

The discursive management of responsibility in business - assigning and negotiating responsibility for sustainability in new product development

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Abstract

Responsibility is an important concept in new product development, typically associated with the need to consider social and environmental impacts. Some authors have highlighted a lack of precision in the way responsibility in product design and development is conceptualised, since multiple framings of responsibility are often conflated. Indeed, responsibility is a psychological notion that can be constructed in different ways. Yet there is a lack of empirical research on the discursive construction and management of responsibility. This study uses discursive psychology to identify how designers respond when they are directly asked about responsibility in semi-structured interviews. The idea of being responsible as a person is treated by participants as more problematic than the idea of taking responsibility, since personal accountability is evoked. Whereas 'feeling responsible' is readily assumed and linked to culpability. Implications for both the allocation of responsibility in business settings and for research on responsibility are outlined.

Keywords: Discursive psychology; responsibility; sustainability; new product development; product designers.

Track: Sustainable and responsible business.

Paper type: Developmental paper, empirical.

Word count: 2256.

Theoretical background and rationale

This study uses a qualitative method from social psychology, discursive psychology (DP), to analyse how product designers respond to different types of questions about responsibility. Responsible innovation is an important concept in new product development, which refers to taking into account social, environmental, and ethical aspects (Stilgoe et al. 2013). Among product design professionals, given the ecological crisis, there is an increasing focus on finding ways to better manage natural resources, through reducing pollution and waste, and aspiring to a circular economy (Waage 2007; Clark et al. 2009; Delaney, Liu 2023). It is widely recognised that decisions made at the early design stages are highly important in terms of sustainability outcomes throughout a product lifecycle (Schögggl et al. 2017; Tischner 2001). For example, choices about which materials to use, and how to bond materials and components together, have implications regarding reuse and disposal (Babri et al. 2022).

However, there is a lack of consensus on who is responsible for how sustainable product outcomes are in specific industry settings. Furthermore, the term responsibility is used in different ways to mean different things. It is theorised that responsibility can involve either making decisions in a way that considers future consequences, or accepting accountability for past decisions (Fahlquist 2009). Whether individual designers or engineers can be held responsible for design decisions is widely debated, since they may not have sufficient individual decision-making power (Swierstra, Jelsma 2006; van de Poel et al. 2015). Design in industry is found to be a social process, involving many stakeholders (Lloyd, McDonnell 2009; Bucciarelli 1988). Attempts have been made to advise on criteria to be used to determine who should be responsible for environmental impacts, for example taking into account capacity and interests (Mostert 2015). In some workplaces, responsibility for sustainability is made explicit through strategies and job descriptions, and in others it may be implicit (Pujari et al. 2003). In contrast, other authors prefer to frame responsibility as a virtue, based on character and emotions (Roeser 2012). These differences in ways of talking about responsibility are not always treated as noteworthy in discourses about responsible business or responsible design, but may be significant in terms of how responsibility is navigated in practice (van de Poel, Sand 2018).

Despite the prominence of this theoretical literature on meanings of and allocation of responsibility for product sustainability, there is a lack of empirical research on how product design professionals construct and negotiate responsibility from their own perspectives. To start to fill this gap, this study seeks to answer the research question: *How is the notion of responsibility for sustainability practically managed in talk by product designers?* The findings provide new insights into how to better allocate and manage responsibility for sustainability in business operations.

Discursive psychology

As a psychological construct rather than an observable phenomenon, responsibility can be examined in terms of the ways people talk about it. Discursive psychology (DP) offers an approach for detailed analysis of how people talk about and negotiate psychological concepts in conversations (Edwards 2006; Wiggins 2017). DP differs from other methods used for analysing discourses in business literature due to its focuses on sequential interactions, and on identifying actions accomplished through talk (Whittle, Mueller 2011; Wiggins 2017). DP involves analysis of extracts from conversations, to identify patterns of actions (such as

justifying decisions or minimising concerns), and discursive devices used to achieve these actions (Whittle, Mueller 2011; Wiggins 2017). Table 1 shows the sorts of discursive devices that might be found when closely analysing talk.

Table 1: Examples of discursive devices, from Wiggins (2017)

Pronoun and footing shifts	E.g., switching from ‘I’ to ‘you’; or from speaking as the author or principal
Pauses	1 second or over is considered to signal some sort of difficulty
Hedging	E.g., ‘hh.’, ‘erm’, highlighting delicateness
Extreme Case Formulation	Invoking maximum or minimum properties e.g. the best ever
Minimisation	E.g., just/only
Lists and contrasts	E.g., three-part list often used for rhetorical effect
Disclaimers	E.g., ‘I’m not sexist but...’
Metaphors	These can make an account more vivid
Reported speech	Actively voicing previous talk or thoughts to add authenticity
Script formulation	Portraying something as a regular occurrence, typical or expected
Modal verbs	E.g., ‘should’, relating to responsibility/accountability
Stake inoculation	Defending against the potential claim that they have a stake in what they are saying
Category entitlement	Making reference to categories and so inferring expectations related to that category
Narrative structure	Describing a series of events in sequence. This can be used to increase plausibility

Participants and Procedure

Sixteen semi-structured interviews were undertaken via video call with a purposive sample of sustainability-focused product designers (see table 2), primarily recruited via LinkedIn. University research ethics committee approval was given before commencing data collection, covering informed consent, anonymity, and data security in line with British Psychological Society (2018) ethics guidelines. The interview guide included a section on responsibility for how sustainable products were, with questions on who was responsible and whether the designers felt responsible. Full transcripts of the interview conversations were produced, anonymised, checked, and shared as a dataset for further research use (Cooper 2021).

Table 2: Participant details

	Location	Sex	Type of project talked about	Product type	Length
1	Germany	M	Professional - in-house	Trestle table	73:23
2	India	M	Professional - in-house	Ceiling fan packaging	48:02
3	US/Netherlands	F	Professional - in-house	Suitcases	45:43
4	Argentina/Italy	M	Professional - independent	Coffee table	65:53
5	UK	F	Internship	Child's bike	41:25

6	UK	F	Student project plus previous work in industry	Cycling backpack	39:20
7	France	F	Student project plus previous work in industry	Architectural outdoor space	42:29
8	Netherlands/ Brazil	F	Student project plus previous work in industry	Plant sensor	29:30
9	US	M	Professional - design agency	Shoe packaging	29:28
10	Spain	M	Design competition	Compost bin	54:13
11	Brazil	M	Professional - independent	Facemask	39:07
12	UK	M	Professional - in-house	Electric vehicle charge point	37:00
13	US	M	Professional - in-house	Vehicles	51:40
14	Canada	F	Professional - in-house	Yoga mat	40:08
15	Germany	F	Professional - independent	Lamp	35:10
16	UK	M	Professional - independent	Plastic cup	59:03

Analysis methods

Data analysis followed an established approach for DP research as outlined by Wiggins (2017). When examining extracts in which participants were asked about responsibility, different sorts of responses were noticed when the questions were asked in slightly different ways (for example, when asking who took responsibility versus who was responsible). In order to conduct a detailed analysis, all extracts in which responsibility is explicitly discussed were transcribed using Jefferson (2004) notations (see table 3), which help highlight non-verbal aspects of how people talk that might be relevant, such as pause lengths and changes to intonations.

Table 3: Transcription symbols (Wiggins, 2017, adapted from Jefferson, 2004)

(.)	A micro-pause around one tenth of a second
(1.2)	A pause or silence, measured in seconds and tenths of seconds
=	Latched talk, where there is no hearable gap between words (can occur within a turn at talk, or between speakers)
::	Stretched sounds in talk; the more colons, the longer the sound, as in rea::lly l:::ong sounds
CAPITALS	Talk that is noticeably louder in contrast to the surrounding talk (sometimes shouting)
<u>Underlined</u>	Emphasised words, or parts of words, are underlined
°	Degree symbols enclose noticeably °quieter° talk, with double degree signs indicating °°whispering°°
> <	‘Greater than’ and ‘less than’ symbols enclose talk that is at a faster pace (>speeded-up< talk) than the surrounding talk
< >	‘Less than’ and ‘greater than’ symbols enclose talk that is at a slower pace (<slowed down> talk)
↑ ↓	Upward arrows indicate a rising pitch in talk, downward arrows indicate falling pitch
£	British pound sign indicates smiley voice or suppressed laughter
#	Hashtag indicates ‘creaky’ voice such as when someone is upset.
[]	Square brackets indicate the start (and end) of overlapping talk

Hh	hhs indicate audible breaths. A dot followed by hs (.h) indicate audible inbreaths; without the dot (as in hh) is an outbreath. Within a word (as in 'ye(h)s'), this indicates laughter while talking ('interpolated laughter'). The more hs, the longer the breath.
Huh/heh/hah	Laughter can be represented with outbreaths that have vowel sounds within them.
'yes'	Single quotation marks are used to indicate reported speech or thought
(())	Double brackets (sometimes without italics) contain details about other features that have not been transcribed, e.g., ((waves hand))
(Unclear)	Words in single brackets are the transcriber's best guess at what was being said, or (unclear) or (inaudible) if it really can't be heard clearly

Summary of findings

The analysis produced four key findings, outlined in table 4. This is a small-scale, inductive study, and so the numbers of instances of each pattern found are small. Nevertheless, the similarities in the ways the responses are constructed for each question type to achieve the same actions are noteworthy, and other DP research using small samples has shown how discursive strategies identified can be generalised across similar interactional settings (Goodman 2008). Here, I share three example extracts to demonstrate some of the findings. The full research paper will contain a detailed analysis section including identification of discursive devices and features used to achieve the actions.

Table 4: Patterns found

Question type	Actions accomplished through responses	Number of instances of pattern/number of times question asked
Generalised assessments of responsibility for product sustainability		
Asked hypothetically 'who is responsible' in general	Talk through possible options to show thoughtfulness, acknowledge difficulty of question	5/6
Assessments of responsibility in the specific projects		
Asked 'who took responsibility' or 'what were the lines of responsibility' in specific project	Associate responsibility with decision-making power/job roles	6/6
Asked 'who is responsible' in specific project	Treat question as highlighting the designer's own accountability, deflect responsibility away from themselves	4/5
Subject-side assessments of responsibility		
Asked 'do you feel responsible'	Produce very strong agreement to portray committed identity, and often (5/7) associate with culpability	7/7

Generalised assessments of responsibility for product sustainability

In extract 1, the participant is asked to make an assessment of 'who is responsible' for sustainability in general in product development. Despite the question framing responsibility as a state of being, rather than actions taken, the response links responsibility to the act of making decisions. There is apparently no easy answer since there are numerous actors who make decisions about products. As the interviewee is not being directly held accountable herself, the response can be hypothetical and flexible.

Extract 1, from interview 8 - plant sensor

- 1 I so who do you think (.8) is responsible fo::r >the sustainability of
2 products<
- 3 P8 (.9) the sustainability of products
- 4 I of products yeah
- 5 P8 i think that it's (.5)
- 6 okay obviously those that put the products out there (.5) e::r and i
7 know that there is a demand for it in the part of consumers asking for
8 it because they're consuming
- 9 (.5) but i think the responsibility is the from those that create it (.8) in
10 the first place (.5)
- 11 er and the:n we can take individual responsibilities for the choices we
12 make
- 13 I mhm
- 14 P8 (.6) but without the right information it's also hard to make
15 the correct choice >so when information is not< given
- 16 I yeah
- 17 P8 i think there's a bunch of stakeholders that are responsible
- 18 I (.8) [sure]
- 19 P8 [(give a)] responsibility to everybody

Assessments of responsibility in specific projects

When the designers are asked ‘who is responsible’ for sustainability in a specific project, they hesitate, indicating some difficulty. Again, being responsible is associated with decision-making. In extract 2, the designer orients to the possibility that she might be expected to be responsible herself in her own work context and so explains why she cannot be, without answering the question of who is responsible.

Extract 2, from interview 3 - suitcases

- 1 I and so who do you ↑think's responsible for (.7) the sustainability=
2 =the true sustainability of the design
3 P3 (2.7) so here's where it gets very complicated becau::se (.6) you know
4 i've been in the circular economy programme with the: (.3) ellen
5 macarthur (.8)
6 I [yep]
7 P3 [foundation] and i've been in other sustainable (.6) ↑conferences and
8 they'll go >'↑oh ↑yeah we we need to educate the designers< [to]
9 I [mhm]
10 P3 make the right decision and do' (.2)
11 ↓'well (.4) er can i (.3) ↑speak' because i don't have power when it
12 comes to (.4) making a final decision

Subject-side assessments of responsibility

When the designers are asked ‘do you feel responsible’, they are asked about their own feelings rather than how responsibility works out there in the world (Edwards, Potter 2017). There are strong affirmative answers, and accounts of guilt associated with the environmental consequences of past design work, often using the reported thought device to add credibility (Holt, Clift 2006). Extract 3 shows an example of a strong agreement without any initial hesitation. Conversation analysis research has shown that responses that are seen as ‘preferred’ are delivered more quickly than ‘dispreferred’ ones (Stokoe et al. 2020). This is followed by a demonstration of reflection on past design decisions.

Extract 3, from interview 12 – electric vehicle charge point

- 1 I yeah (.6) okay (h) and do you fe:el (.7) do you feel any personal
2 responsibility fo:r (.6) making the design as sustainable as possible
- 3 P12 yeah definitely yeah (.5) definitely erm (1.2) it's e::r (.9) it can weigh
4 on your mind (.6)
- 5 I ok
- 6 P12 er (.2) quite a bit i think particularly if you if you maybe start to feel
7 that (1.1) er and i've had this in other projects actually whe:re if you
8 started if you if you come up on a new piece of research that maybe
9 shows that your design is not as sustainable as you thought it was (.8)
10 erm
- 11 I [mhm]
- 12 P12 [or] actually it's not having the impact you want it to have
- 13 I (.7) yeah
- 14 P12 (.8) erm then then you can actually sort of (.4)
15 well personally anyway i sort of start to feel a bit bad about that and
16 you think 'is this really worth still doing (.6) er (.9) have i (.2) have i
17 kind of spent my time well here have i made good decisions is this
18 actually making a positive (.4) impact'

Contributions, limitations, further research, and conclusions

The key contributions of this research are conceptual and methodological. The analysis of interview questions and responses demonstrates that distinct patterns can be found in how people use language to assign and negotiate responsibility. Specifically, the analysis makes three findings regarding how participants respond when asked to make generalised or specific object-side assessments of where responsibility lies in the ‘out-there’ world of their work, and when asked to make subject-side assessments of their own feelings of responsibility (Edwards, Potter 2017; Huma et al. 2020). The different types of responses can be explained through analysis of the different ways responsibility is constructed in the questions.

First, when asked generally who is responsible for product sustainability, pinning down who is responsible is portrayed as difficult, but participants are able to depict thoughtful consideration of different possible answers, linking responsibility to the action of decision-making. Their own personal accountability is not evoked through these types of general questions. When asked who took responsibility or what were the lines of responsibility in a specific project, similar sorts of responses are seen. Again, participants orient to the question as tricky, but then offer potential answers as to who took responsibility, based on having made decisions or holding senior status in an organisation. The nature of decision-making in new product development is known to be complex and involve multiple stakeholders (Cooper 2023; Devon, van de Poel 2004), and this complexity is portrayed through the participants responses.

Second, and in contrast, when participants are asked who is responsible for sustainability in a specific context, they treat this question as potentially holding them personally accountable (despite not being directly asked if they might be responsible themselves). Responses focus on explaining why they can’t be responsible as designers. This adds further insights through demonstrating the different practical, interactional consequences of using ‘being’ versus ‘taking’ when asking for assessments of responsibility.

Third, responses are very different when participants are directly asked ‘do you feel responsible’. The designers construct subject side assessments (Edwards, Potter 2017), formulating their own feelings, seemingly with ease. Extreme case formulations such as ‘absolutely’ and ‘a hundred per cent’ are delivered without hesitation (Pomerantz 1986). These responses allow the designers to construct positive, caring identities, regardless of whether they deny *being* responsible. There is therefore misalignment between how participants make sense of the external world of responsible actions taken at work, and inner worlds of feelings of responsibility, with such misalignment commonly found in DP analysis of the ways we talk (Edwards, Potter 2017).

From these findings it can be inferred that it is important for managers to pay attention to the language they use to talk about who is responsible for aspects of sustainability in an organisation. In addition, these findings can help business researchers better formulate interview and focus group questions on the topic of responsibility, considering the different discursive strategies used to negotiate being responsible, taking responsibility and feeling responsible.

In terms of limitations, this research is based on interviews conducted for a broader project on decision-making in sustainable design, and so only a small part of each interview involved

discussion of responsibility. Future research could involve analysing more in-depth conversations about responsibility for sustainability in business settings, both through research interviews and focus groups, and in naturally occurring strategy meetings in which responsibility is allocated and negotiated.

To conclude, this research demonstrates how a social psychological approach can contribute understanding of ‘how human responsibility for ecological degradation is communicated, constructed, distributed and avoided’ (Adams 2014, p.259) in business settings. Asking people about responsibility is not a neutral act – people are held to account for their actions through particular question formations, and so seek ways to manage their own accountability and identities accordingly.

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