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The process of making trust related judgements through interaction with food labelling – a consumer study

Emma Tonkin, BND(Hons) ^a

Samantha B Meyer, PhD ^b

John Coveney, PhD ^a

Trevor Webb, PhD ^c

Annabelle M Wilson, PhD ^a

^a *Discipline of Public Health, Flinders University of South Australia, Bedford Park, South Australia, Australia, 5042*

^b *School of Public Health and Health Systems, University of Waterloo, Waterloo, Ontario, Canada, N2L 3G1*

^c *Behavioural and Regulatory Analysis Section, Food Standards Australia New Zealand, Barton, Australian Capital Territory, Australia, 2600*

Corresponding author

Emma Tonkin

Discipline of Public Health

GPO Box 2100

Adelaide, South Australia

5001

Phone: +61 8 7221 8451

Fax: +61 8 7221 8424

emma.tonkin@flinders.edu.au

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Abstract

There is both empirical and theoretical research supporting the idea that consumers' interaction with food labelling impacts on their trust in the food system and its actors. This paper explores *the process by which* consumers' interpretation of, and interaction with, labelling results in the formation of trust related judgements. In-depth, semi-structured interviews with 24 Australian consumers were conducted. Theoretical sampling was used to gather a wide range of consumer perspectives. Real food packages were used as prompts for discussion in interviews, with one interview section requiring participants to examine particular products while thinking aloud. Process and thematic coding were used in transcript analysis. Labelling was seen by participants as a direct and active communication with 'labellers'. The messages communicated by individual label elements were interpreted more broadly than their regulatory definitions and were integrated during the process of making sense of labelling. This enabled participants to form trust related judgements through interaction with labelling. Finally, product and consumer characteristics varied participants' judgements about the same or similar label elements and products. Divergence in consumer and regulatory interpretations of labelling creates a situation where labelling may be both fully compliant with all relevant legislation and regulation, and still be perceived as misleading by consumers. This suggests that the rational frameworks that policy seeks to overlay on consumers when considering food labelling regulation may be hindering consumer belief in the trustworthiness of labellers. Policy must recognise the different, yet equally legitimate, ways of interpreting labelling if it is to foster, and not undermine, consumer trust in the food system generally.

Keywords

Consumer, labeling, food, trust, policy

1. Introduction

For consumers in many industrialised countries, personal encounters with food producers and regulators are a rarity. The operation of the food system is so far from everyday thought that the vast majority of consumers are unable to even name the bodies responsible for its regulation (FSANZ, 2008). Yet the entire cycle of food production and consumption is a high risk endeavour (Speybroeck et al., 2015). Food consumption involves both high vulnerability to, and uncertainty regarding, food risks for consumers (Verbeke et al., 2007; Ward et al., 2012). Thus with very little relative personal control to manage perceived risks in practical terms (Dixon and Banwell, 2004), trust in the food system is essential. Food labelling is one of the primary methods of contact with the food system for most consumers (FSANZ, 2008) (see figure 1 for relevant definitions), with industry and government primarily seen as 'labellers', or the face of the food system (Tonkin et al., 2016). Thus gaining an understanding of *how* food labelling influences trust in food system actors is important. This paper reports an exploratory, qualitative study investigating *the process by which* consumer interaction with food labelling influences their trust related judgements about labellers.

Insert figure 1 about here

That consumers interpret labelling information in an effort to come to a purchasing decision is axiomatic. Consumers seek and utilise factual information relating to product characteristics, for example ingredients lists, in making food choices. However a further role of labelling, unrelated to food choice, has been suggested; one made possible by locating food labelling at the interface of consumers and the food system. Einsiedel (2002) proposes that food labelling is an avenue for building and restoring consumer confidence in food systems. Similarly, in a Government commissioned report on food labelling in Australia Blewett et al. (2011) explicitly state that food labelling reinforces consumer knowledge of, and trust in, the food system. As such, this paper explores the dimension of labelling interpretation that does not relate directly to consumer attitudes or purchasing decisions.

Herein we take a novel perspective and examine *the process by which* the interaction consumers have with labelling influences their trust related judgements about labellers. We use 'interpret' to define occasions where consumers read and generate a simple message from a label element. 'Interaction' refers to the much larger meaning making process, where other factors influence the meaning consumers make from this interpretation.

In conceptualising trust this paper predominantly utilises the perspective of Lewis and Weigert (1985). Lewis and Weigert (1985) emphasise trust is a social concept, and not a purely psychological construct as presented in much psychometric research aiming to measure trust. Therefore in its social context, it is often too simplistic to frame trust as a dichotomy of 'trust' and 'distrust', but rather trust is a generalised social reality that can be strengthened or weakened through social interaction (Lewis and Weigert, 1985). As such, trust is not a variable but a multidimensional and complex process that is reflexively worked on in the maintenance of social relations (Khodyakov, 2007).

In this conceptualisation, trust is seen as having multiple bases; 'It has distinct cognitive, emotional and behavioural dimensions which are merged into a unitary social experience' (Lewis and Weigert, 1985). The cognitive base for trust can be thought of as our choice to trust and our reasons for doing so—our 'evidence' of trustworthiness. Complementary to the cognitive base of trust is the emotional base; this affective foundation for trust is the emotional bond between the trustor and the person, group or system in whom they place trust (Lewis and Weigert, 1985). The delineation of the affective and cognitive dimensions is not meant to suggest however that the affective aspect is not cognitive; affective states can be founded on cognitive components (Jones, 1996). The cognitive and emotional bases of trust are interconnecting and reciprocally supporting (Mollering, 2006), but individually more or less relied upon in different social situations (Lewis and Weigert, 1985). As such, we might suggest trust in the food system is more reliant on the cognitive bases of trust given its relatively impersonal nature. However we can see that the emotional base is also foundational for trust in the food system through the outcome of its violation – the emotional indignation, often resulting in outrage, with which the public responds to perceived breaches of trust in food systems. An example of this is that supermarket and

grocery stores consistently rank in the top 10 industries for consumer complaints to the Australian Competition and Consumer Commission (ACCC) ¹ (Australian Competition and Consumer Commission, 2015). ‘Trust in everyday life is a *mix* of feeling and rational thinking, and so to exclude one or the other from the analysis of trust leads only to misconceptions that conflate trust with faith or prediction’ (Lewis and Weigert, 1985, p. 972, emphasis in original).

While not wholly explaining trusting behaviour, indicators of perceived trustworthiness influence these bases for trust and therefore are important in the formation and maintenance of trusting relations (Barber, 1983; Mollering, 2006). Mollering (2006, p. 48) suggests a trustworthy actor is someone who ‘is *able* and *willing* and *consistent* in not exploiting the trustor’s vulnerability’ (emphasis in original). Similarly, Poppe and Kjaernes (2003, p. 89) state that ‘without much doubt, truth-telling is a valid trust dimension’. Perceived abuses of trust, such as manipulation or deception of trustees, influence how trustworthy a social actor is seen to be (Khodyakov, 2007; Lewis and Weigert, 1985). Therefore here, we encompass consumer judgements of credibility, truthfulness, honesty and willingness to be trustworthy (or absence of this in the form of deception and manipulation) with the phrase ‘trust related judgements’, and identify these as judgements which impact assessments of the trustworthiness of social actors (herein labellers). While we can never completely know whether the trusted party is indeed trustworthy, and as such trusting always requires a leap of faith (Giddens, 1990; Luhmann, 1979; Simmel, 1978), trust is dynamic and trust related judgements can be updated and reflexively considered when new information is presented, for example through social interaction (Hobbs and Goddard, 2015; Mollering, 2006). Importantly, this may not always take the form of analytical and systematic consideration, with affective responses that ‘occur rapidly and automatically’ an

¹ The ACCC is responsible for enforcing the Competition and Consumer Act 2010, which promotes fair trade in markets to protect consumers and businesses. Complaints and inquiries may relate to unfair trading or unsafe products. Misleading and deceptive conduct in food labelling is addressed by the ACCC.

important and useful pathway for decision making (Slovic et al., 2004, p. 312). As consumer encounters with food labelling may be thought of as social interactions, here we focus on *the process by which* they influence consumer judgements related to trust, and the consumer and labelling factors that influence this.

An essential starting point for this exploration is explicitly defining the foci for trust judgements made around labelling. We previously distinguished between trust *in* and *through* labelling (Tonkin et al., 2015). When trusting *in* labelling consumers place trust in the truth of the message. For example, consumers' judgements of a Fairtrade logo as believable, true and reliable might be framed as their trust *in* that label element. Conversely, Garretson and Burton (2000) provide a good example of trust *through* labelling in their study showing perceptions of manufacturer credibility (a composite measure that included a (un)trustworthy component) is reduced when front-of-pack nutrition claims are inconsistent with the detailed nutrition information on the back. In this way label elements communicating technical information are used to form trust related judgements about something other than that technical message; trust in the manufacturer is influenced *through interaction* with the communication medium of labelling. In the case of Garretson and Burton's (2000) study the focus of the trust related judgement was the manufacturer, but other studies have shown trust judgements about food safety (Batrinou et al., 2008), food governance (Poortinga and Pidgeon, 2004) and specific food actors and the food supply in general (Coveney, 2008; Van Rijswijk and Frewer, 2012) can be formed *through* labelling. Thus, while acknowledging the importance of trust *in* labelling, this paper wholly focusses on the process of trust *through* labelling.

There is both theoretical (Bildtgard, 2008), and some empirical evidence that consumers' interaction with food labelling influences their trust in the food system (Batrinou et al., 2008; Garretson and Burton, 2000; Poortinga and Pidgeon, 2004). However, the literature examining *how* the interaction influences trust, the process of forming trust related judgements through labelling, is sparse and disconnected. For example, Eden (2011) provides evidence that consumer factors such as personal typologies of 'good' and 'bad' foods actively contribute to the process of meaning-making, but this examination is

focussed on organic and functional food labels. The work from Garretson and Burton (2000) suggests the interaction between multiple label elements is important in influencing trust, however this research focussed solely on nutrition information. There has been no comprehensive exploration of the labelling information that is used, and the underlying processes and factors contributing to the formation of trust related judgements from labelling in general. As such there is little explanation of why some labelling builds or reinforces trust in the food system, while other labelling breaks or undermines it. This paper seeks to address this gap by determining:

1. *The process by which* consumers' interpretation of, and interaction with, labelling results in the formation of judgements related to trust in labellers; and
2. The consumer and product characteristics that are important in influencing this interpretation.

The following section provides an overview of the project methods used to achieve these research aims.

2. Methods

2.1. Recruitment and sampling

We wanted to seek information about participants' interpretation of their lived experience, therefore in-depth, semi-structured interviewing was used for data collection (Minichiello et al., 2008). Theoretical sampling (Layder, 1998) of participants was conducted with the aim of eliciting a wide range of perspectives and levels of attention to food labelling, rather than have a sample representative of the Australian population. Theoretical sampling was informed by literature indicating that different demographic characteristics influence labelling engagement (FSANZ, 2008) and trust in food, including primary shopping location (supermarket, farmers' market) (Ekici, 2004), presence of specific dietary requirements (allergy), rurality (Meyer et al., 2012), gender, age, education background and income group. Recruitment methods were targeted to achieve theoretical sampling dimensions. Initially, participants with food allergies were recruited through advertising with Allergy and Anaphylaxis South Australia and farmers' market shoppers through advertising with Slow

Food SA. Once these groups had been adequately represented, participants were recruited using posters in locations chosen to reflect theoretical sampling dimensions not yet represented. Specifically, posters were placed in the male change rooms of a University gym to recruit younger, male participants, and on the notice boards in supermarkets of two suburbs with low Relative Socio-economic Disadvantage scores (based on the Index provided by the Australian Bureau of Statistics) to recruit supermarket shoppers with relatively lower incomes. The data regarding consumers' interaction with labelling were found to be saturated at 24 participants, and all theoretical sampling dimensions had also been adequately represented by this stage (Mason, 2010). Participant characteristics are summarised in Table 1. Participants were reimbursed \$30 for expenses associated with taking part in the research. Ethics approval was granted by the Flinders University Social and Behavioural Research Ethics Committee (project number 6429).

Insert Table 1 about here

2.2. Data collection

Semi-structured interviews were conducted by the primary author between May and July 2014. Hour-long interviews covered the broad areas of definition and use of food labelling, participants' considerations relating to food, comparing unlabelled and labelled foods, participants' thoughts on specific packaging prompts (using a modified thinking aloud method described below), and finally trust in the food system. These major themes were used as a guide to direct the interview, with specific questions used being unique to each interview to enable the proper elicitation of, and natural context for, participant responses. As such, no strict interview schedule beyond the major themes outlined above was adhered to in the interview process. The data for this article are primarily drawn from the sections on the definition and use of food labelling, and the thinking aloud questions detailed below (Fox et al., 2011), while other data are reported elsewhere (Tonkin et al., 2016). The

interview protocol, which included the main themes to be covered and the thinking aloud questions, was piloted twice prior to data collection.

Three images of real food labelling and 12 packages were used as prompts for discussion (Table 2). This approach was used to facilitate accessibility of interview content for participants. The type and number of packaging prompts were chosen to address a number of theoretical dimensions, with a view to maximise range without providing an overwhelming number. Both 'core' (milk, bagged carrots) and 'noncore' foods (chocolates, lollies) (Bell et al., 2005) were included as it has been shown that consumers' underlying attitudes regarding foods influences their response to labelling information (Eden et al., 2008a). The majority of the packaged items shown were core shopping items as perceptions of the everyday encounter with food labelling were sought. Poppe and Kjaernes (2003) cite that some foods are perceived by consumers to hold more inherent health risks and therefore a range of foods from low (packaged tea) through to high risk (fresh meat) were also included. Additionally, table 2 illustrates the variety in types of advertising achieved through selection; some prompts contained health or nutrition claims, cartoon characters, third-party certification and extensive nutritional information, while others were relatively simply packaged. In the only structured questions during the interview, participants were presented with items 7, 9 and 12 and asked the question 'Can you tell me out loud your thoughts as you look at these'. This process was repeated with items 2 and 6, and items 5 and 10.

Insert Table 2 about here

2.3. Analysis

Each interview was audio-recorded and transcribed by the primary author, read at a minimum three times and summarised. Interview summaries were compared and contrasted to find common broad themes, those relevant to this analysis being: the process of interpreting labelling, interpreting intent from labelling and outside influencers of

labelling interpretation. These themes were used to code interview transcripts, along with new codes for important data features. Transcript sections relating to the process of interpreting labelling were then re-coded using process coding, the isolating of sections of text relating to actions (Saldana, 2013). The synthesis of this analysis is presented in Figure 2. This resulted in a number of new codes such as questioning labelling, moving from examining the macro (labelling as a whole) to the micro (label elements), comparing label messages with existing knowledge and opening dialogue with labellers. These codes were then conceptually positioned with the other broad themes and restructured into the two main areas presented in the findings of this paper: the process of interpreting labelling and the label and consumer factors that influence this. The analysis framework from Tonkin et al. (2015) was used to organise the consumer factors into rational (demographic characteristics), personal and social factors. This framework outlines the different factors seen to influence the interaction between consumers and food labelling, and categorises them into rational, personal and social contexts. However, this study predominantly focussed on the personal and social influences, and therefore the 'rational' factors heading has been omitted here. Negative cases were sought from the data to enable depth and nuance of understanding. Analyst triangulation was achieved as the developing analysis was presented to the wider research group at each stage in visual, verbal and written forms, enabling critique of process and outcome and ensuring robustness of data and analysis (Fade, 2003). Additionally, peer-debriefing was conducted through the presentation of the findings to a group of researchers, regulators and policy makers to ensure research credibility (Fade, 2003).

3. Results

Twenty-four South Australian consumers were interviewed. Figure 2 outlines the process of forming a trust response through interaction with labelling demonstrated by the participants in this study, and is discussed in detail below. This discussion is followed by a presentation of the product and consumer characteristics identified as influencing participant responses to labelling.

Insert Figure 2 about here

3.1. Interpreting labelling

3.1.1. The process of interpreting labelling as a whole

When presented with packaging prompts participants demonstrated two distinct phases of response; an instinctive, more emotional reaction followed by a more cognitively reasoned judgement. The first instinctive response was to the product as a whole. Participants' described a first impression regarding what they variously described as trustworthiness, reliability, credibility, and competence; however it was difficult for them to articulate how this impression was developed,

'Interviewer: So you said that some look untrustworthy, what makes one look untrustworthy?

... Yeah it's hard to explain I think...it...I think it's more of an instinct rather than something I can explain. I don't think I can define it. It would be more like, I would pick it up and be like "ahh, don't really feel comfortable"' (Ruby)

If there was little motivation to reason further, this was where the process ended, indicated by the 'lower involvement' pathway in figure 2. The second more cognitively reasoned judgement followed an examination of individual label elements and how they come together to form a whole ('higher involvement' pathway in figure 2). Here participants scrutinised, interpreted and responded to individual label elements they perceived as relevant to them. Typically they began with the front (name, advertising and certification labels) and progressed to the back/side labelling (nutrition information, ingredients, country of origin and allergy warning statements). No participants discussed the storage information or manufacturer's contact details. So while different label elements were considered individually during the process, trust related judgements appeared to be based on the labelling as a whole.

Participants appeared to be aware of the differing reasons for including different label elements on a package. Regardless, the multiple messages of label elements were

integrated during the process of interpreting labelling, ‘...the manufacturer’s information² gives more detail. The advertisers don’t give that much information. We have to see both the informations [*sic*], then only we can get to a conclusion...’ (Amelia). A good example of different label elements interacting to form an overall response was Bruce’s examination of the tuna can (item 2). Here Bruce has a negative initial reaction to a product, but this more affective response is tempered through the cognitive consideration of a different label element,

“SAFCOL tuna, responsibly fished”. Yeah okay, well immediately I look at that and think okay well I am... I find it humorous (laughing). Okay they say “[caught by] pole and line”, I understand that, so then I think it’s not so humorous, it’s quite fair’ (Bruce)

As such, all the separate messages communicated by different label elements formed one overall response regarding that package, ‘I take the whole sort of package into account and say the way a product is... I don’t know... Packaged to appeal to customers as well as the information on it to really tell customers what it’s about’ (Chloe). In this way participants judged labelling as a whole, despite being aware of the different purposes of labelling and label elements.

Participants used language to suggest the interpretation of labelling was an active communication between themselves and labellers. A quarter of participants even spoke directly to labellers “‘is that really real or are you just writing that on there?’” (Ruby). The majority of participants saw the food industry, identified as the manufacturer, producer, company or marketing team, as solely responsible for all labelling and therefore the main labeller. Despite this, almost all made a distinction between advertising and ‘proper’ information, with back/side labelling seen as information reliable enough to base a purchasing decision on, in contrast to front labelling. While front information was not considered to be ‘reliable’ information, it appeared to form the basis of the initial, affective

² Here Amelia is referring to the information she perceived as coming from the manufacturer, that is, the ingredients list and nutrition information.

response to a package. Third party organisations responsible for certification were also identified as labellers by a minority of participants. In summary, participants were able to form trust related judgements because labelling was seen as a direct communication with food system actors; it involved the examination of individual label elements in the context of the whole package, and appeared to be both cognitively and affectively based.

3.1.2. Interpreting individual label elements

Individual label elements, similar to labelling as a whole, were interpreted intuitively; quickly and without a reasoning process. Importantly, label elements were not interpreted in their literal sense, but rather the messages communicated by label elements were generalised to what participants described as their implied meaning. A common example was nutrient content claims being interpreted as claims of healthfulness, ‘...you know, them saying that something is fat free but then it’s full of sugar; like it’s...they’re saying it’s healthy but when you actually look at the breakdown it’s not’ (Lewis). Country-of-origin labels were another example discussed in over half of the interviews,

‘I mean just the fact that they get away with marketing as Australian when a considerable proportion of the product could be, could be actually manufactured overseas, you know? That whole, putting something into a package value adds quite a bit and that’s not, that’s not what “Made in Australia” is meant to be’ (Oliver).

By contrast however, third-party certification labels (for example the Soil Association organic logo) were universally interpreted technically; certification labels were read as an endorsement from a particular organisation regarding the set of principles they represent. Therefore, the messages interpreted from most label elements were broader than that communicated by their technical definition.

Participants were conscious of these differences in ‘common sense’ interpretation and technical definition and therefore had described having learned to be wary of accepting label messages at face value; ‘...there’s not necessarily any guarantee with that....Like with some stuff that says “light” - it’s actually not low in fat, it could be light in colour; it could be light in taste, without being light in calories or fats’ (Paula). As such, participants routinely

displayed a sceptical and questioning approach to interpreting all label elements, ‘...they highlight this is 7% [recommended dietary intake of fibre], well what is that? You know? What’s that really mean?’ (Grace). Label messages contrary to their own knowledge were particularly scrutinised and the perceived meaning doubted, ‘“High quality protein” ...I know soy beans are high in protein, but I don’t know that they’re high quality’ (Colin). Participants also described a learned approach to questioning product characteristics other than those a specific label element referred to, ‘this “99% fat free” thing which is, you’ve got to say “well how much sugar’s in it” and all these sorts of things’ (Hannah). This was particularly so for claims suggesting a food product had been modified from the original in some way, as with the Heart Active milk [Item 6], ‘I start thinking “okay so what have they done to that?”’ (Ruth).

Similarly, some labelling resulted in participants questioning the food system more broadly, as with one participant who saw 'made in Australia from imported ingredients' and questioned whether any 'made in Australia' label could be trusted, ‘I try to buy maybe Australian made but these days you can’t even trust that anymore because you know it tells you it’s made from imported... And you think to yourself “Hmm okay”’ (May). With additional thought and scrutiny even mandatory labelling which had previously been relied upon was doubted,

‘But, but here’s a question for you. We make an assumption that that information is correct, okay? Energy so much, so much per kilojoule all that stuff. Now the question I’m now posing and I hadn’t really thought about this, who produces those figures and how accurate are those figures? I mean we’re taking those as being 100% correct. Now does Farmers Union have a little laboratory somewhere where they get 100 mLs and they measure it out? I mean maybe some of those tests are quite scientific? Maybe they’re expensive to do? I don’t know...I don’t know the answer’ (Jack).

Only one participant, who had recently moved to Australia, had very strong confidence in government and therefore did not approach labelling sceptically, ‘And I do trust food labelling because if they are not approved [by government] they wouldn’t be able to put it

on the package' (Leo). As such, the majority of participants brought a position of learned scepticism to the process of forming trust related judgements through interaction with labelling.

3.1.3. Interpreting intent and trust related judgements from labelling

All participants talked about interpreting meaning beyond that relating to product attributes from labelling, 'So you have to be quite savvy when you're looking at the label [element] as to what it actually is. *Interviewer: So there's the stated message and... ..and then there's the actual message'* (Lewis). Participants described actively seeking to 'uncover' meaning, 'I try to look beyond the obvious' (Thomas). As previously mentioned, labelling was seen as a direct communication. As such, participants made judgements about the intent behind different label elements in enabling them to find the 'truth' about a product, 'And I know that, well it's not lying, it's 60% less [sugar] but it doesn't actually tell you... And this one's not... So neither of them are *lying*, it's whether you believe what they...It's not the whole story' (Liz). When participants perceived that the intent of a label element, and therefore the labeller, was to deceive or manipulate them, they said that this impacted their trust judgement, 'Yeah, look, to an extent I kind of, I know what they're playing at, you know? I'm judging my lack of, my lack of trust in, in [the company] based on the fact that they're trying to flog me something' (Colin).

While no participant expressed that the technical/literal message was the only message communicated by label elements, the depth of meaning and intent read into them varied between participants. Two participants were willing to accept labelling at face value, while others read labeller intent very deeply,

'I'm sure that that [indicating to Item 6] is 100% compliant with everything that it has to comply with but it's kind of... "heart active" is very big and very bright and very red and it's misleading because people are thinking that they're helping themselves by having that and not changing the rest of their world, so that's pretty cynical in my book' (Henry).

Participants overall were clear that they felt labellers knew about, and capitalised on, the incongruence between consumer and technical interpretations, for example

‘...it’s kind of a sleight of hand; I think that’s what happens with food...it might be good food but they’re creating a bit of an illusion around the surface...It’s a negative. So when I see that in the shop I tend to think “yep here we go again”’ (Bruce).

While all participants expressed a desire to see regulatory change to prevent what they saw as misleading labelling, for example:

‘...when a consumer goes to the shops and they see a product making a certain claim that has a fairly clear meaning to any kind of rational person, that person doesn’t have to then go and research that to actually work out whether that’s actually true or not’ (Oliver),

a minority felt that it was ‘out of [“big brother’s”] control’ (Fran), that is, the government have little power to change industry practices. Therefore, participants made meaning relating to the intentions of the labeller in interaction with labelling, forming the basis of a trust response (Figure 2).

3.2. Factors influencing participants’ interpretation of labelling

3.2.1. Labelling/product characteristics

A number of label element and product factors were shown to influence whether and how participants made trust related judgements. As previously mentioned, label elements were interrogated for meaning in the context of all labelling on the package. Additionally, label elements were understood in broad, ‘common sense’ terms. This meant that often participants perceived individual label messages on the same package to be in conflict. For example when the perceived meaning of a country-of-origin label was contradicted by branding information, ‘When the sign says Australian made and it’s a brand like Uncle Toby’s or Nestle or something like that, that doesn’t mean anything to me...I bet that money’s going somewhere else’ (Colin). As many participants interpreted content claims like ‘X% less sugar’ as claims of health rather than strictly nutrient content, it was common for these messages to be perceived to be in conflict with the nutrition information,

‘But once upon a time I would have just looked straight at the 60% less sugar and thought “Oh that can’t be bad” or the little tub of yoghurt you know, “I want to lose weight, I’ll get the fat free yoghurt” and there’s about a kilo and a half of sugar in it’ (Thomas).

These conflicts ultimately resulted in a negative response to labelling overall,

‘Interviewer: How would you define food labelling?’

Um...as a crock, really. Can I say that? I don’t, I just, I don’t believe that what businesses are putting on the front of their packaging necessarily reflects what’s on the labelling itself as far as the ingredients go’ (Lucy).

As participants believed these conflicts to be intentional, generally they perceived them to indicate labellers are trying to manipulate them. This resulted in negative perceptions of the intent of the label message, and consequently, of the labeller (see figure 2).

However, third-party certification labels/logos were an exception in that external endorsement of products rendered all the labelling on a package more truthful and positively intended. This was even the case with one participant who mistakenly thought the product name was a third-party endorsement,

‘I suppose if they’re gonna say it reduces cholesterol...’cause I say “alright, alright. They must have reduced the cholesterol otherwise they wouldn’t be approved by The Heart...” or Active Heart or Heart Foundation or whatever...they have the heart sign on there’ (May).

For a minority of participants however, third-party certification from particular organisations worked in the opposite way, enhancing scepticism,

‘And even people like the RSPCA appear to be in cahoots with the industry to avoid telling the, telling the truth. If the Heart Foundation says there’s something right now I actually start to look...it triggers me to do further research because they’ve put a tick on it where I wouldn’t bother even doing any more research if there wasn’t a Heart Foundation tick! ...It is part of that process that gives you just that little degree of scepticism in terms of overall’ (Isaac).

Therefore third-party certification provided an air of truthfulness to all the labelling, even if other label elements on the package were considered problematic. However, this was only if the external organisation endorsing a product were themselves trusted.

The type of label element was also a factor which influenced participants' belief in the labeller's truthfulness. In discussions of advertising, participants seemed conscious of not appearing to be naïve, 'See that's the first thing I know is that you don't believe what's written on the front of the box' (Lucy). Therefore advertising information was approached more sceptically than the ingredients list and nutrition information, even though these label elements were not recognised as mandatory information;

'Interviewer: What makes that [nutrition information and ingredients] more reliable?

These? [pause] I spose they're pretty much the same! I don't know. Well the nutrition ingredients lists, I've never thought about that being reliable, I've never even distrusted it! I've just thought that what they have in the ingredients must be true' (Bruce).

However, when ingredients lists and nutrition information were perceived to be manipulated this was objected to more strongly than the 'expected' manipulation from advertising,

'Again annoyed because I think that the ingredients should be quite easy to read and they shouldn't be allowed to...like they shouldn't be able to cloud it with other enticements. It should just be factual what it is so that you can make an informed decision without being swayed' (Lucy).

A quarter of participants described the apparent enforceability of these label types as justification for their reliability. Additionally, how 'testable' the messages were influenced how truthful participants believed the label element to be, regardless of label type,

'So this sort of stuff ["99% fat free"] is, is readily defined and easily measurable. So my assumption is that if there's misleading information here it opens the company up to a risk that they'll get on top of reasonably

quickly. So yeah because it's clearly defined...It's not open to interpretation' (Oliver).

However while this idea was important, it still could not overcome the deception perceived to underlay apparent incongruence between the technical meaning and the 'common sense' meaning of a label element,

'I think just it being fact and not really being able to manipulate it [the nutrition information] much. Like yeah with the fat free thing, you can't really say, obviously like sometimes when they add sugar to compensate for, you can't tell. Whereas with the table you will be able to see the fat, the sugars, the carbs, the everything. Yeah so you have to, you just sort of see the facts and interpret it for yourself' (Chloe).

Therefore both the type of label element and the phrasing used influenced participants' expectations regarding truthfulness, and therefore the trust response.

Perceived product attributes were also important. Participants used concepts like 'industrialised', 'natural', 'local', 'healthy' and 'processed' to classify products, typically during the initial, affective reaction to a product. During the more conscious, cognitive consideration, label elements were judged for consistency with these broad attributes, for example, 'so "[fish caught by] pole and line" in theory is better but I'm struggling to see...I'm struggling to believe that they can catch enough fish to produce an industrialised product using sticks basically. So, so that has a credibility gap' (Henry). Furthermore, the meaning read into the same label element, for example '99% fat free', was seen as reasonable on some products and not others due to the perceived consistency with a product attribute, like 'naturalness', 'I'm probably more likely to trust the milk as opposed to the party mix as it looks, you know it just strikes me as refined. Whereas the milk you know there's only so much they can do right?' (Colin). Labelling on 'local' products was given the benefit of the doubt, while 'overseas' products were judged harshly, like Hannah with this affective response to item 12, 'You see I would never even look at that; looks like [a] Chinese [product]'. As such, participants' existing assumptions and perceptions regarding the food

product as a whole influenced their interpretation of the intent behind the labelling, and therefore trust related judgements.

3.2.2. Consumer Characteristics

Consumer characteristics also influenced the participants' trust related judgements that were developed through interaction with labelling. Cases where participants responded differently to the same label element or product were used to understand the consumer factors causing variations in participants' trust related judgements to labelling.

3.2.2.1. Personal context

Personal knowledge and experience were found to be factors repeatedly shown to be influencing labelling interpretation. Participants drew on nutrition, agriculture, health and business knowledge, and previous work and life experiences to make meaning from labelling. Label elements related to nutrition or production practices participants had personal knowledge about were scrutinised more deeply, while others were more likely to be accepted at face value. One participant believed a '99% fat free' claim on a milk carton (Item 6) but not a sweet packet (Item 11),

'... that's probably more because I would know more about how that sort of fat free and sugar thing works compared to knowing more about the milk' (Lucy).

When a perceived label message was inconsistent with a participant's knowledge, it was typically seen as being included on the package by the labeller for a manipulative purpose,

'My understanding is, there is an association with cholesterol but there is no evidence to show that cholesterol causes any heart issues. So it's, it's, it's, it's continuing to drive... It continues to badly educate the public and fill them up with... Misinforming the public which I find criminally bad' (Isaac).

However, knowledge could positively or negatively influence interpretation, as when labelling was consistent with personal knowledge belief in the truthfulness of the message, and labeller, was reinforced. Personal knowledge or experience appeared to explain much

of the variation in the trust related judgements brought about through participants' interaction with different products and label elements.

A variety of other personal characteristics influenced the way participants interpreted intent in labelling. Participants shopping for young children appeared to be sensitised to perceived manipulation from labelling in general, '...it would be nice to know, and a lot of parents would like to know, what's in this stuff and the companies have become very clever with their wording' (Ruth). This was also the case for participants who managed dietary conditions like food allergy or intolerance, who reported reading labelling conscientiously. Finally, all three participants born in non-English speaking countries demonstrated a less sceptical, and more trusting approach to labelling interpretation, 'Yeah [labelling is] educational and informative also, yeah it's very good' (Amelia).

3.2.2.2. Social context

Information from personal friends and associates was a factor that strongly influenced the way label elements were interacted with, and therefore the meaning that was interpreted from them. Family, formal and informal networks, particularly those through social media, reportedly influenced the way participants interacted with and trusted particular label elements. This was especially the case for participants managing food allergy, many of whom reported hearing stories about 'not so good practices' through online support communities 'Like I will hear stories, like mum will say, mum will let me know of people that have reacted to stuff that it wasn't in the ingredients' (Ruby). Health professionals also influenced what labelling information was sought, and how it was then interpreted, 'I've been coached by a dietitian to you know, just to watch certain elements. For instance looking at yoghurt, if it says zero fat doesn't necessarily mean no sugar, you know what I mean?' (Colin).

The internet and online educators were primary or additional sources of information for half those interviewed, and participants reported being sensitised to manipulation from particular label elements through these avenues. The majority of these participants reported being unaware of the 'minefield' prior to engagement and consequently had developed a more sceptical approach to labelling interpretation since, '...and then she

[online blogger] said “you know sometimes they start to repackage words and say that certain ways” so I normally always go for the ingredients list’ (Abbey). Information from non-government organisations like Greenpeace and the consumer group Choice was also important in shaping labelling interaction for a minority of participants, ‘It was Choice were doing a 5 star rating, and out of the 100 products or whatever, only 2 got the 5 and then the rest you know... And I just, yeah don’t like just how misleading things are.’ (Abbey). Three participants had become dependent on these organisations to provide advice upon what labelling could be considered reliable,

‘I tend to, unless they’ve been, I’ve been exposed to the particular labels [elements] through a source that I trust I tend to take them with a grain of salt... So certainly Choice, Greenpeace, I mean even...ah... I was going to say the government but...’ (Oliver).

While almost all participants discussed the media as influencing their approach to labelling interpretation, only one reported that this positively influenced trust, ‘Well because the media talks through some of the labels [elements] and I’ve learnt from the media in Australia... Because I do trust it because the media reports that’ (Leo). News coverage highlighted things to look for on labelling and fostered the sceptical approach to label element interpretation, ‘...with the Victoria Honey has [*sic*] been exposed³, that maybe you shouldn’t just assume because it’s honey, it’s honey.’ (Isaac). Participants reported *The Checkout*⁴ and similar programmes as useful resources for helping them discover manipulation and deception in labelling, ‘So they [*The Checkout*] did a thing on serving sizes;

³ Isaac is referring to the notices of infringement issued to Basfoods (Aust) Pty Ltd by the ACCC in 2014 due to their product named ‘Victoria Honey’ being neither honey, nor from the Australian state of Victoria.

⁴ *The Checkout* is an Australian consumer affairs programme often including segments relating to the marketing of food and beverages.

I thought “oh another thing they’re being deceitful about with us” (Abbey). One participant expressed this concern related to more sensationalist early evening programmes,

‘I think they’re diabolical programmes. They’re probably feeding a sense of distrust or mistrust or whatever amongst consumers in a quite different way than the one I’ve been referring to throughout’ (Thomas).

Therefore the social context that participants were positioned in impacted their attention to, personal knowledge relating to, scepticism towards and consequently the trust related judgements developed through interaction with label elements and products.

4. Discussion

The findings demonstrate *how* – that is, the processes by which – consumers come to make trust related judgements about labellers through food labelling. They suggest that participants seeing labelling as a direct communication with labellers, and interpreting labelling as a whole, are what made this possible. Further, participants interpreted most labelling elements more broadly than their technical definition. Participants perceived that labellers intended for them to be misled by this broader interpretation. Finally, product and consumer characteristics help to explain the varied judgements brought about through participants’ interaction with labelling.

The findings suggest that consumers interpret label elements technically, but broadly and intuitively also; the perceived ‘common sense’ meaning of label elements ranges beyond their strict definition. This finding extends previous literature discussing the reported halo-effect identified by Roe et al. (1999) to suggest consumer ‘overgeneralisation’ of label elements is not limited to health or nutrition claims. Similar to findings from Eden (2011), participants here described the meaning of organic claims, but also country-of-origin labelling and many other label elements, as broader than the definition used by regulators and industry. However, the broader meaning interpreted from label elements did not typically mislead participants, but rather it elicited a response relating to perceived ‘manipulative intent’ (Campbell, 1995) of the labeller. Our findings align with and provide an important extension to those of a recent study aiming to address the previously inconsistent

findings regarding the halo-effect by Orquin and Scholderer (2015). Orquin and Scholderer (2015) demonstrated that consumers were not misled by nutrition and health claims, and in fact the presence of claims negatively impacted purchase intentions. We argue that a potential explanation for the reduction in purchase intention is the perception of manipulative intent created by label elements, as described by our participants. Our findings suggest that negative trust related judgements are likely *especially* when consumers are not misled by a label element, and few appear to be misled. That is, consumers perceive that labellers use overly general phrasing with the explicit intention of misleading them, resulting in negative trust related judgements about labellers.

As it is reasonable to expect that perceived manipulative intent and therefore reduced trust in labellers may impact purchase decision (Campbell, 1995), there are obvious implications for marketers and retailers. It is also important to note that because the interaction presented is relational, it is logical to assume that negative trust related judgements produced through interaction with labelling may result in labelling itself being less trusted in the future (Dörnyei and Gyulavári, 2016). The finding of learned scepticism described by these participants may support this assertion, and is consistent with other research finding consumer scepticism related to health claims (Chan et al., 2005; Tan and Tan, 2007) and sustainability labelling (Eden et al., 2008b; Sirieix et al., 2013). This too has clear implications for any food labeller, especially those attempting to communicate public health messages through labelling initiatives.

The implications of the above finding extend more broadly however. The difference in consumer and technical interpretations of labelling creates a situation where labelling may be both fully compliant with all relevant legislation and regulation, and still be perceived as misleading by consumers. Aside from the implications this has for trust in the broader food system as described further in another paper arising from this study (Tonkin et al., 2016), it raises the question of whether applying rational frameworks to the monitoring and enforcement of misleading and deceptive conduct in labelling is succeeding in its goal of consumer protection. To suggest this is a simple case of consumer misunderstanding requiring yet more consumer education as the solution ignores the core problem; that

currently there is a lack of recognition of different, yet equally legitimate, ways of interpreting labelling. Given that food labelling in Australia is 'the most public face of food policies, standards and laws' (Blewett et al., 2011, p. 3), that this is negatively impacting consumer judgements relating to food-system-actor trustworthiness should be of concern to industry and governments alike.

A further finding of this research suggests additional areas for action to address this issue. While consumers see some label elements as more reliable than others, they integrate label elements when forming judgements related to trust through labelling; the combination of label elements on a package is important in influencing trust related judgements. This is a novel finding, with extant literature investigating food labelling and trust predominantly focussed on how individual and discrete label elements are trusted or influence trust, with a few exceptions (Batrinou et al., 2008; Garretson and Burton, 2000). While this interaction between label elements often resulted in a negative response, in one example endorsement from a trusted organisation, appeared to neutralise some of the negative impact of other problematic label elements. It may be possible that over time this could reduce consumers' extreme, and often unwarranted, negative response to specific label elements, for example health claims. When combined with findings from Frewer et al. (1996) and Frewer et al. (1999) outlining the characteristics of information sources that foster trust in food risk information, this finding suggests an opportunity to rebuild belief in truthfulness, or at least inhibit damaging trust, through using the combination of labelling elements on a package to foster a positive trust related response. One example is potentially the increased presence of trusted endorsement bodies on labelling, such as the Health Star Rating Scheme recently introduced in Australia.

Utilising a qualitative approach to study this topic brings advantages, but also introduces some limitations. To what extent trust related judgements made through labelling are routinized and automatic, rather than actively and cognitively considered, is unclear ('low' compared with 'high' involvement pathway in figure 2). It could be that asking participants to explain their response using an interview method turns an affective, subconscious response into a cognitive/reasoned phenomenon. Dodds et al. (2008) discussed a similar

limitation regarding their use of a focus group method to examine British consumers' use of scientific knowledge in evaluating advertising. Use of experimental research methods, such as rigorous thinking aloud experiments (Ericsson and Simon, 1980; Fox et al., 2011), may provide insight into the relative mix of central and peripheral processing of labelling information when making judgements related to trust through labelling (Petty et al., 1983; Verbeke, 2005). However, that our qualitative findings generally reflect those determined through the experimental methods of Orquin and Scholderer (2015) enhances the validity of both sets of findings. Even if the cognitively reasoned process for interpreting indicators of trustworthiness is simply a post-hoc justification for an otherwise intuitive, emotional response, in relation to these findings, does it matter? The bases for trust are both cognitive and emotional (Lewis and Weigert, 1985). So while we are unable to identify how frequently or consistently these considerations are consciously held by consumers, if participants were providing a cognitive justification for a typically emotional response (which may involve many of the same considerations, albeit in a more liminal form) the issues presented are no less important.

The qualitative approach permits a depth of understanding regarding consumer interaction with labelling and how it influences judgements related to trust that has not previously been achieved. It provides a complement and extension to the many survey-based studies exploring the dimensions and operation of consumer trust in food found in the literature (Greibitus et al., 2015; Hobbs and Goddard, 2015; Lassoued and Hobbs, 2015). Additionally, the variety of perspectives gathered through the participant sampling and recruitment strategy enabled multiple negative cases to be drawn out, and therefore the analysis nuanced and refined, reflecting the complexity of the consumer environment. However, participant recruitment included elements of self-selection, and therefore participants may potentially represent the more motivated members of the community. Linked to this, while the sample size was appropriate for this exploratory study, it limits the ability to reliably compare responses by participant characteristics. Given the influence of these aspects on both attentiveness to labelling and trust, we could expect them to impact judgements related to trust developed through labelling also. Finally, the social context of consumers was shown to be important in influencing their interaction with labelling, and labelling

regulation varies internationally. Due to these issues with reliability and generalisability, it is essential to confirm these exploratory findings using quantitative, population representative surveys both in Australia and internationally. However, this approach should be managed with caution so as to not minimise differences in responses created through a lifetime of personal experiences to simple demographic variables.

It is clear that while regulators examine labelling from a technical, rational standpoint, consumers interpret labelling intuitively and broadly. Where regulators and researchers separate labelling into separate units of label elements for interpretation, consumers make meaning from labelling as a whole. It is thus not surprising then that food system actors become frustrated with 'consumer misunderstanding' of labelling, while consumers feel manipulated by industry and unheard by governments. The findings presented here provide deep insight into how consumers' interaction with labelling results in the formation of trust related judgements about food system actors. They suggest that some acknowledgement of the multiplicity of ways of interpreting labelling from both regulatory and enforcement bodies will be required to support consumer belief in the trustworthiness of food system actors. The importance of these findings should not be overlooked given the fragility of trust in the food system, both locally and globally.

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