concept within a specific context.

162 [Table 1]

163 Notably, the distinction between antecedents and attributes is nuanced.  
164 Walker and Avant (2005, 2019) define an antecedent as, "An event(s) which 'must'  
165 occur prior to the concept occurring, for the concept to be present." i.e., if the  
166 phenomenon is experienced, the concept *will* be felt. Whereas an attribute is defined  
167 as, "characteristic(s) most commonly associated with the concept." Unlike an

168 antecedent, the concept can be experienced in the absence of a particular attribute  
169 being experienced (Walker & Avant, 2005, 2019). If the attribute is present, however,  
170 it is more likely that the concept is to also be present simultaneously with the  
171 attribute (Walker & Avant, 2005, 2019).

## 172 *Results*

173 Due to the shared rationale for concept inclusion, shared study aims, and  
174 purpose, guilt and shame were analysed together in step one and two (Walker &  
175 Avant, 2005, 2019). Then due to their different AACs, guilt-specific and shame-  
176 specific analyses were conducted for steps three to seven. In some instances, AACs  
177 were common to both guilt and shame in included literature. As such, in steps three  
178 to seven, a separate analysis of overlapping AAC's and academic definition  
179 generation was also conducted. Also included in this overlapping analysis were  
180 instances where concepts were grouped in thematic analysis, without it being  
181 explicitly specified whether guilt and/or shame were being referred to. This separate  
182 overlapping analysis was conducted to ensure exclusivity of constructed guilt-  
183 specific and shame-specific definitions.

184 **Chronology of events** presented in participant and author narratives  
185 determined AAC selection e.g., for the Thomson et al (2015) account,

186 *"I ended up suffering from quite severe postnatal depression, I have always*  
187 *wondered whether that was something to do with it, if I could have breastfed would it*  
188 *have happened."* (in text/Jill, pg.41)

189 **Firstly, the paper in question explored shame only, so participant narrative**  
190 **was analysed in the concept analysis under the lens of shame (Thomson et al,**  
191 **2015). In this participant's account, stopping breastfeeding earlier than one would**  
192 **have liked (i.e., early breastfeeding cessation) were seen as a potential cause for**

193 one's negative emotional experience of postnatal depression, inferred by the  
194 connecting statement, '...if I could have breastfed would it have happened', allowing  
195 causality to be surmised (Thomson et al, 2015).

196  
197 *Step One: Identify concept(s)*

198 Step one involved identification of concepts of interest to answer the research  
199 question(s). Guilt and shame were chosen due to their association with infant  
200 feeding outcomes (e.g., Fallon et al, 2016; Komninou et al, 2016; Thomson et al,  
201 2015) and their frequent interchangeable use in existing infant feeding literature  
202 (e.g., Lee, 2007c).

203 *Step Two: Aims and purpose*

204 Step two involved outlining study aims and how concept analysis findings  
205 intended to bridge into future research. Despite guilt and shame both being elicited  
206 by the perception of having committed a moral transgression (English Oxford Living  
207 Dictionaries, 2018a; English Oxford Living Dictionaries, 2018b), there are guilt-  
208 specific and shame-specific characteristics which evidence concept exclusivity  
209 (Fallon et al, 2016; Hanell, 2017). The current study aimed to better understand the  
210 overlapping and unique AACs of guilt and shame through the construction of  
211 academic definitions.

212 Identifying relationships between characteristics of maternal guilt and shame  
213 would allow for the identification of specific factors (i.e., antecedents and attributes)  
214 which healthcare professionals could use as direct conversational prompts during  
215 infant feeding discussions with postpartum women. In turn, this may allow additional  
216 support to be put in place for women feeling guilty and/or shameful in relation to their  
217 infant feeding experiences, to prevent consequences from occurring. Clearly

218 identifying boundaries between concepts would serve to potentially improve research  
219 homogeneity by implementing generated definitions in future infant feeding literature.

220 *Step Three: Identify all uses of the concept*

221 Step three involved identifying as many uses of the concept as possible.  
222 General guilt has been defined as, “A feeling of having committed wrong or failed in  
223 an obligation.” (pg. 1, *in text*, English Oxford Living Dictionaries, 2018a). In an infant  
224 feeding context, perceived moral failing and resultant guilt have been associated with  
225 early breastfeeding cessation and formula supplementation, especially for women  
226 with antenatal breastfeeding intentions (Crossley, 2009; Hvatum & Glavin, 2017;  
227 Lee, 2007b; Murphy, 2000). Thomson et al (2015) use Niedenthal et al’s (1994)  
228 general definition of guilt as a feeling of regret in response to a moral misconduct.  
229 This definition has been supported by academic literature linking breastfeeding  
230 cessation to feelings of guilt and subsequent feelings of failure for not ‘doing the right  
231 thing’ by one’s infant (Mozingo et al, 2000).

232 Previous research has also defined guilt in relation to behavioural failings  
233 which motivate reparative behaviour (Kemper, 1987; Lewis, 1995; Miceli &  
234 Castelfranchi, 2018; Rotkirch & Janhunen, 2009; Taylor & Wallace, 2012). In an  
235 infant feeding context, this reparative behaviour has taken the form of maternal  
236 defence of infant feeding method, in attempt to reframe one’s decision as one of a  
237 ‘good mother’ (e.g., Lee, 2007a). Guilt-induced reparative behaviour has also taken  
238 the form of externalised anger towards healthcare professionals, who were  
239 sometimes perceived to exacerbate postnatal guilt through contributions towards  
240 perceived pressure to breastfeed (e.g., Fahlquist, 2016).

241 General shame has been defined as, “A painful feeling of humiliation or  
242 distress caused by the consciousness of wrong or foolish behaviour.” (pg.1, *in text*,  
243 English Oxford Living Dictionaries, 2018b). Academic literature has also defined  
244 shame in terms of internalised moral transgressions, especially when perceiving  
245 oneself as having failed in front of other people (Kemper, 1987; Lewis, 1995; Miceli &  
246 Castelfranchi, 2018; Taylor & Wallace, 2012). Breastfeeding challenges have been  
247 associated with shame (e.g., Hanell, 2017), supporting Tangney et al.’s (1996)  
248 definition, as utilised in Thomson et al (2015).

249 Hanell (2017) uses Ahmed’s (2014) general definition of shame as an intense  
250 and distressing internalisation of a failing to the self. This definition has been  
251 supported by infant feeding literature demonstrating that not exclusively  
252 breastfeeding was associated with dissociation from one’s own maternal identity  
253 (Thomson et al, 2015). Thomson and colleagues use Niedenthal et al’s (1994)  
254 definition of shame as an internalisation of a failing to the self, especially when the  
255 individual perceives themselves as failing in front of others. This general definition  
256 may account for feelings of inadequacy, self-blame, and fears of judgement  
257 experienced by women facing breastfeeding challenges (Asiodu et al, 2017; Hanell,  
258 2017).

#### 259 *Step Four: Defining attributes*

260 Step four involved identifying characteristics most associated with the concept  
261 (Walker & Avant, 2005; 2019). See Table 2 for guilt-specific, shame-specific, and  
262 overlapping AACs.

263 [Table 2]

264           Uncertainty about having made the right infant feeding decision was an  
265 identified attribute of guilt (Lee & Fuerdi, 2005; Lee, 2007c). Guilt was experienced  
266 by women who felt that formula feeding had to be kept secret, as it was perceived as  
267 less healthy than breastfeeding (Hvatum & Glavin, 2017). Lack of social support was  
268 another identified attribute of guilt. For exclusively breastfeeding mothers, guilt was  
269 associated most commonly with maternal support networks e.g., feeling guilty  
270 because family members were unable to share infant feeding responsibilities  
271 (Komninou et al, 2016).

272           Public breastfeeding fear was an identified attribute of shame (Dalzell, 2007;  
273 Thomson et al, 2015). Having unmet, unrealistically high breastfeeding expectations  
274 was also an identified attribute of shame which resulted in feelings of inadequacy  
275 and disappointment when antenatal intentions were unmet (Asiodu et al, 2017;  
276 Hvatum & Glavin, 2017; Mazingo et al, 2000). Such breastfeeding expectations  
277 originated from: understanding breastfeeding health and attachment benefits to  
278 infant (Asiodu et al, 2017; Hvatum & Glavin, 2017; Mazingo et al, 2000); personal  
279 goals (Asiodu et al, 2017; Mazingo et al, 2000); healthcare promotion manifesting  
280 pressure to breastfeed (Hvatum & Glavin, 2017; Mazingo et al, 2000) and previous  
281 familial exposure to breastfeeding (Asiodu et al, 2017). Perceived insufficient  
282 breastmilk production was an identified attribute of shame as it concerned feelings  
283 that one was failing a biological obligation (Asiodu et al, 2017; Hanell, 2017).

284           Overlapping attributes were identified in cases where characteristics were  
285 common to both guilt and to shame, and in cases where it could not be determined  
286 whether the characteristic in question was attributed to guilt or to shame i.e., if guilt  
287 and shame were grouped in thematic analysis.

288 Fears about the infant health consequences of formula feeding were identified  
289 attributes of guilt and shame (Fahlquist, 2016; Mozingo et al, 2000). This was  
290 supported by quantitative literature which found that 33% of mothers felt guilty for  
291 exclusively formula feeding their infant, and 20% of mothers felt concerned about the  
292 potential infant health consequences of exclusively formula feeding (Lee, 2007a,  
293 2007b, 2007c; Lee & Fuerdi, 2005). Fear of judgement from others concerning infant  
294 feeding method was an identified attribute of postpartum guilt and shame. Women  
295 experiencing guilt who were transitioning from breastfeeding to formula feeding  
296 perceived that healthcare professionals viewed formula feeding as inadequate  
297 (Lagan et al, 2014) and perceived that friends and family were undermining of  
298 breastfeeding efforts (Komninou et al, 2016; Spencer et al, 2014).

299 Women experiencing shame concealed infant feeding challenges due to fears  
300 about being judged by healthcare professionals for experiencing difficulties with  
301 breastfeeding and for not breastfeeding exclusively (Spencer et al, 2014). In  
302 quantitative literature, 23% of women were concerned about how healthcare  
303 professionals would feel about transitioning to formula feeding from breastfeeding  
304 (Lee, 2007a, 2007b, 2007c; Lee & Fuerdi, 2005).

#### 305 *Step Five and Step Six: Identification of a model case and other generated cases*

306 Step five and step six aimed to distinguish between the concept being present  
307 and the concept being absent, through generating a model case and other cases for  
308 guilt and shame (Walker & Avant, 2005; 2019). This step involved the generation of  
309 short vignettes: using generated attributes to create clearer distinctions between the  
310 concept being present and the concept being absent, through use of examples  
311 (Walker & Avant, 2005, 2019). Vignettes created include the following cases: model



312 (an example of the concept being used within the identified context, whereby all  
313 defining attributes are present); borderline (most, but not all, defining attributes are  
314 present); related (similar to the concept of interest but differs when examined more  
315 closely); contrary (a clear example of the concept not occurring); inverted (contains  
316 ideas outside of personal experience); and illegitimate (example of the case being  
317 used improperly or in a context separate from the context of interest). See Table 3 for  
318 generated cases for the current concept analysis findings.

319 [Table 3]

### 320 *Step Seven: Identification of antecedents and consequences*

321 Step seven involved the identification of antecedents i.e., identification of  
322 events which must occur prior to the concept occurring, for the concept to be  
323 present, and consequences i.e., identification of events which occur due to the  
324 concept occurring (Walker & Avant, 2005, 2019). Lack of and inconsistent infant  
325 feeding advice and guidance was an antecedent of guilt which concerned insufficient  
326 guidance regarding safe formula feeding practice (Hvatum & Glavin, 2017), and  
327 infant feeding guidance perceived to be biased towards breastfeeding (Fahlquist,  
328 2016; Lee, 2007b, 2007c). This led women to feel undermined and disconnected  
329 from healthcare professionals (Fox et al, 2015).

330 Defence of infant feeding method was an identified consequence of guilt  
331 which occurred in response to feeling ill-supported with breastfeeding challenges, by  
332 healthcare professionals and social support networks, to maintain one's 'good  
333 mother' identity (Fox et al, 2015). Perceived selfishness was also an identified  
334 consequence of maternal guilt. Breastfeeding mothers felt selfish in response to  
335 fears regarding insufficient infant weight gain (Fox et al, 2015). Formula feeding

336 mothers also felt selfish in response to fears about not having done the right thing for  
337 their infant's wellbeing (Lee, 2007c; Mozingo et al, 2000; Murphy, 2000).

338 Censored formula feeding discussions was an identified antecedent of shame,  
339 as it served to increase perceived pressure to breastfeed and contributed towards  
340 feelings of dejection and perceived lack of infant feeding choice (Crossley, 2009;  
341 Thomson et al, 2015).

342 Dissociation from one's maternal identity was an identified consequence of  
343 shame. For breastfeeding mothers this manifested through lowered self-confidence  
344 in response to receiving negative comments about breastfeeding during pregnancy  
345 and having little or no prior breastfeeding exposure (Thomson et al, 2015). For  
346 formula feeding mothers dissociation was experienced in response to early  
347 breastfeeding cessation (Asiodu et al, 2017). Combination feeding mothers  
348 experienced dissociation in response to experiencing breastfeeding challenges  
349 which contradicted antenatal breastfeeding expectations (Hanell, 2017).

350 Experiencing depressive symptoms was an identified consequence of shame  
351 for formula feeding mothers, which occurred in response to having not done 'best' by  
352 one's infant by breastfeeding (Thomson et al, 2015). Extreme distress, which fell  
353 under the shame-specific consequence 'panic/fear', occurred in response to  
354 perceived **objectification of the breasts and focus on biological milk transfer during**  
355 **breastfeeds by healthcare professionals**, and in response to fears that one was  
356 being judged negatively for experiencing breastfeeding challenges (Hanell, 2017;  
357 Thomson et al, 2015). Avoidance behaviour was an identified consequence of  
358 shame which took the form of avoiding parenting classes, hiding formula bottles from  
359 healthcare professionals, and experiencing distress related to perceived

360 breastfeeding inability (Crossley, 2009; Lee, 2007a, 2007b, 2007c; Lee & Fuerdi,  
361 2005; Thomson et al, 2015). Humiliation was an identified consequence of shame,  
362 which occurred in response to manipulation and objectification of breasts by  
363 healthcare professionals who were attempting to facilitate breastfeeding (Thomson  
364 et al, 2015).

365         Early breastfeeding cessation was an identified antecedent for women  
366 experiencing guilt and shame (Asiodu et al, 2017; Fahlquist, 2016; Hvatum & Glavin,  
367 2017; Lamontagne, et al, 2008; Murphy, 2000; Spencer et al, 2014). Not achieving  
368 personal breastfeeding goals was associated with significantly higher guilt scores  
369 than women who met personal breastfeeding goals (Chezem et al, 1997). Perceiving  
370 that one had failed their personal breastfeeding expectations also preceded shame,  
371 which was exacerbated when mothers perceived that they were being judged by  
372 other mothers based on their infant feeding method (Hvatum & Glavin, 2017;  
373 Murphy, 2000).

374         Pressure to breastfeed was an identified antecedent of guilt and shame  
375 (Hvatum & Glavin, 2017; Spencer et al, 2015). Pressure to breastfeed was  
376 experienced in relation to healthcare professionals (Lamontagne et al, 2008;  
377 Crossley, 2009) and maternal support networks (Crossley, 2009; Lamontagne et al,  
378 2008).

379         Healthcare professionals: giving unbalanced infant feeding advice in favour of  
380 breastfeeding (characterised by primary focus of infant feeding conversations being  
381 placed on the infant and maternal health benefits and perceived 'ease' of  
382 breastfeeding, while omitting information about common breastfeeding challenges,  
383 and excluding guidance about safe formula feeding practice); insufficiently preparing  
384 mothers for postnatal breastfeeding challenges; giving conflicting advice; making

385 discouraging statements; providing inadequate emotional support; and resisting  
386 maternal wishes to transition to formula feeding were elements of inadequate and  
387 inappropriate healthcare professional support which preceded guilt and shame for  
388 postpartum women (Cloherty et al, 2004; Fahlquist, 2016; Fallon et al, 2016; Fox et  
389 al, 2015; Spencer et al, 2014).

390 Feeling like a failure was a consequence of guilt and shame for women  
391 supplementing with formula (Mozingo et al, 2000; Murphy, 2000). Perceiving that  
392 healthcare professionals were undermining of maternal reasons for early  
393 breastfeeding cessation led to feelings of failure, which manifested as externalised  
394 anger being held towards healthcare professionals (Fox et al, 2015; Lee, 2007c).

#### 395 *Constructed definitions*

396 The identification of guilt-specific, shame-specific, and overlapping AACs led  
397 to the construction of the following context-specific definitions:

398 *“In the context of infant feeding, guilt is characterised by the following*  
399 *attributes: feelings of uncertainty about having made the right infant feeding decision,*  
400 *and perceived insufficient social support. Lack of and inconsistent infant feeding*  
401 *advice and guidance was an identified antecedent of guilt, which resulted in the*  
402 *following consequences: feeling the need to defend infant feeding method and*  
403 *experiencing feelings of selfishness.”*

404 *“In the context of infant feeding, shame is characterised by the following*  
405 *attributes: objectification and manipulation of breasts by healthcare professionals;*  
406 *perceived lack of milk production; fears of public breastfeeding and unrealistic*  
407 *breastfeeding expectations; and antecedent: censored attempts to discuss*  
408 *breastmilk substitutes. Antecedents and attributes led to an array of aversive*

409 *emotional (postnatal depression; panic/fear; dissociation from one's maternal*  
410 *identity, humiliation) and behavioural (avoidance behaviour) consequences for the*  
411 *mother."*

412 *"In the context of infant feeding, women who experienced both guilt and*  
413 *shame shared the following attributes: fearing infant health consequences of formula*  
414 *supplementation and fearing judgement from others for infant feeding method.*  
415 *Antecedents of both guilt and shame included: perceived pressure to breastfeed,*  
416 *inadequate and inappropriate healthcare professional support, and having not*  
417 *breastfed for as long as intended during pregnancy. The shared consequence of*  
418 *both guilt and shame was feeling like a failure."*

#### 419 *Step Eight: Definition of empirical referents*

420 The aim of step eight was to identify wider concept(s) to which guilt and  
421 shame belong, **linking to the theoretical underpinnings of the concepts.** Both  
422 concepts belong to the empirical referent *Moral Emotions*. As supported by general  
423 definitions identified in step three (Walker & Avant, 2005, 2011), guilt and shame  
424 were elicited from some of the same perceived transgressions e.g., not  
425 breastfeeding for as long as initially intended during pregnancy. Women  
426 experiencing guilt and shame felt they were not good mothers if unable to breastfeed  
427 (Asiodu et al, 2017; Lamontagne et al, 2008). Experiencing "moral collapse" (pg.472,  
428 Lee, *in text*, 2007a) was an identified theme which captured the jeopardised maternal  
429 identity in response to breastfeeding inability (Lee, 2007b, 2007c; Lee & Fuerdi,  
430 2005). Lack of practical support from healthcare professionals exacerbated these  
431 feelings, leaving women feeling the need to defend infant feeding method to reframe  
432 themselves as good mothers (Fox et al, 2015).

433 Focus on the maternal body as failing a biological obligation when  
434 experiencing breastfeeding difficulties also exacerbated feelings of self-blame and  
435 inadequacy for women experiencing shame (Dalzell, 2007; Hanell, 2017).  
436 Interestingly, non-altruistic motivations for breastfeeding were also linked with moral  
437 conflict i.e., experiencing guilt when breastfeeding for weight loss purposes  
438 (Crossley, 2009). Reframing formula supplementation as a moral sacrifice in the best  
439 interest of infant health alleviated moral conflict about having done the right thing  
440 (Lee, 2007c; Murphy, 2000). Given shared AACs, both overlapping and exclusive  
441 definitions should be utilised in the examination of guilt and shame in infant feeding  
442 literature.

#### 443 *Discussion*

444 The current concept analysis generated infant feeding-specific definitions of  
445 postpartum guilt and shame. Guilt and shame both belong to the wider empirical  
446 referent, *Moral Emotions*, which may explain some of the overlapping characteristics  
447 identified. This is also supported by evidence from general definitions of guilt and  
448 shame, which concern differing internal responses to the same perceived moral  
449 transgression (Ahmed, 2014; English Oxford Living Dictionaries, 2018a, 2018b;  
450 Niedenthal et al, 1994; Tangney et al, 1996). Identified guilt-specific and shame-  
451 specific AACs also evidenced construct exclusivity. Consequently, both specific and  
452 overlapping definitions should be utilised in future infant feeding research.  
453 Overlapping definitions provide a broad definition of these moral emotions and detail  
454 shared characteristics of concepts, while specific definitions provide a greater scope  
455 for more in-depth and focused investigations of guilt and shame experiences within  
456 an infant feeding context.

457           The generated guilt definition was supported by general definitions  
458 (Niedenthal et al, 1994) and involved immediate emotional responses to the  
459 perceived moral transgression of formula feeding e.g., feeling selfish (Murphy, 2000).  
460 Conversely, shame involved more introspective and potentially prolonged effects  
461 e.g., dissociation from one's maternal identity (Fahlquist, 2016). Given these  
462 differential maternal wellbeing outcomes, it is important for healthcare professionals  
463 to ask mothers about potential experiences with antecedents and attributes unique to  
464 guilt and to shame. This would allow for earlier identification of mothers at risk of  
465 experiencing these emotions, which may in turn allow early intervention to prevent  
466 their consequences from emerging.

467           Shame that was elicited in response to early breastfeeding cessation  
468 concerned feelings that the self was failing a biological obligation, which was in turn  
469 associated with loss of self-confidence (Hanell, 2017; Thomson et al, 2015). Low  
470 breastfeeding confidence has been associated with lower frequencies of  
471 breastfeeding initiation and shorter breastfeeding duration (Mossman et al, 2008).  
472 Additionally, shame was uniquely associated with postnatal depression (Thomson et  
473 al, 2015), which has been linked with shorter breastfeeding duration and early  
474 exclusive breastfeeding cessation (Dias & Figueiredo, 2015). These findings warrant  
475 further exploration of shame in relation to infant feeding outcomes, to optimise  
476 maternal wellbeing and infant feeding outcomes.

477           Insufficient and inconsistent infant feeding guidance was a key attribute of  
478 maternal guilt. In previous literature, formula feeding women often spoke of having  
479 wanted to receive more information about safe formula feeding practice (Appleton et  
480 al, 2018; Tarrant et al, 2013). Breastfeeding mothers related the exacerbation of guilt  
481 to having received insufficient formula feeding advice, which manifested a perceived

482 pressure to breastfeed (Fahlquist, 2016). Current study findings were further  
483 supported by previous literature findings that perceived judgement from others  
484 regarding the experience of breastfeeding difficulties prevented help-seeking  
485 behaviour (Hunt & Thomson, 2017). Additionally, receiving unrealistic breastfeeding  
486 guidance which omitted postnatal breastfeeding challenges (e.g., pain) led to  
487 dissatisfaction with healthcare professional support when there was a disconnect  
488 between breastfeeding expectations and experiences (Fox et al, 2015). This is  
489 problematic as 19.6% of women reported that their breastfeeding difficulties were not  
490 solved by healthcare professionals (Gianni et al, 2019). In providing more balanced  
491 and realistic infant feeding guidance regarding safe formula feeding practice and  
492 management of breastfeeding difficulties, it may be possible to create a more  
493 inclusive infant feeding environment that promotes open communication to work  
494 through infant feeding challenges.

495 Also securing moral conflicts around infant feeding decision-making is the  
496 widespread promotion of formula milk, with financial investment steadily increasing  
497 since 2015 (Hastings et al, 2020). Promotion of breastmilk substitutes is problematic  
498 because advertisements are frequently interpreted as confusing for new parents  
499 (Barenes et al, 2015). Furthermore, aggressive marketing of formula milks have  
500 been shown to successfully increase prevalence of formula feeding (Piwoz &  
501 Huffman, 2015). Linking with the antecedent, '*Lack of and inconsistent infant feeding  
502 advice and guidance*', recommendations are made for healthcare professionals to  
503 provide accurate formula feeding guidance to those who choose to supplement with  
504 breastmilk alternatives, to falsify misleading marketing strategies. To address wider  
505 societal concerns about the impact of increased formula feeding prevalence on  
506 maternal emotional wellbeing, including guilt and shame experience, calls are also



507 made for tighter regulations on the marketing of infant formula milks (Harris &  
508 Pomeranz, 2020; Romo-Palafox, Pomeranz, & Harris, 2020).

509 Censored attempts to discuss formula supplementation was an identified  
510 attribute of shame. In previous literature, formula feeding mothers tended to use  
511 formula tin instructions to guide feeding practice and felt that formula was  
512 stigmatised by healthcare professionals (Appleton et al, 2018). This is problematic  
513 because many parents struggle to comprehend nutritional content on formula  
514 product labelling and find difficulties in choosing brands (Malek et al, 2019).  
515 Healthcare professionals have also raised issues regarding misleading formula  
516 product information, inconsistencies in infant feeding information, and time  
517 restrictions on delivery of care from other staff (Dykes et al, 2011). Providing more  
518 balanced guidance about safe formula preparation and appropriate interpretation of  
519 formula packaging may therefore improve perceived satisfaction with healthcare  
520 professional support by dissipating formula feeding stigma and by promoting  
521 informed infant feeding choice.

522 Concept analysis findings confirm that one's sociocultural context is an  
523 important determinant of infant feeding guilt and shame experience. Feeling that one  
524 is being pressurised to breastfeed is affirmed by polarised discourse that portrays  
525 breastfeeding as 'best', 'good', and, 'right' (Cummins, 2020). Current breastfeeding  
526 promotional efforts (UNICEF, 2013) construct a morally dichotomous environment  
527 that leads mothers to feelings of inadequacy and failure if breastfeeding challenges  
528 or transitions to formula feeding are experienced (Brimoh & Davies, 2014; Fallon et  
529 al, 2019). This may explain the guilt-specific consequence, '*Feeling the need to*  
530 *defend one's infant feeding method*' as a function of cognitive reframing theory  
531 (Robson & Troutman-Jordan, 2014). This involves the alteration of negative, self-

532 defeating beliefs into more positive beliefs, so to improve personal wellbeing  
533 (Robson & Troutman-Jordan, 2014).

534 In other domains of health research e.g., weight loss in those with overweight  
535 or obesity, setting manageable goals is essential in determining sustained and  
536 positive behavioural change (Bailey, 2017). As such, poor breastfeeding outcomes  
537 may be a function of an inefficient sociocultural context that urges a moral imperative  
538 to exclusively breastfeed to 6 months. Instead, adopting an incremental approach to  
539 setting breastfeeding goals may serve to improve longer term breastfeeding  
540 outcomes (Brown, 2016; Símonardóttir & Gíslason, 2018).

541 The following identified domains associated with infant feeding guilt and  
542 shame, '*Public breastfeeding fear*', '*Perceived insufficient social support*', and  
543 '*Uncertainty about having made the right infant feeding decision*' restate societal  
544 barriers to breastfeeding. Formula feeding has become a cultural norm in the UK  
545 (Thomson & Dykes, 2011). This has been shaped by a number of maladaptive  
546 factors: lack of vicarious exposure to breastfeeding in popular media (O'Brien, Myles,  
547 & Pritchard, 2017); other female family members having formula fed their infant(s),  
548 resulting in the loss of influential breastfeeding advocates for the new mother  
549 (Sriraman & Kellams, 2016); perceived or actual intolerance of the general public to  
550 non-discreet breastfeeding practice (Jamie, McGeagh, Bows & O'Niell, 2020); and  
551 insufficient support from one's employer in facilitating work and infant feeding goals  
552 (Snyder et al, 2018).

553 Concept analysis findings extend the above literature base by demonstrating  
554 that such an unconstructive social environment forms the basis of adverse maternal  
555 emotional e.g., fear, and behavioural e.g., avoidance behaviour, outcomes. Adopting

556 a multicomponent public health strategy that invests in health services, population-  
557 level breastfeeding promotion, supporting maternal legal rights, protecting maternal  
558 wellbeing, and more tightly regulating the marketing of formula milks may be viable  
559 intermediaries for improved breastfeeding and postpartum emotional wellbeing  
560 outcomes (Brown, 2017).

### 561 *Implications for clinical practice*

562         Given the different consequences that guilt (e.g., defence of infant feeding  
563 method, Fox et al, 2015) and shame (e.g., postnatal depression, Thomson et al,  
564 2015) elicited, it is important for clinical practitioners to identify and discuss attributes  
565 and antecedents of guilt and shame during postpartum infant feeding discussions to  
566 prevent negative maternal wellbeing outcomes. Defence of infant feeding method  
567 occurs in response to receiving inadequate and inappropriate healthcare  
568 professional support, which can leave mothers feeling dissatisfied and disconnected  
569 (Barimani et al, 2017; Shmied et al, 2011). As such, by healthcare professionals  
570 directly encouraging open and honest communication regarding women's postnatal  
571 infant feeding concerns, it may also be possible to improve perceived quality of  
572 healthcare professional support. There are currently no psychometric measures  
573 which assess postpartum guilt and shame. Earlier identification of mothers at risk for  
574 and/or vulnerable to these emotions could result in the provision of additional support  
575 to work through perceived barriers, to promote positive breastfeeding and maternal  
576 wellbeing outcomes. Additionally, by understanding guilt and shame antecedents, it  
577 may be possible to predict and intervene early, so to prevent these emotions from  
578 occurring.

### 579 *Limitations*

580 Misattribution and interchangeability of concepts in existing literature (Jackson  
581 et al, 2021) limits ability to form firm conclusions. Establishing causality between  
582 AACs was problematic given the inclusion of mainly cross-sectional papers  
583 (Crossley, 2009; Dalzell, 2007; Fahlquist, 2016; Fallon et al, 2016; Fox et al, 2015;  
584 Hvatum & Glavin, 2017; Komninou et al, 2016; Lagan et al, 2014; Lamontagne et al,  
585 2008; Lee, 2007a, 2007b, 2007c; Lee & Furedi, 2005; Mozingo et al, 2000; Spencer  
586 et al, 2014; Thomson et al, 2015). Future research should therefore aim to use  
587 longitudinal methodologies to evidence directionality between guilt and shame AACs,  
588 and to quantitatively validate the proposed relationships identified in the current  
589 study.

590 Also, quality of included papers limited ability to form firm conclusions. Most  
591 quantitative literature included in the concept analysis did not report statistical  
592 analyses in full (Chezem, Montgomery, & Fortman, 1997; Lee, 2007a, 2007b, 2007c;  
593 Lee & Furedi, 2005), and one study lacked scale validity testing (Fallon, Komninou,  
594 et al., 2016). Qualitative literature oft recruited unrepresentative samples of mainly  
595 White, highly educated, partnered, primiparous women of high socioeconomic status  
596 (Asiodu et al, 2017; Fox et al, 2015; Hvatum & Glavin, 2017; Lagan et al, 2014;  
597 Lamontagne et al, 2008; Mozingo et al, 2000; Murphy, 2000; Spencer et al, 2014;  
598 Thomson et al, 2015), and some included papers omitted the routine collection of  
599 some demographic characteristics (Crossley, 2009; Fahlquist, 2016; Thomson et al,  
600 2015), collectively limiting transferability and generalisability of findings.

601 Constructed definitions may only be applied to the context of postpartum  
602 infant feeding. However, antenatal breastfeeding intentions also influence  
603 postpartum breastfeeding duration, with intent to use formula being associated with  
604 significantly shorter breastfeeding duration (Kim et al, 2013). Future research should

605 therefore seek to create antenatal-specific definitions of maternal guilt and shame  
606 based on context-specific AACs e.g., inhibited attempts to openly discuss formula  
607 supplementation at antenatal parenting classes (Crossley, 2009), so that  
608 comparisons can be made with postpartum definitions.

609 To meet study aims, a homogenous sample of studies from developed  
610 countries was systematically selected for inclusion so that clear, context-specific  
611 definitions of guilt and shame could be generated. Given cultural variation in  
612 breastfeeding practices and maternal wellbeing between developed (Leahy-Warren  
613 et al, 2017) and developing (Wanjohi et al, 2017) countries, generated definitions  
614 may serve as a key comparator in the event that future research seeks to compare  
615 cross-cultural differences in guilt and shame experiences within an infant feeding  
616 context.

### 617 *Conclusions*

618 Constructed definitions provide an in-depth analysis of the key characteristics  
619 which distinguish infant feeding-specific guilt and shame. Using constructed  
620 definitions may allow future research to achieve greater research homogeneity due  
621 to improved construct validity. Future research should aim to construct definitions,  
622 specific to the antenatal infant feeding context, to allow earlier identification of guilt  
623 and shame. Given the identified link between shame and postnatal depression,  
624 future research should focus efforts on investigating the relationship between shame  
625 and infant feeding and maternal wellbeing outcomes. Finally, future research should  
626 aim to empirically support identified AACs for use in infant feeding literature.

627

628

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928 *Table legends*

929 Table 1: Description of Walker and Avant's (2005, 2019) concept analysis framework  
930 steps

931 Table 2: Overlapping and unique attributes, antecedents, and consequences of  
932 maternal guilt and shame, within the postpartum infant feeding context

933 Table 3: Generated cases for maternal guilt and shame, within the postpartum infant  
934 feeding context

935 *Supplementary documentation*

936 Supplementary document 1: List of databases which the initial search strategy  
937 derived, with frequency counts for number of articles identified per database in the  
938 initial phase of study selection

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Table 1: Description of Walker and Avant's (2005, 2019) concept analysis framework steps

Step of Walker and Avant's (2005, 2011) concept analysis framework	Description
1. Select concept	Choose a concept of interest which is most suited to answering the research question(s). Choose a concept which is manageable and specific.
2. Determine analysis aims/purpose	Outline how the concept analysis findings intend on bridging into future research. The concept analysis is not the end point.
3. Identify all uses of the concept	Identify as many uses of the concept as possible. Consider all uses of the term to gain a contextual understanding of how concepts are utilised and understood.
4. Identify attributes	Identify the characteristics most commonly associated with the concept. They act as criteria which help the reader to distinguish the concept experience from similar, related, and dissimilar concepts.
5. Identify model case	An example of the concept being used within the identified context, whereby all defining attributes are present.
6. Identify borderline, related, contrary, inverted, and illegitimate cases	To more clearly distinguish between the concept being present and the concept being absent, additional cases are generated. Examining cases which are of interest and similar to the concept of interest, but not identical, will help to clarify boundaries for what constitutes a defining attribute and what does not:  <p data-bbox="943 965 1104 1000"><b><i>Borderline</i></b> Most, but not all, defining attributes are present. The generated case is inconsistent with the concept in some way.</p> <p data-bbox="943 1114 1059 1149"><b><i>Related</i></b> Similar to the concept of interest but differs when examined more closely.</p> <p data-bbox="943 1225 1077 1260"><b><i>Contrary</i></b> A clear example of the concept not occurring.</p>

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***Inverted***

Contains ideas outside of personal experience.

***Illegitimate***

Example of the case being used improperly or in a context separate from the context of interest.

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7. Identify antecedents and consequences

***Antecedents***

Identification of events which must occur prior to the concept occurring, for the concept to be present.

***Consequences***

Identification of events which occur as a result of the concept occurring.

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8. Define empirical referents

Wider concept(s) to which the concept of interest belongs. Empirical referents are linked to the theoretical underpinnings of a concept.

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Table 2: Overlapping and unique attributes, antecedents, and consequences of maternal guilt and shame, within a postpartum infant feeding context

	Guilt only	Shame only	Guilt and shame
Attributes	<p>Perceived insufficient social support (<i>Fallon et al, 2016; komninou et al, 2016</i>)</p> <p>Uncertainty about having made the right infant feeding decision (<i>Lee, 2007c; Lee &amp; Furedi, 2005</i>)</p>	<p>Objectification and manipulation of breasts (<i>Dalzell, 2007; Thomson et al, 2015</i>)</p> <p>Perceived lack of milk production (<i>Asiodu et al, 2017; Hanell, 2017</i>)</p> <p>Public breastfeeding fear (<i>Thomson et al, 2015</i>)</p> <p>Unrealistic breastfeeding expectations (<i>Asiodu et al, 2017; Hvatum &amp; Glavin, 2017; Mozingo et al, 2000</i>)</p>	<p>Fear of infant health consequences due to formula supplementation (<i>Fahlquist, 2016; Lee, 2007a, 2007b, 2007c; Lee &amp; Furedi, 2005</i>)</p> <p>Fear of judgement from others for infant feeding method (<i>Lagan et al, 2014; Lee, 2007b; Lee &amp; Furedi, 2005; Spencer et al, 2015</i>)</p>
Antecedents	<p>Lack of and inconsistent infant feeding advice and guidance (<i>Fahlquist, 2016; Fox et al, 2015; Hvatum &amp; Glavin, 2017; Lee, 2007b, 2007c</i>)</p>	<p>Censored attempts to discuss <b>breastmilk substitutes</b> with healthcare professionals (<i>Crossley, 2009; Thomson et al, 2015</i>)</p>	<p>Perceived pressure to breastfeed (<i>Crossley, 2009; Fahlquist, 2016; Fox et al, 2015; Hvatum &amp; Glavin, 2017; Lamontagne et al, 2008; Lee, 2007c; Murphy, 2000; Spencer et al, 2015</i>)</p> <p>Inadequate and inappropriate healthcare professional support (<i>Cloherty et al, 2004; Fahlquist, 2016; Fallon et al, 2016; Fox et al, 2015; Komninou et al, 2016; Lagan et al, 2014; Lamontagne et al, 2008; Lee &amp; Furedi, 2005; Murphy, 2000; Spencer et al, 2015</i>)</p> <p>Not breastfeeding for as long as intended during pregnancy (<i>Asiodu et al, 2017; Chazem et al, 1997; Dalzell, 2007;</i></p>

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*Fahlquist, 2016; Hvatum & Glavin, 2017; Lamontagne et al, 2008; Lee, 2007a, 2007b, 2007c; Lee & Furedi, 2005; Mozingo et al, 2000; Murphy, 2000; Spencer et al, 2015)*

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**Consequences**

**Feeling the need to defend infant feeding method** (*Fallon et al, 2016; Fox, et al, 2015; Komninou et al, 2016; Lee, 2007c; Lee & Furedi, 2005*)

**Perceived selfishness** (*Lee, 2007c; Murphy, 2000*)

**Dissociation from one's maternal identity** (*Asiodu et al, 2017; Fahlquist, 2016; Hanell, 2017; Thomson et al, 2015*)

**Postnatal depression** (*Thomson et al, 2015*)

**Panic/fear** (*Hanell, 2017; Thomson et al, 2015*)

**Humiliation** (*Thomson et al, 2015*)

**Avoidance behaviour** (*Crossley, 2009; Fahlquist, 2016; Lee, 2007a, 2007b, 2007c; Lee & Furedi, 2005; Thomson et al, 2015*)

**Feeling like a failure** (*Fahlquist, 2016; Fox et al, 2015; Hvatum & Glavin, 2016; Lamontagne et al, 2008; Lee, 2007a, 2007b, 2007c; Lee & Furedi, 2005; Mozingo et al, 2000; Murphy, 2000*)

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Table 3: Generated cases for maternal guilt and shame, within a postpartum infant feeding context

Case type	Guilt only	Shame only	Guilt and shame
Model	<p>Magdalena is a primiparous mother to Jade. Whilst in hospital, Magdalena exclusively breastfed with the support of her midwife and physician. Upon discharge, Magdalena faced a number of breastfeeding difficulties. Jade was extremely hungry, and demand fed throughout the night, leaving Magdalena feeling sleep deprived and irritable. Magdalena believes that Jade's tongue tie may be causing latching difficulties, as breastfeeding became increasingly painful.</p> <p>Despite Magdalena's midwife reassuring her that Jade was feeding normally, Magdalena maintained that something was wrong. Magdalena lived alone and was not very close to her immediate family. Unable to settle these issues, Magdalena decided to formula feed. Lack of guidance on purchasing the correct formula left Magdalena feeling overwhelmed with choice. Magdalena often thought to herself that she must be a truly selfish</p>	<p>Isobel had a terrible experience at hospital. Her midwife would often grab and manipulate Isobel's breast in response to her asking for advice on positioning, rather than offering advice and guidance, which left Isobel feeling humiliated and disempowered. Her midwife, Anne, had only discussed breastfeeding with Isobel during the postpartum period and often refused to talk about the possibility of supplementing with formula when Isobel was out and about. All of Isobel's family and friends had exclusively breastfed their babies, and so Isobel set herself a target to exclusively breastfeed for 9 months, which she found a frightening prospect.</p> <p>Isobel also did not like breastfeeding in public – she felt as though everyone were judging her technique. As a result, Isobel very rarely left the house, and if she did, ensured that it was close enough to be able to return promptly to feed her child if needed. Isobel feels that the stress she is under is causing her to not produce enough milk because her infant is increasingly fussy at the breast and has begun to feed more frequently and for longer periods of time, especially during</p>	<p>Roisin is a 32-year-old, primiparous pregnant mother to baby Darren. Roisin likes to think herself well prepared for the realities of breastfeeding. She has read all the parenting books and attended many antenatal classes discussing the challenges of breastfeeding and what to expect. Roisin is planning to return to work at 4 months postpartum, so intends to exclusively breastfeed until then. Roisin feels that her partner, Warren, is particularly pushy for her to exclusively breastfeed. She also feels that there is a lot of pressure from her group of friends who are all either currently exclusively breastfeeding or intending to do so. They have been friends since they were in high school, so she does not want to be considered the 'odd one out' in the group.</p> <p>After giving birth, Roisin found breastfeeding more difficult to manage than expected. Due to Roisin's high responsibility career, her employer requested that she return to work earlier. Roisin struggled to maintain exclusive breastfeeding with heavy work commitments, and consequently decided to formula feed when at work (so that Warren could help) and breastfed in the evenings and in the morning</p>



	<p>person for not trying harder to breastfeed.</p>	<p>the night. As a result, Isobel isn't sleeping very well, and is at a loss as to what to do.</p>	<p>before work. Despite this, Roisin felt like a failure for having stopped exclusively breastfeeding at 2 months postpartum when she had hoped to exclusively breastfeed for 4 months postpartum.</p>
<p>Borderline</p>	<p>Rachael, aged 19, is a primiparous mother to 17-week-old Matthew. Rachael took six months away from college during her third trimester but has now returned for her final year. Upon returning to college Rachael struggled to maintain the exclusively breastfeeding which she maintained easily when not studying. Lack of sleep as a result of night feeds started to have an aversive effect on Rachael's academic performance.</p> <p>Rachael's mother, Sam, suggested that she take on some of Rachael's night feeds so that Rachael can rest and focus more on her studies. Sam formula fed all of her 5 children and shows Rachael how to properly clean bottles and purchases the appropriate formula for Matthew.</p>	<p>Denise is a new mother to a healthy 3-week-old boy, Kieran. During pregnancy Denise decided to exclusively breastfeed until Kieran was 4 months old, at which point Denise intended to return to work. All of Denise's friends had exclusively breastfed their children to 6 months postpartum and were very insistent that Denise continue exclusively breastfeeding when she returned to work.</p> <p>Denise felt that her midwifery team and physicians were especially 'pushy' of exclusively breastfeeding too and would often silence Denise's attempts to discuss safe formula feeding practice. Denise has recently stopped attending parenting classes after receiving derogatory comments from non-breastfeeding mothers the last time she attended. Denise also dreaded visits from her healthcare practitioner, as she would often 'ram' Kieran's head on Denise's boob to make him eat, without explaining what she was doing.</p>	<p>Nora is a mother to twins, Becky and Ben. During pregnancy Nora intended to exclusively breastfeed both of her babies. However, a few days after giving birth Nora found that Becky was very distracted at the breast and disinterested in feeding compared with Ben. As such, 10 days postpartum Nora decided to swap Becky to formula, whilst she continued to exclusively breastfeed Ben to 7 months postpartum.</p>
<p>Related</p>	<p>Luna has a 2-week-old infant named Delilah. Luna combination feeds her infant so that her partner, Bill, could</p>	<p>Kathrine is a 34-year-old stay-at-home mother to Ryan [9], Lewis [4], and Niamh [1 week]. During pregnancy, Kathrine was not sure how she</p>	<p>During pregnancy Sabina felt like she was under exceptional pressure to breastfeed from her GP and midwifery team. They would often</p>

	<p>share parenting duties. Luna and Bill decided to combination feed during pregnancy and are happy with their choice.</p> <p>Nevertheless, Luna is extremely concerned about the long-term consequences of formula supplementation on Delilah's health and feels like a bad mother for not exclusively breastfeeding.</p>	<p>wanted to feed Niamh. She had received contradictory advice from healthcare professionals and family. She knew that breastfeeding was the healthiest option, so decided to give it a go.</p> <p>Niamh took to breastfeeding well, and so Kathrine exclusively breastfed Niamh. Kathrine felt too ashamed to take Niamh to her local parenting group, as she feared that her technique would be judged by the other mothers. Since Niamh was feeding so well, Kathrine did not want to jeopardise this by risking doubts being introduced from other mothers.</p>	<p>question her if she asked questions about formula supplementation and would strongly promote the benefits of breastfeeding at her check-ups.</p> <p>Sabina experienced lots of pain whilst breastfeeding during the postpartum period and, despite intending to breastfeed with occasional formula feeds until 15 weeks postpartum, exclusively formula fed by 11 weeks postpartum. Given the difficulties and pressure she had experienced, Sabina was content with her feeding achievement.</p>
Contrary	<p>Patricia has an 8-month-old son named Cameron. Patricia is now engaging in infant-led weaning, after 7 months of exclusive breastfeeding. Patricia received exceptional support from her midwifery team and boyfriend which allowed her to meet her infant feeding goals. Without Patricia's "amazing" midwife, she does not feel that she would have been able to exclusively breastfeed for as long as she did.</p>	<p>Carine is a new mother to 5-week-old twins. Carine had decided during pregnancy that she was going to exclusively breastfeed her children. Carine's midwife, Florence, was a wonderful source of support. Whenever Carine needed guidance or reassurance, Florence was there to lend a helping hand and to be a shoulder to cry on.</p>	<p>Nadia is a very career-driven woman who intended to breastfeed exclusively until she returned to work at 20 weeks postpartum and then intended to pump whilst working for a further 4 weeks.</p> <p>Perceiving herself as a very determined and persevering person, Nadia achieved her infant feeding goals with little difficulty. She watched lots of YouTube tutorial and asked parenting forums to aid her in resolving any breastfeeding challenges she faced postpartum.</p>
Illegitimate	<p>Rob is a 29-year-old man, whose wife had passed away during childbirth.</p>	<p>Laira is a 38-year-old woman to identical twins, Nick and James. Nick and James are 4 years</p>	<p>Charlie when weaning her baby, did not necessarily expose her baby to as many</p>

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Rob is the primary caregiver to his 3-week-old daughter, Madeleine. Although struggling to come to terms with the loss of his wife, Rob is enjoying his new role as a father and frequently takes Madeleine to postpartum parenting classes. Rob is exclusively formula feeding Madeleine, whom is a happy, healthy baby.

old. Laira decides one Saturday morning to take her infants to a soft play group. Nick and James started to play roughly with some of the other children at the playgroup, resulting in Nick taking a tumble and bumping his head. Laira ran over to check on Nick, feeling bad for not having intercepted the situation sooner.

different types of foods as she thinks that she should have, especially fruits and vegetables. Now her son is 2.5 years old and is an extremely picky eater. Concerned for her son's wellbeing, she takes Sean to the doctors for advice. Charlie feels regretful for not having given her son a better start to healthy eating.

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Inverted

Jessica is a 42-year-old mother of 3 sons and 2 daughters. Her youngest child has recently started high school. Jessica had neglected her education to start a family, and now she has more free time has decided to go back to university to follow her passion for English Literature.

Jessica has not engaged in any activities purely for herself since the birth of her second child, and consequently is experiencing much conflict as to whether she is doing the right thing. Jessica worries that her children will need her more than she anticipates and is concerned that she may be making a rushed or selfish decision.

Aria has gone on holiday with her 6-year-old daughter, Demi. One day Aria takes Demi to the beach but forgets to put sun cream on her. Demi becomes badly sunburnt and has to spend the rest of the holiday covered up with the shade. Aria feels like a bad mother for failing to protect Demi from the sun appropriately. Disapproving looks from other parents at the holiday park made Aria feel humiliated.

Nathan is a single dad to 18-month-old Jamie. Jamie is 6 years old and particularly difficult around bedtime, often having a tantrum at the prospect of getting ready for bed.

Nathan was having a particularly difficult week at work and decided to allow Jamie to stay awake until Jamie felt tired, which was 10:45pm. The next day Jamie's teachers pulled Nathan aside to inform him that Jamie had been falling asleep at the desk and was struggling to concentrate during class discussions. Nathan felt angry at Jamie's teachers for, what he thought, as them thinking him an inadequate father. More truthfully, though, Nathan thought himself a failure for disrupting Jamie's routine.