**Consuming Worker Exploitation? Accounts and Justifications for Consumer (In)action to Modern Slavery**

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**Abstract**

While research has examined the plight of vulnerable workers (e.g., Harvey et al, 2017; Potter and Hamilton, 2014), the role of consumers who drive demand for slave-based services and products has been largely neglected. This is an important gap given both historical evidence of the effectiveness of 18th and 19th century anti-slavery consumer activism (Newholm and Newholm, 2015) and recent attempts to regulate slavery through harnessing consumer power, such as UK’s 2015 Modern Slavery Act. This article draws on data from in-depth interviews with 40 consumers, to identify their understanding of modern slavery, before revealing the neutralising and legitimising techniques they use to justify their (in)action. Our findings contribute to, and extend, neutralisation theory (Sykes and Matza, 1957) by exploring its applicability in this unique context. We also position *techniques of legitimisation* as central to understanding how modern slavery is tolerated through a variety of discursive and institutional factors.

**Key Words**

Consumer Demand, Modern Slavery, Worker Exploitation, Slavery, Consumption, Neutralisation, Legitimation.

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**Introduction**

There are more enslaved people now than at any other time in human history (ILO and Walk Free Foundation, 2017). These modern slaves are working across many service and production industries, including domestic work, agriculture, restaurant/food services, nail bars, car washes and the sex trade (ILO, 2012). Deepening inequalities globally are working to increase the vulnerabilities that create the conditions under which slavery can thrive (Anderson, 2010). Thus, modern slavery is a central element of the global work environment.

While research has examined the plight of vulnerable workers (e.g., Harvey et al, 2017; Potter and Hamilton, 2014; Sayce et al., 2007; Smith, 2006; Yea and Chok, 2018), this body of knowledge has neglected the role of consumers who ultimately drive demand for slave produced products/services. Korczynski et al (2000) and Gamble (2007) highlight the importance of the consumer in the production and labour processes that are affected by consumer choices, but do not examine consumer perspectives in their research. Consumers are also viewed as playing an essential role in eradicating modern slavery in UK legislation, policy and corporate spheres (Gutierrez, 2017; Nolan and Bott, 2018), yet their attitudes and actions in relation to the work of modern slaves remains severely under-researched.

The 18-19th centuries saw some of the earliest successful forms of anti-slavery consumer activism (e.g., Newholm, Newholm and Shaw, 2015). Indeed, there are many instances where consumer action has been successful in changing exploitative working conditions, with fair trade being a more recent example (Barnett, Cloak, Clarke, Malpass 2010). Importantly, the influence of consumer beliefs and attitudes extends beyond actual consumer demand (or lack thereof) for slave-free services and products. As Barnett et al. (2011) aptly illustrate in the context of fair trade consumerism, the mainstreaming of the movement not only relied on evidence of purchase volume of fair trade products but on the employment of the ethical consumer figure by actors other than the ‘consumer’, such as campaigning organisations. Put differently, consumer-oriented logics and practices form part of public discourses and campaigning tactics that extend beyond actual consumer demand. Thus, within a multi-stakeholder setting, consumer beliefs and actions have the potential to help redress work inequities in a multiplicity of ways. As such, it is, therefore, important to understand the potential role of the consumer in driving or eradicating severe forms of worker exploitation.

This article focuses on the demand side of modern slavery, contributing to research examining modern slavery by investigating consumer perspectives of slavery related work and employment. Drawing on data from semi-structured in-depth interviews with 40 consumers, the study reveals the neutralising and legitimising techniques that consumers use to comprehend modern slavery and formulate their responses to it. These findings contribute to and extend neutralisation theory (Sykes and Matza, 1957) by exploring its applicability in this context. The article also positions “techniques of legitimisation” as central to understanding how modern slavery is tolerated through a variety of discursive and institutional factors that stretch beyond formal legislation.

**Consuming the Work of Modern Slaves**

Modern slavery has been defined as, “a relationship in which one person is controlled by another through violence, the threat of violence, or psychological coercion, and has lost free will and free movement, is exploited economically, and is paid nothing beyond subsistence” (Bales et al. 2009, 31). It is estimated that more than 1.2 million people are modern slaves across Europe (Global Slavery Index) and this number is increasing, including in the UK (2018 UK Annual Report on Modern Slavery). Several conditions facilitate this increase in slavery, including, population growth, vulnerability and reduced price of a human, resulting in “disposable people” (Bales, Hedwards and Silverman, 2017). Consumer demand in ‘first world’ countries fuels the conditions for slavery across many industries. For example, global consumer demand for seafood resulted in labour shortages in Thailand, filled by trafficked persons spending long periods at sea, away from authorities, creating an ideal environment for the use and concealment of slave workers (Gutierrez, 2017). The effects of consumer demand are also pronounced in the service sector of global cities, such as London, with criminal networks directly exploiting their multiculturalism and anonymity (e.g., Cumming, 2017).

In seeking to eradicate modern slavery, the UK introduced, what was at the time, groundbreaking legislation in the form of the 2015 Modern Slavery Act. In this legislation, the consumer is presented as a key stakeholder in the enforcement of the Act and, thus, has been formally allocated a critical role in eradicating modern slavery. This is highlighted in the UK Home Office’s Inquiry on Modern Slavery (Home Affairs Committee, 2019), where Chief Constable Sawyer argues that: “…if you want to transform the UK’s approach to modern slavery, look at transparency in supply chains, look at business, look at consumer choices” (pp. 7). Consumers and their choices are, therefore, viewed as key in perpetuating slavery. This view is shared by non-governmental stakeholders who seek to directly appeal to consumers to use their power and become more responsible, for example, “Consumers could and should use their consumer power to put pressure on companies to produce statements and ensure their supply chains are slavery free”[[1]](#endnote-1). In turn, businesses highlight the role of consumers in driving policies, for example, “…our customers expect us to deliver on these commitments” (Morrisons; https://www.morrisons-corporate.com/Documents/corporate2018/Morrisons\_Modern-Slavery-Act-2018.pdf). Thus, consumers are strongly implicated in modern slavery practices, not only through actual demand for slave-based services and products but also as a stakeholder and/or dominant figure employed by various other stakeholders in public debates and policies relating to modern day slavery. These calls to action imply that consumers understand their responsibilities, can correctly categorise instances of modern slavery, have clear pathways to action, are motivated to act against modern slavery, and will report instances of modern slavery should they observe them. An understanding of the consumer as a key stakeholder in work-based slavery, however, is lacking (Bales et al. 2017). Consumer attitudes and behaviours towards the slavery in their consumption remains severely under-researched. Further, consumer demand for the products and services of modern slavery does not appear to have abated, despite slavery being illegal and morally condemnable in most parts of the world (ILO, 2017). This illustrates a significant need to understand consumer’s perceptions and (in)actions towards work-based slavery.

The term modern slavery is, however, contested and understanding of where extreme labour exploitation ends and modern slavery begins is unclear. Further, slavery exists across the complex networks of local and global supply chains that deliver our products and services (Crane, 2013; Nolan and Bott, 2018). The conceptual boundaries between home-grown and foreign slavery, inter-related terms—such as “intense labour exploitation” (e.g., Strauss and McGrath, 2017), and other forms of precarious and non-agentic labour remain under-explored despite their potential as a source of confusion for consumers and other stakeholders. In addition, studies in this area have predominantly focused on fair trade (e.g., Nicholls and Opal, 2005; Andorfe and Liebe, 2012) and sweatshop production of clothing (e.g., Shaw, Hogg, Wilson, Shiu and Hassan, 2006). Fair trade and sweatshop labour represent sites of production and modern slavery that are distant from the end consumer, such as, coffee plantations in South America and sweatshops in Ethiopia. This body of knowledge does not reveal how consumers in Westernised markets, such as the UK, understand, observe and respond to modern slavery within their own communities and at a distance. This is important in understanding consumer demand and response to local *and* global sites of modern slavery.

Research into broader ethical consumption points to the challenges of motivating and enabling consumers to act where ethical issues are present (e.g., Shaw and Shiu, 2003; Carrington, Neville and Whitwell, 2010; Chatzidakis, Hibbert and Smith 2007). This extant research focuses on the contradictions and immobility of consumers, suggesting that: (i) consumers often embellish their ethical intentions to save face in research scenarios and, thus, are not as ethical as they claim to be (e.g., Auger and Devinney, 2007); (ii) a barrage of social and functional barriers often get in the way of being attentive to ethical concerns (e.g., Shaw and Shiu, 2003; Carrington, Neville and Whitwell, 2010; Vermeir and Verbeke, 2008); (iii) ‘ethical’ identity is one of many identities simultaneously being juggled by consumers (e.g., Connolly and Prothero, 2008; Cherrier, 2007); and, (iv) the neutralisation strategies and tactics used by some consumers enable continued ethical consumption inconsistencies (e.g., Chatzidakis, Hibbert and Smith, 2007).

While these studies focus on the barriers and limitations to consuming ethically, there is evidence of consumer action to address various forms of social and environmental injustice. For instance, within the consumer boycotting literature there is evidence that the successful targeting of highly symbolic brands (e.g., Shell or Nike) can have knock-on effects on broad industry practices (Diermeir, 2012). Moral intensity, the degree to which an issue is viewed as morally significant, can play an important role in moving consumers to action (Jones, 1991). This illustrates that consumers can be engaged to make ethical choices, while their role also stretches beyond the realm of actual buying or not buying and is employed by a variety of stakeholders aiming to achieve certain policy or market related outcomes.

It is important to note, however, that the modern slavery context is very different from the identifiable and defined slavery of the 18th and 19th centuries that enabled successful anti-slavery consumer action (e.g., Newholm, Newholm and Shaw, 2015). Modern sites of slavery are complex and fragmented, and modern slavery lacks a clear definition (Gallagher, 2017). It is an umbrella term that may include a range of illegal and exploitative practices, such as, human-trafficking, slavery, forced labour, child labour, removal of organs and slavery-like practices. Further, the context of modern slavery poses challenges not least because most consumers are, in principle, opposed to slave-based services and products and yet oblivious in their perpetuation. This raises an important question: how can we, as consumers, remain oblivious to enslaved workers when we are consuming goods tainted with forced labour and even interacting with slaves in our everyday consumption lives? Recent developments in anthropology and geography point to the proximal distance between sites of consumption and production—i.e., the ‘North-South Divide’—as a key factor in the concealment of slavery in production (e.g., Kleine, 2016; Lutchford, 2016), but this does not explain responses, or lack of, to localised slavery.

This article addresses the critical gap in our understanding of the demand side of modern slavery. It investigates how consumers understand and respond to modern slavery and, as a result, their potential role in perpetuating and/or eradicating worker slavery.

**Methodology**

***Informants and Sampling***

This research explores the demand side of modern slavery. Thus, we recruited consumers from a diverse range of life experiences and sociocultural backgrounds—seeking gender, age, educational, occupational and geographic diversity. This purposeful sampling approach was taken to extend the depth of our findings and to attain theoretical saturation (Miles and Huberman 1994; Patton 2002). The recruitment strategy resulted in an informant sample ranging in age from early-20’s to mid-80’s, represented a range of educational backgrounds and occupations—manual and non-manual labour, included a diverse spectrum of cultural heritage reflective of contemporary multi-cultural society, and binary and non-binary gender positions. In total, we interviewed 40 informants across three UK cities, using snowballing as our recruitment method.

The presence of local forms of slavery was an important consideration in our selection of sampling sites as we aimed to explore consumer response to both local and global instances of slavery. We first conducted interviews in London, an internationalised city known for its diverse population—and the site of publicised cases of local modern slavery in industries, such as, the sex trade, construction, hospitality and domestic workers. We then expanded the sampling of our informants to Glasgow and Blackpool. These sites were of specific interest to the study as we theoretically sought to “follow the conflict” (Marcus 1995) to further locations linked to localised forms of slavery—Glasgow and Blackpool are known to be sites for the human trafficking of slaves[[2]](#endnote-2).

INSERT TABLE 1

***Data Collection***

*Consumer Interviews*

The interviews combined semi-structured interview questions with image elicitation techniques (e.g., Bell and Davison, 2012; Bolton, Pole and Mizen, 2001). This combined visual and textual research design aligns with the shift towards visual methods and analysis within the humanities and social science disciplines (Bell and Davidson, 2012). We used images selected by the informants as prompts to uncover and stimulate thought processes during the interview, serving to facilitate dialogue (Warren, 2012) about modern slavery. Thus, we took a *dialogical* approach, using the informant chosen images to evoke rich dialogue and deep insight (Meyer, Hollerer, Jancsary and van Leeuwen, 2013) into their thoughts, perceptions and experiences of modern slavery. The use of images as interview prompts in complex scenarios with overtones of power imbalance—such as the production and consumption of slavery, provides an “opportunity to reconsider some of today’s most complex problems from a new angle” (Liebenberg, 2009, pp. 4). Further, interview discussion of images that have been selected by the informants themselves gives the informant ‘voice’, helping them to express deep emotions, discuss uncomfortable topics, and reveal the otherwise unspoken (Liebenberg, 2009; Meyer et al., 2013). Given the hidden nature of modern slavery—literally and in the subconscious, this was an important consideration in the research design and data collection.

Prior to their interview, informants were asked to collect 8–12 images that represented their thoughts and feelings about modern slavery. These images were sourced from online sites, magazines, newspapers, and photographs. As the images were selected by the informants, these selections and subsequent discussion of each image were directed by the informant’s own agenda and understanding rather than that of the researchers, assisting the researchers to access the informant’s sense-making and experiences of modern slavery (Liebenberg, 2009).

The interview questions were semi-structured and included a combination of image-elicitation prompts and open-ended questions. These open-ended interview questions probed for informant’s own perspectives, experiences and responses to slavery in general, and more specifically in the goods and services that they personally consume. The interview questions evolved as the research and analysis unfolded and we became iteratively theoretical in our approach (Gioia, Corley, and Hamilton, 2013). The interviews were 1–2 hours in duration, were audio-recorded and transcribed, and informants were assured of anonymity. While interviewing, the researchers sought to create an environment where informants felt at ease and, as a result, the interviews were characterised by a conversational quality with the researcher that was circular in nature, as researcher inventions flowed from the course of the conversation (Connolly and Prothero, 2003), seeking minimum intervention.

***Analysis***

The interview transcripts were analysed using a hermeneutic approach. First, we conducted an intra-textual analysis within each informants' data to develop first-order emic categories (Gioia et al. 2013)—such as: determinants of modern slavery; ‘othering’ slaves; trivializing slavery; and, deflecting responsibility. We then moved to an inter-textual analysis across informants. In this process, the authors moved back and forth between the emergent categories and the extant literature to assess prior constructs’ capacity to reflect a reliable and authentic interpretation of our informants’ worlds. Additionally, we employed a process of axial coding to identify patterns across the first-order codes, enabling inductive development of higher-level constructs and relationships (Corbin and Strauss, 2008)—such as: categorizing modern slavery; neutralising techniques; and, legitimizing techniques. Iterations were open to the identification of unexplored and unanticipated insights. We also explored differences along the axis of age, race, region and employment but did not observe any variations that enabled further interpretation.

The software tool *Nvivo* and extensive data tables were used to assist with this in-depth analysis. Data collection and analysis occurred cyclically, with the interviews from one research site analysed to develop first-order codes then high-order abstractions, before entering a new research site with a refined interview schedule. The cycles of data collection and analysis continued until the concepts and relationships had stabilized and were at a sufficient level of abstraction (Corley and Gioia 2004). Analysis was conducted first independently and then jointly between the authors to cross check for validity and reliability (Karmowska, Child and James, 2017).

**Findings**

The analysis focused on how consumers understand modern slavery and their potential role in perpetuating and/or eradicating slavery. Through the methodology of constantly iterating between informants’ emic accounts and prior theory and literature, we identified key *techniques of neutralisation* (Sykes and Matza, 1957) that were used widely by our informants. Neutralisation theory argues that individuals may engage in illegal and/or unethical behaviour by resorting to a set of commonly employed justifications or rationalisations that can protect them from self-blame and/or blame by others. The original five techniques include “denial of responsibility”, “denial of injury”, “denial of victim”, “condemning the condemners” and “appealing to higher loyalties” (Sykes and Matza, 1957). Three out of these, namely, “denial of responsibility”, “denial of injury”, “denial of victim”, were particularly prevalent among our data. An additional technique was also identified that we label as “denial of definitive evidence”.

As illustrated below, in addition to these four techniques, another set of techniques labeled *techniques of legitimation* (cf. Ugelvic, 2016) were identified. Compared to techniques of neutralisation, they can be viewed as more widely normalised and legitimised and, therefore, effective in rendering slavery less morally significant altogether (Jones, 1991). Thus, techniques of legitimation seek to directly reduce an individual’s perceived moral intensity towards slavery and enable them, at a macro level, to justify, normalise and legitimise their indifference and apathy. In contrast, techniques of neutralisation do not reduce the moral intensity of slavery but offer excuses and justifications for consumer inaction to dissipate feelings of guilt and/or shame. Thus, techniques of legitimation directly affect consumer attitudes by drawing on macro-level accounts and narratives. In contrast, techniques of neutralisation primarily affect the relationship between attitudes and consumer behaviour by enabling the consumer to justify their inaction even when they recognise slavery as a significant moral issue.

In this study, these two techniques often worked in a synergistic fashion. Taken together, they explain our key observation: widespread consumer lack of engagement with contemporary slavery. Consumer understandings of modern slavery and their techniques of neutralisation and legitimation are now presented.

***Understanding Modern Slavery***

There was considerable discussion and uncertainty as to the boundaries between labour exploitation and slavery among informants. For most, however, “removal of choice and freedom” and an inability to control their own lives and speak out was a key determinant of slavery: “...where someone doesn’t have the choice or doesn’t have the free will, that for me would be slavery. Anything from the other side of that would just be exploitation of workers” (Chantel). The informants tend to consider slavery as something that takes place “far away” in locations “abroad”. A small number of informants, however, claimed to have directly encountered local slavery in shops, nail bars, car washes, domestic help, and in some cases had routinely interacted with these people.

Our informants primarily placed the responsibility for tackling modern slavery with government. For example, Mark notes: “when it comes to exploitation, it can be consumers and pressure groups. But to stop slavery which is a crime—it needs to be tackled by the government” (Mark). Informants were generally unaware of the existence of the UK Modern Slavery Act and their role as a consumer stakeholder within this legislation. Those that were aware of the legislation, such as Chantel, were critical of the efficacy and enforcement of the Act:

"The law needs to change to stop vulnerable and those that are being exploited and enslaved. The last law that was brought out, was it 2015-2016? It's not fit for purpose. Slavery will just continue. It's not doing the job that it was set out to do, was to protect those people in our society who are vulnerable, that are being taken advantage of that are being enslaved and being violently treated, mis-used. That law needs to be changed."

Irrespective of whether informants recognised their interactions with slavery remotely and/or locally, however, very few acted on this recognition. Further, those informants that did enact their concerns about slavery were highly selective, engaging in conscious acts—such as boycotting specific brands or companies—aligned with single issues. For instance, while Nick discusses his concerns about the exploitation of children in sites of slavery broadly, his consumer action against such slave practices is limited to trying to “avoid shopping at Primark because I associate it with products that are probably made by children with poor working conditions”. This selectivity of consumer action, and inaction, displayed by informants was underpinned by the ability to draw on techniques of neutralisation and techniques of legitimation.

***Techniques of Neutralisation***

*Denial of Responsibility*

The majority of informants shifted all responsibility for addressing modern slavery onto stakeholders – namely, government and for-profit companies – other than the consumer-citizen. For example, Claire suggests that: “It sounds awful, but slavery isn't directly my issue. It shouldn't be happening, I don't want it to happen, but it's not my issue”. Government was viewed as being responsible for the codification and enforcement of anti-slavery legislation to address and eradicate slavery in supply chains. Harry notes that:

‘At the end of the day, I don't think that it's the consumer's issue—that’s just passing the blame again. It's at the top end that should be controlled. It's not really our fault…[And] I don't think it’s the companies, at the end of the day they are trying to make as much money as possible. Everything should come down to government in putting controls on it all. If they [companies] can get away with it, why not? Good luck to them. You want the government to take charge’.

Some externally-focused informants, such as Helene, did partially apportion responsibility to business, especially in globalised contexts, suggesting that: “I feel like the government should do everything in their power to stop all of this. [And] It's also between the masters and their workers. It has nothing to do with me as the consumer”.

Other informants accepted a certain degree of personal responsibility for themselves within a stakeholder environment. For example, Belinda notes that government has a responsibility to act “because they run the country”, while companies also “have a massive responsibility to ensure that their products are ethically sourced and that their workers are being treated fairly” and that “I feel like we are all responsible so I feel personally responsible as well to do what I can to help”.

*Denial of Victim*

Another tactic commonly used by informants to reduce the moral claims of enslaved people was that of viewing particular slaves as being *complicit*—and even cunning—in their situation and, therefore, less of a victim. For instance, Vicky suggests that enslaved people in the UK “have the opportunity to go to school and to get a proper job. If they don't take it, it's their choice. If they don't do anything about it, it is because they just don't want to”. She intimates that the Polish illegal immigrant who cleans her house is complicit, and even benefits, from the slavery arrangements due to receiving [minimal] cash-in-hand tax-free payments and being invisible to authorities. This assumption of complicity of local instances of enslaved (adult) people was a common thread across informants, with Andrew suggesting that: “…they want to continue [working as slaves]—obviously they would prefer to stay here [UK] rather than going back, so they'd prefer to wait it out and hope for things to get better”. Similarly, Kristen views slaves working in the UK as complicit in their situation: “they are often here illegally because it’s easier than getting the right visa to work, so they come in and do seasonal work, take the cash in hand and then go home”. Denials of victimhood, therefore, mitigate informants’ own moral obligation by projecting responsibility onto the enslaved individual for their own situation. In doing so, informants maintained their inaction—even if aware—by dismissing the entrapment of domestic slaves and negating their claim to the status of ‘slave’. For instance, Vincent contends that:

‘it's the people that are undergoing it, that are experiencing it that have to try and eradicate it themselves. They have to find a way to educate themselves because no one is going to educate them. You have to be the one to initiate it, you [slave] have to ask, you [slave] have to take the first step’.

*Denial of Injury*

Informants further engaged in *denials of injury* as a neutralisation tactic by *trivialising* the experiences of slavery. This enabled deflection of acknowledgement when confronted with the slavery in their consumption. We observed informants, such as, Kristen trivialising the conditions experienced by those enslaved: “slavery has a silver lining, they just have to have hope and keep working so that when an opening of opportunity arises they can take it”. Mary trivialises the experiences of slaves who seasonally pick fruit and vegetables by nostalgically drawing on her own experiences:

‘They're brought over and there's lots of that done in this country especially in summer where they need strawberry picking or potato picking, they do it for less money…When I was a girl I'd go potato picking, strawberry picking. I'd go on the train…and do that and they gave you a pittance really. And you didn’t mind, it was an adventure and I loved it, we didn’t feel exploited it was good to be in the fresh air, picking strawberries and picking potatoes’.

We also observed informants engaging in trivalising practices by projecting themselves as being slaves. For example, Annabel projects herself and others as experiencing economic hardship on-par with that of local slaves, suggesting that “"many people in the UK are struggling financially too, not just slaves”. Other informants trivialise the experience of slavery when suggesting that they themselves are ‘enslaved’ to technology or their work: “that for me is enslavement in many ways, because I'm trapped—a slave to the system...slave to the economy” (Carl). These findings show that this responsibility is not negated or diluted, rather consumers work to shift this responsibility onto the victim themselves—the slave—by denying them the conditions of slavery and trivialising their daily experiences of entrapment, vulnerability, fear and violence.

*Denial of Definitive Evidence*

An additional technique that was widely employed among our informants was denial of definitive evidence. By threading a hint of uncertainty into their considerations of instances of slavery, informants were able to discredit both claims of slavehood and any impetus to take action. Without concrete evidence of both the slavery itself and the means to tackle it, informants were able to neutralise their sense of internalised responsibility and experiences of guilt by justifying that to act might do more harm than good for the individual or group of people. Chantel is aware of instances of slavery occurring where she lives, and yet is able to maintain a position of inaction by resting on notions of uncertain evidence and fear of reprisals:

‘You see it every day. There's a lot of people here from Asia and from Thailand and I've witnessed it locally, we have a hotel and I see two young girls being brought in by an older man, doesn’t really allow them to mix. He drops them off at the door and he picks them up. And that happens on a regular basis. If you say hello, they look away from you. They never engage in conversation…If I had credible information that that was going on [she would report it] but we have to be so careful because the perpetrators are so smart and can be quite powerful and frightening people to cross as well. So, I think you'd have to be very careful how you did it. Because there’ll be reprisals, because you're taking away their money-making ability whether or not they're in the hotel industry or the hospitality or servitude or as sex slaves. [Also] I could make the call [to the police] but my information is not 100%. It's gut feeling and you can’t really go with that, police wouldn’t entertain it at all.’

***Techniques of Legitimation***

Techniques of legitimation (Ugelvic, 2016) refer to commonly employed accounts or justifications that are used by consumers to deny or reduce the otherwise illegitimate nature of slavery in their consumption. Unlike the techniques of neutralisation, they directly mitigate the moral intensity of slavery as opposed to the relationship between intensity and consumer (in)action. These techniques of legitimation can be seen as backstage and tacit knowledge that normalises slavery even when at a more explicit level, slavery continues to be recognized as illegal and morally unacceptable. For example, some of our consumers talked of slaves coming from “Third World” or “backward” countries and this was in turn used to imply acceptability of slavery. We could see how such narratives both drew on rich various histories of postcolonialism (e.g., Said 1978) and uneven geographical development (e.g., Harvey and Braun, 1996) and more recent events and responses to the so-called refugee crisis by prominent politicians. Our data and analysis distinguishes three key techniques of legitimation exhibited by our informants: “othering”, “dehumanizing” and “necessity”.

*Othering*

A key tactic used to diminish slaves’ claim to moral status and, thus, sense of moral obligation was that of *othering*. Through the use of othering practices (see e.g., Gülerce, 2014), informants created distance and difference between themselves and the slaves. This allowed them to justify why it is acceptable for slaves to be subject to conditions of severe exploitation, while this would not be acceptable for them personally. From this perspective, the socio-cultural background of slaves is characterised as radically different to their own and, thus, there is no obligation or cultural imperative to act in response. For example, for sites where a particular form of slavery was deemed by informants to be a cultural practice, such as sex slavery in some Asian countries, it was assessed to be of low moral imperative as the moral frameworks in this foreign culture were assumed to be different—and inferior—to the informant’s own. Stephan engages in othering practices when referring to the role of the caste-system in India. By othering these Indian slaves, he effectively reduces claims to moral obligation towards them:

“…so if you look at the caste system in India, if you're at the low end of that caste system then they are the only people you're going to deal with and those are the only jobs you're going to get because you're a certain caste, then it's going to be very difficult for you to break out of that. If that [enslavement] is because you were born of a certain caste, that's how you're going to stay”.

Annabel evokes othering practices when she suggests that in “Africa they have tribal rituals and tribal ways” and, similarly, Carl contends that “if a [sweatshop] factory is working within the rules and regulations of its host country, then by virtue of the ethics of that country it is not morally wrong”. These ‘tribal’ traditions and foreign legislation seemingly overrule their obligations as consumers of these forms of slavery. In such situations, informants expressed a relatively low moral intensity.

*Dehumanising*

In some instances, informants were observed stripping modern slaves of their ‘humanness’ as another, interrelated, tactic to diminish the moral intensity of modern slavery. These *dehumanising* practices worked to dilute and remove the human rights of enslaved individuals regardless of their socio-cultural background. For example, Alex reduces his consideration of enslaved people to a utilitarian cost-benefit equation to ascertain the value to himself in consuming slavery: “It's the cost-benefit analysis. There are these slavery problems, but I get so much benefit from it that I continue doing it”. A number of informants stripped whole categories of slaves and disadvantaged people of their humanness, such as, inferring that some parents are effectively ‘pimping’ their children out because they are too lazy to work themselves: “When it comes to a parent treating their children as slaves and not feeding them...it's inhumane. The love for people isn’t the same” (Mary). Non-human objects are not subject to human consideration and duties of care.

More often than not, dehumanising techniques concerned adult slaves. In contrast, children often evoked a sense of *high moral intensity*. These modern slaves were viewed as being of equal moral status and, hence, claiming a legitimate moral obligation. For example, Helene contends that:

“modern day slaves are the children - the girls that are made to prostitute and the [child] workers—somebody has to stand up for the children that have nobody to speak for them [they have no voice], for example a child that is working for his survival. While a grown man who is washing a car in a hand car wash - they have other options they can explore”.

Helene illustrates the relativities of moral obligation and polarised moral intensities experienced for child versus adult slaves, which were a reoccurring thread amongst our informants across the study.

*Defense of Necessity*

A common legitimation technique employed by informants was that of calling on an overwhelming sense that slavery is an inevitable consequence and, indeed necessity, of society and that they were, therefore, powerless to make an impact. Vincent observes:

“I need to buy what I need to buy...so regardless of where it comes from or how it’s made, as long as its new and I can wear it, then whether Bob or Billy makes it, if it’s a good price for me—then I'm going to buy it. Everyone is making use of modern slaves, and I have to get it somewhere. I'm not going to make it myself”.

Further, Melanie illustrates a sense of hopelessness and powerlessness when reflecting on the normalized nature of slavery: “I don’t feel good about it but I think everybody just accepts that this is part of life. Wherever you go in the world, there is some kind of slavery. So, I don’t think it could ever be stopped”. By calling on assumptions that “everyone” is using and/or consuming slavery, and that slavery is an inevitable dark side of society informants, such as Vincent and Melanie, are able to wash away fleeting experiences of personal guilt and shame.

**Discussion and Conclusion**

This research explores how consumers understand modern day slavery and their potential role in perpetuating and/or eradicating it. Overall, the study observes a widespread lack of engagement with issues of modern slavery that contrasts sharply with the 18th and 19th century modes of anti-slavery consumer activism (e.g., Newholm, Newholm, and Shaw, 2015). Key strategies akin to Sykes and Matza’s (1957) techniques of neutralisation are identified through the systematic analysis of ethnographic interview data with 40 consumers. These included denials of responsibility, denials of victim, denials of injury and an additional technique that we have termed denials of definitive evidence. Taken together, these four techniques help explain why and how the majority of our consumers did not do anything about the modern slavery in their consumption, even when identifying it as a significant moral issue.

The study significantly extends Sykes and Matza’s (1957) neutralisation theory to identify, in the context of slavery, another key set of techniques, labeled techniques of “legitimation”. These resemble the work of Ugelvik (2016) in the sense that they address the legitimacy deficit that arises when tolerating behaviours that otherwise continue to be seen as clearly illegal and morally unacceptable. In doing so, these techniques of legitimation work to deflect the individual from engaging in processes of ethical decision-making by blocking the recognition that an issue is highly morally significant in the first place (Jones, 1991). To do so, techniques of legitimation draw on tacit knowledge and macro-level counter-hegemonic discourses at the fringes of social legitimacy.

Bounded by histories of postcolonialism, uneven geographic development and more recent geopolitics, modern slavery has proved to be a particularly fruitful context for illustrating such grand counter-narratives. Informant accounts of slaves coming from backward and uncivilised countries, for instance, coincided with the shocking declaration of a leading politician that many US immigrants come from “shithole” countries. Such statements, therefore, remain, to a large extent, “extensions of patterns of thought prevalent in society rather than something created de novo” (Sykes and Matza, 1957, p.669). In doing so, the techniques of legitimation emerging through this study address Copes and Maruna’s (2017) recent call for further research into the type of cultures that allow feelings of moral (ir)responsibility to be normalised, at such widespread levels, in the first place. On a pessimistic note, techniques of legitimation may be much harder to combat than neutralisations, given their macro-level nature and increasing usage in various reactionary settings.

As workers, we are acutely aware of labour exploitation and care about our wages, conditions, work pace, and other forms of immaterial and emotional labour (e.g. Weeks, 2007). Further, under capitalism workers have the freedom to leave an employer, enabling the worker to be a ‘consumer’ of workplace options should they be dissatisfied with their conditions of employment (Connolly and Connolly, 1991). Our research reveals, however, that as consumers of worker exploitation through slavery we are largely apathetic and indifferent to others’ conditions of work. These insights are critical as research has highlighted the centrality of the consumer as an authority figure in processes of work and production (Korczynski et al., 2000). This has critical implications generally. More specifically, the role of the consumer in reporting instances of modern slavery and pressuring corporate behaviour is central to the UK Modern Slavery Act. Such an approach to legislative enforcement is unprecedented and our research points to serious policy and legislative failure in an area of devastating human exploitation.

The UK Modern Slavery Act charges the consumer with a role in eradicating slavery. Yet, this legislation disadvantages the consumer in a number of key ways. First, many of our informants were unaware of the legislation and those that were did not see a role for them as part of it. Second, the legislation lacks enforcement, thus, isn’t effective in alerting the consumer to the worker slavery they risk supporting in their choices of products/services. This uncertainty, coupled with the lack of a list of companies required to comply with the legislation, supports a ‘denial of definitive evidence’ – one of our observed neutralisation techniques. Profits from modern slavery are estimated to be $1.5 billion (ILO, 2014), while measures to eradicate slavery may be costly. Gutierrez (2017) argues that mobilising consumers is key to motivating companies to accept the challenge of removing slave-based worker exploitation from their supply chains. These issues must be addressed to support consumers in their role in eradicating worker slavery and for the legislation to achieve its purported purpose.

This research examines consumption of slave work and in doing so highlights important questions for future research. As consumers sought to neutralise and legitimate the consumption of slavery, future research should explore how such approaches could be countered. We suggest future research that identifies effective interventions to mobilise consumer action towards the eradication of modern slavery. Message framing could be an important element of such interventions to shift consumers from a passive role in creating demand for slavery to an understanding of their role in the processes of production. Such a larger scale study could also enable an exploration of individual responses and understandings of modern slavery by demographic and socio-economic characteristics. Future research could also explore differing approaches to connect consumers and workers, and to couple the binary identity roles of being both a consumer and a worker. Furthermore, this study’s identification of techniques of legitimation poses challenges towards the possibilities of slave-free societies. Consumer engagement in techniques of legitimation to cope with their consumption of slavery points to a critical need for multi-level, multi-stakeholder approaches that recognise both consumer complicity and the structural forces that underlie the perpetuation of slavery in 21st century economies.

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**References**

Anderson, B (2010) Migration, immigration controls and the fashioning of precarious workers. *Work, Employment and Society* 24(2): 300-317.

Andorfer, VA, and Liebe, U (2012) Research on fair trade consumption—A review. *Journal of Business Ethics* 106(4): 415-435.

Auger, P, and Devinney, TM (2007) Does what consumers say matter? The misalignment of preferences with unconstrained ethical intentions. *Journal of Business Ethics 76*(4): 361-383.

Bales, K, Trodd, Z, & Williamson, AK (2009) *Modern slavery: The secret world of 27 million people*. Oneworld Publications Limited.

Bales, K, Hedwards, B, and Silverman, B (2017) Modern Slavery Research: the UK Picture A research report from the Office of the Independent Anti-Slavery Commissioner and the University of Nottingham’s Rights Lab.

Barnett, C, Cloke, P, Clarke, N, and Malpass, A (2010) *Globalizing responsibility: The political rationalities of ethical consumption*. John Wiley & Sons.

Bauman, Z (1988) Is there a postmodern sociology? *Theory, Culture & Society* 5(2-3): 217-237.

Bell, E, and Davison, J (2013) Visual management studies: Empirical and theoretical approaches. *International Journal of Management Reviews* 15(2): 167-184.

Bolton, A, Pole, C, and Mizen, P (2001) Picture this: Researching child workers. *Sociology,* 35(2): 501-518.

Carrington, MJ, Neville, BA, and Whitwell, G (2010) Why Ethical Consumers Don’t Walk their Talk: Towards a Framework For Understanding the Gap Between the Ethical Purchase Intentions and Actual Buying Behaviour of Ethically Minded Consumers. *Journal of Business Ethics*, 97(1), 139-158.

Chatzidakis, A, Hibbert, S, and Smith, AP (2007) Why People Don’t Take Their Concerns About Fair Trade to the Supermarket: The Role of Neutralisation. *Journal of Business Ethics*, 74(1), 89-100.

Cherrier, H (2007) Ethical consumption practices: co‐production of self‐expression and social recognition. *Journal of Consumer Behaviour: An International Research Review,* 6(5): 321-335

Cherrier, H, Black, I, Lee, M. (2011) Intentional non-consumption for sustainability: Consumer resistance and/or anti-consumption? *European Journal of Marketing,* 45 (11/12): 1757-1767.

Connolly, KG, and Connolly, PM (1991) *Competing for employees: proven marketing strategies for hiring and keeping exceptional people*. Macmillan Pub Co.

Connolly, J, and Prothero, A (2008) Green consumption: Life-politics, risk and contradictions. *Journal of Consumer Culture,* 8(1): 117-145.

Copes, H, and Maruna, S (2017) Techniques of Neutralization: A Theory of Its Time and Ahead of Its Time. In *Delinquency and Drift Revisited, Volume 21* (pp. 43-58), Routledge.

Crane, A (2013) Modern slavery as a management practice: Exploring the conditions and capabilities for human exploitation. *Academy of Management Review*, 38(1): 49-69.

Corley, KG, and Gioia, DA (2004) Identity ambiguity and change in the wake of a corporate spin-off. *Administrative Science Quarterly* 49: 173-208.

Cumming, E (2017) Slaves on our streets: Why London is a global hub for modern slavery. The Independent UK: [https://www.independent.co.uk/news/uk/home-news/slaves-on-our-streets-london-global-hub-sex-trafficking-prostitution-abuse-exploitation-a7943941.html](about:blank) [Last accessed: 4th July 2019]

Dando, CJ, Walsh, D, and Brierley, R (2016) Perceptions of psychological coercion and human trafficking in the West Midlands of England: beginning to know the unknown. *PloS one*, 11(5).

Diermeier, D (2018) When Do Company Boycotts Work? *Harvard Business Review*, 6 August.

Duffield, GM, and Grabosky, PN (2001). The Psychology of Fraud. *Australian Institute of Criminology: Trends and Issues in Crime and Criminal Justice*, 199: 1-6.

Gallagher, AT (2017) What's Wrong with the Global Slavery Index? *Anti-Trafficking Review*, 8: 90-112.

Gamble, J (2007) The rhetoric of the consumer and customer control in China. *Work, Employment and Society*, 21(1): 7-25.

Gülerce, A (2014) Selfing as, with, and without othering: Dialogical (im) possibilities with dialogical self theory. *Culture & Psychology* 20(2): 244-255.

Gutierrez, JA (2017) Less than Transparent: How California’s Effort to Shine Light on Modern Slavery May Ultimately Keep Consumers in the Dark. *Loyola Journal of Public Interest Law* *19*: 57-82.

Harvey, D, and Braun, B (1996) *Justice, nature and the geography of difference*. Blackwell.

Harvey, G, Rhodes, C, Vachhani, SJ, and Williams, K (2017) Neo-villeiny and the service sector: the case of hyper flexible and precarious work in fitness centres. *Work, Employment and Society* 31(1): 19-35.

Jones, TM (1991) Ethical decision making by individuals in organizations: An issue-contingent model. *Academy of Management Review* 16(2): 366-395.

Karmowska, J, Child, J, and James, P (2017) A contingency analysis of precarious organizational temporariness. *British Journal of Management* 28(2): 213-230.

Korczynski, M, Shire, K, Frenkel, S, and Tam, M (2000) Service work in consumer capitalism: customers, control and contradictions. *Work, Employment and Society* 14(4): 669-687.

Lee, MSW, and Male, M (2011) Against medical advice: the anti-consumption of vaccines. *Journal of Consumer Marketing* 28(7): 484-490.

Miles MB, and Huberman AM (1994) *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage Publications.

Newholm, T, Newholm, S, and Shaw, D (2015) A history for consumption ethics. *Business History* 57(2): 290-310.

Nicholls, A and Opal, C (2005) *Fair trade: Market-driven ethical consumption*. Sage.

Nolan, J, and Bott, G (2018) Global supply chains and human rights: spotlight on forced labour and modern slavery practices. *Australian Journal of Human Rights* 24(1): 44-69.

Ozanne, LK, and Ballantine, PW (2010) Sharing as a form of anti‐consumption? An examination of toy library users. *Journal of Consumer Behaviour* 9(6): 485-498.

Patton MQ (2002) *Qualitative Research and Evaluation Methods*. Thousand Oaks, CA: Sage Publications.

Pentina, I, and Amos, C (2011) The Freegan phenomenon: anti-consumption or consumer resistance? *European Journal of Marketing* 45(11/12): 1768-1778.

Piacentini, MG, and Banister, EN (2009) Managing anti-consumption in an excessive drinking culture. *Journal of Business Research* 62(2): 279-288.

Portwood-Stacer, L (2012) Anti-consumption as tactical resistance: Anarchists, subculture, and activist strategy. *Journal of Consumer Culture* 12(1): 87-105.

Potter, M, and Hamilton, J (2014) Picking on vulnerable migrants: precarity and the mushroom industry in Northern Ireland. *Work, Employment and Society* 28(3): 390-406.

Said, E (1978) *Orientalism: Western representations of the Orient*. New York: Pantheon.

Sayce, S, Ackers, P, and Greene, AM (2007) Work restructuring and changing craft identity: the Tale of the Disaffected Weavers (or what happens when the rug is pulled from under your feet). *Work, Employment and Society* 21(1): 85-101.

Scott, D (2008) *Understanding prison staff*. Routledge.

Shaw, D, Hogg, G, Wilson, E, Shiu, E, and Hassan, L (2006) Fashion Victim: the Impact of Fair Trade Concerns on Clothing Choice. *Journal of Strategic Marketing*, 14(4): 427-440.

Shaw, D, and Shiu, E (2003) Ethics in Consumer Choice: a Multivariate Modelling Approach. *European Journal of Marketing*, 37(10), 1485-1498.

Smith, C (2006) The double indeterminacy of labour power: labour effort and labour mobility. *Work, Employment and Society* 20(2): 389-402.

Sykes, GM, and Matza, D (1957) Techniques of neutralization: A theory of delinquency. *American sociological review* 22(6): 664-670.

Ugelvik, T (2016) Techniques of legitimation: The narrative construction of legitimacy among immigration detention officers. *Crime, Media, Culture*, 12(2): 215-232.

Vermeir, I, and Verbeke, W (2008) Sustainable food consumption among young adults in Belgium: Theory of planned behaviour and the role of confidence and values. *Ecological Economics* 64(3): 542-553

Weeks, K (2007) Life within and against work: Affective labor, feminist critique, and post-Fordist politics. *Ephemera: Theory and Politics in Organization* 7(1): 233-249.

Yea, S., & Chok, S. (2018). Unfreedom Unbound: Developing a Cumulative Approach to Understanding Unfree Labour in Singapore. *Work, Employment and Society* 32(5): 925-941.

**Author Biographies**

***Michal Carrington***

Michal Carrington is a Senior Lecturer in Marketing at the University of Melbourne, Australia. Michal broadly researches in consumption ethics, business ethics, and consumer culture. Her current research focuses on consumption of modern slavery, how Indigenous consumers and producers engage with markets, and the consumption of Celebrity. She has published her work in international journals (e.g. Journal of Business Ethics, Journal of Business Research, Marketing Theory, Journal of Public Policy and Marketing, and European Journal of Marketing), co-authored books, as well as giving invited talks on consumer and marketing ethics. Michal engages with corporate and government stakeholders through research.

***Andreas Chatzidakis***

Andreas Chatzidakis is Professor of Marketing at Royal Holloway University of London. His work focuses on the intersection of consumption with ethics and politics, including projects such as consumer-oriented activism in post 2008 Athens and the role of care and relationality in everyday consumption. He has published in a range of international journals and co-authored various books and edited collections. He is co-editor in chief of Marketing Theory.

***Dierdre Shaw***

Deirdre Shaw is Professor Marketing and Consumer Research at Adam Smith Business School, University of Glasgow. Deirdre has researched and taught in the area of consumption ethics throughout her career, publishing on the subject in a range of international journals (including Psychology and Marketing, Journal of Business Ethics, Marketing Theory, European Journal of Marketing, Business History, British Journal of Management, Work, Employment and Society, Journal of Marketing Management, Sustainable Development), contributing to books and non-academic publications, giving invited talks and supervising PhD researchers in this area.

**Table 1: Informant Details**

|  |  |
| --- | --- |
| **Informant Pseudonym** | **Informant Characteristics** |
| Adaise  *London* | British, Female, 28, Medical Doctor.  Cultural Background: Asian African. |
| Alex  *London* | British, Non-binary Gender, 30, Psychologist.  Cultural Background: English. |
| Alva  *London* | British, Female, 32, PhD Student.  Cultural Background: African. |
| Amaia  *Glasgow* | Spanish, Female, 30, PhD Student.  Cultural Background: Spanish. |
| Andrew  *London* | British, Male, 35, Teacher.  Cultural Background: African. |
| Annabelle  *Blackpool* | British, Female, 56, Civil Servant.  Cultural Background: English. |
| Angus  *Glasgow* | British, Male, 30's, Student.  Cultural Background: Scottish. |
| Annie  *Glasgow* | Swedish, Female, Early 20's, Student.  Cultural Background: Swedish. |
| Belinda  *London* | British, Female, 29, Nurse.  Cultural Background: English. |
| Brian  *Blackpool* | British, Male, 60, Ship Captain.  Cultural Background: English. |
| Caleb  *Blackpool* | British, Male, 31, Taxi Driver  Cultural Background: English. |
| Carl  *London* | British, Male, 26, Butler  Cultural Background: English. |
| Chantel  *Blackpool* | British, Female, 58, Carer.  Cultural Background: English. |
| Claire  *Blackpool* | British, Female, 29, Carer.  Cultural Background: English. |
| Daniel  *Glasgow* | British, Male, Early 40's, Artist  Cultural Background: Scottish. |
| Hannah  *Glasgow* | American, Female, Late 20's, Sewing/Craft  Cultural Background: Caucasian American. |
| Harry  *Blackpool* | British, Male, 29, Wedding Videographer  Cultural Background: English. |
| Helene  *London* | British, Female, 53, Homemaker.  Cultural Background: African. |
| John  *London* | British, Male, 40, Lecturer.  Cultural Background: English. |
| Kristen  *Glasgow* | British, Female, 48, English Language Teacher.  Cultural Background: Turkish. |
| Mark  *London* | British, Male, 29, Teacher.  Cultural Background: English. |
| Mary  *Blackpool* | British, Female, 81, Retired.  Cultural Background: English. |
| Maya  *London* | British, Female, 31, Medical Editor.  Cultural Background: Indian. |
| Melanie  *Blackpool* | British, Female, 62, Retired.  Cultural Background: English. |
| Neil  *Glasgow* | British, Male, 44, Disability Services Manager  Cultural Background: Scottish. |
| Nick  *London,* | British, Male, 29, Statistician.  Cultural Background: English. |
| Peter  *Blackpool* | British, Male, 83, Retired.  Cultural Background: English. |
| Philippa  *London* | British, Female, 41, Gemologist.  Cultural Background: English. |
| Rebecca  *London* | British, Female, 48, Priest.  Cultural Background: African. |
| Ronald  *London* | British, Male, 28, Radiographer.  Cultural Background: African. |
| Sara  *London* | British, Female, 43, Homemaker.  Cultural Background: English. |
| Stephanie  *London* | British, Female, 54, Charity Worker.  Cultural Background: English. |
| Stephen  *Blackpool* | British, Male, 46, Civil Servant.  Cultural Background: English. |
| Stuart  *Glasgow,* | Colombian, Male, 33, Student.  Cultural Background: Colombian. |
| Timmy  *Glasgow* | Greek, Male, Late 30's, Researcher.  Cultural Background: Greek. |
| Tony  *London* | British, Male, 65, Retired (Engineer).  Cultural Background: English. |
| Vicky  *London* | Indian, Female, 28, PhD Student.  Cultural Background: Thai Indian. |
| Vincent  *London* | British, Male, 20, Student.  Cultural Background: African. |
| William  *London* | British, Male, 20, Journalist.  Cultural Background: English. |
| Yasmine  *Glasgow* | British, Female, 28, Retail Worker.  Cultural Background: Bangladeshi. |

1. Anti-Slavery International; https://www.antislavery.org/slavery-today/slavery-in-global-supply-chains/ [↑](#endnote-ref-1)
2. For example, see: <https://b.barnardos.org.uk/internal_trafficking_final_report_aug07.pdf>; <https://nationalcrimeagency.gov.uk/who-we-are/publications/282-national-referral-mechanism-statistics-end-of-year-summary-2018/file> [↑](#endnote-ref-2)