PERCEIVED CORPORATE HYPOCRISY: SCALE DEVELOPMENT IN THE CONTEXT OF US RETAIL EMPLOYEES

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by

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APPROVAL PAGE

The undersigned, appointed by the dean of the Graduate School, have examined the dissertation entitled

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DEFINITION OF KEY TERMS

Latent trait	A characteristic trait that cannot be directly observed or measured (De Ayala, 2009).
Cognitive interview	A questioning technique to obtain factual information about events that otherwise occur very infrequently or in a hidden way that challenges direct observation (Fisher & Geiselman, 1992).
Unidimensionality	An assumption of Item Response Theory (IRT) which states that responses to items (questions) of a scale are manifestations of a single latent trait within a person (De Ayala, 2009)
Local independence	An assumption of IRT that states that "responses to an item are independent of the responses to any other item" at a given level of a latent trait (De Ayala, 2009, p. 20)
Item calibration	This is a "procedure of fitting IRT models to response data collected from a sample and estimating the item parameters using the data" (Zheng, 2014, p. 1)
Item characteristic curve	This is a function that describes the relation between a person's latent trait and their probability of responding in a particular way to a scale item that measures the trait (De Ayala, 2009).

CHAPTER I. INTRODUCTION

Chapter I includes the following sections: (a) background of the study, (b) gaps in the literature, (c) purpose of the study, and (d) significance of the study.

Background of the Study

Corporations could be easily perceived as hypocritical when they claim to be something that they are not (Wagner, Lutz, & Weitz, 2009). In the retail sector, businesses are often wrestling with unethical business practices, and the sector often becomes the subject of media scrutiny for failure to behave responsibly concerning the consumers, well-being of people, human rights, or the environment (Diallo & Lambey-Checchin, 2017). Unethical practices, such as false promotions, bait marketing, false or inaccurate claims, counterfeit products, mislabeling, and privacy infringement for marketing are popular in different retail industries, such as fashion, food, general merchandise, and others (Federal Trade Commission [FTC], 2017; U.S. Census Bureau, n.d.). These offer huge room for potential corporate hypocrisy perceived by both consumers and employees.

False promotion is common in the textile and apparel retailing sub-sector (Tuttle, 2016). For example, in 2012, New Balance (a US footwear manufacturer and retail corporation), and, in 2016, Lord & Taylor (a US luxury products retail corporation) were charged with misleading advertisements, and these companies were subjected to civil penalties and corrective actions per the Federal Trade Commission (FTC, 2016; Hines, 2012). In the food industry, Dannon (a multinational food-products corporation) in 2010, Red Bull GmbH (a multinational energy-drink corporation) in 2014, and Kellogg (a US

multinational food manufacturer and retail corporation) in 2010 and 2013 were charged for false advertising and promotions, and were required to pay legal penalties (Heilpern, 2016). In the automobile industry, Volkswagen (a multinational automobile corporation) was charged for deceptive and false promotions regarding its environmental friendliness, and might need to pay huge legal penalties (Environmental Protection Agency [EPA], 2016). According to Paulins and Hillary (2009), advertising and promotional campaign practices can be important indicators of corporate ethical practices. Again, while advertising tries to assure consumers about the genuineness of their claims (Better Business Bureau, n.d.), a false promotion by the retailer might lead to corporate hypocrisy.

Counterfeit is one of the unethical practices of retail businesses in which fake, unauthorized, and dishonest products are generated to take advantage of stakeholders (Zaczkiewicz, 2016). In the textile and apparel industry, in 2006, Fendi (multinational luxury fashion corporations) won lawsuits against Walmart (a US multinational retail corporation), for its sales of counterfeited goods (Neilson, 2006; Gogoi, 2006). Gucci also won a lawsuit against Guess (multinational luxury fashion corporations) over infringed copyrights in 2012 (Huffington Post, 2012a). In the aforementioned cases, Walmart, Burlington Coat Factory and Guess failed to stand by their promises to offer original products to consumers (Paulins & Hillary, 2009). The problem of counterfeit products in the USA is not restricted to just the textile and apparel industry, and has spread to medicine, electronics, footwear, and personal care products industries of the retail sector (Frohlich, Hess, & Calio, 2014; Zaczkiewicz, 2016). Some people might see

these practices as deliberate attempts by retail businesses to convince their stakeholders of something that they are not actually offering and form corporate hypocrisy.

False and inaccurate claims and mislabeling are other common unethical issues in the retail sector (FTC, n.d.a). In the food industry, in 2010, the U.S. Food and Drug Administration (USDA) warned seventeen retail businesses including General Mills (a US manufacturer and retail brand of consumer goods) and Nestle (a multinational large food corporation) for their misleading claims on their labels and mislabeling (Layton, 2010). In the electronics industry, Samsung Electronics America Inc. (Samsung) (a multinational electronics corporation) was alleged with violation of trade acts when the company knowingly provided inaccurate information regarding their products' country of origin, and had to pay large penalties to resolve the allegations (Justice.gov, 2014). These retail corporations deliberately made claims different than what they actually do or offer, and such contradictory business practices might lead to corporate hypocrisy.

In the above examples of popular unethical practices across the different industries of the retail businesses, we see that the sector might offer room for potential corporate hypocrisy perceived amongst its stakeholders. Some studies surrounding corporate hypocrisy address corporate management strategies to improve corporate communication and reputation among stakeholders by corresponding with corporate economic and philanthropic goals (Cour & Kromann, 2011; Fassin & Buelens, 2011). However, most research tends to focus on how corporate hypocrisy is perceived by consumers, and how corporate hypocrisy impacts consumers' attitudes and trust towards the corporations. For example, Wagner et al. (2009) studied corporate hypocrisy related to corporate social responsibility (CSR) and consumers' perceptions about the firms who

claim CSR. The authors found that when firms do not act upon their standards of CSR as they announced, consumers perceived them as hypocrites. Seeing such discrepancies between CSR standards and executions, the authors proposed and found that corporate hypocrisy negatively affects consumers' beliefs toward CSR. These beliefs were described as consumers' overall assessments of corporations' commitments to their social responsibilities. Additionally, the authors also found that corporate hypocrisy adversely affected consumers' attitudes towards the corporations.

Wagner et al. (2009) also researched CSR-related communication strategies for corporations, and proposed that corporations' sharing of their CSR standards and their acting contradictory to those standards can impact how consumers generate corporate hypocrisy. Additionally, the authors found that if corporations' CSR standards are too abstract in nature, consumers tend to have less corporate hypocrisy because proactive yet vague CSR standards reduce the risk of being inconsistent with the actual behaviors. Finally, Wagner et al. (2009) found that for consumers with prior positive CSR beliefs, introducing an inoculation message (that is, previously exposing consumers to a weaker form of argument about corporations not being socially responsible) prior to corporations' actual irresponsible assertions or actions can make consumers less observant of these contradictions.

Fassin and Buelens (2011) also referred to corporate hypocrisy as an inconsistency between corporations' words and deeds, as proposed by Wagner et al. (2009). The authors explained that, for corporations, the choice to be consistent or inconsistent between their words and deeds is not dichotomous in nature. Instead, corporations operate in a continuum from idealism to cynicism, which eventually

determines the convergence or divergence of corporate words and actions (Fassin & Buelens, 2011). The authors described various reasons, such as the ongoing burden of economic and cultural pressures on business, inconsistencies in management systems, and confusions in communication and semantics, that lead to the dissonance between corporations' words and deeds.

Fassin and Buelens (2011) also described the three drivers of corporate ethical behaviors that can characterize a corporation as a sincere or a hypocritical one. The authors described that the intention of actors being positive or negative, along with the gap between corporate communication and implementation, can determine how corporations can range over a continuum from idealism to sincerity, realism, skepticism, opportunism, hypocrisy, and cynicism. Focusing specifically on hypocrisy, the authors described that when corporations have a gap between their communication and implementation, specifically with negative intentions, corporate hypocrisy could be formed. Fassin and Buelens (2011) suggest that corporations can use this broad continuum to aid their decision making especially for CSR initiatives, as well as for being strategic in their corporate communication.

In addition, Cour and Kromann (2011) discussed that as corporations try to become philanthropic while still maintaining their bottom-line economic responsibilities, corporations might be accused of being hypocritical. The authors described that as corporations try to meet conflicting interests of stakeholders at any given point, corporations might seem to be claiming something but acting differently for stakeholders of opposing interests (Brunsson, 2003; Wagner et al., 2009). The authors described that, given any corporation might have a broad range of audience with opposing interests, CSR

reports and their contents can often lead to corporate hypocrisy amongst stakeholders. After analyzing 50 CSR reports from corporations with large turnovers, the authors found that 96% of those corporations resorted to vague and fuzzy expressions or euphemisms to communicate their philanthropic interests. Therefore, the authors recommended using euphemisms or vague descriptions as a strategic corporate communication tool to protect corporations from hypocrisy judgments. However, the authors also acknowledged that using euphemisms can lead to risky situations in which vague expressions in communication could be interpreted by stakeholders in multiple ways, adding to confusion and the surfacing of hypocrisy.

More recently, Kim, Hur, and Yeo (2015) researched to investigate interrelationships among consumers' trust in corporate brands, their corporate hypocrisy, perceptions about CSR, and corporate reputation. They found that corporate brand trust acts as a mediator between consumers' beliefs about CSR and consumers' overall attitude towards those corporations. While the focus of the study was on the important role of consumer trust toward brand, the authors explained that if consumers perceive corporations as hypocritical, they feel betrayed and form negative attitudes toward the company. Kim, Hur, and Yeo (2015) described that consumers are often not convinced about CSR practices being genuinely motivated by stakeholders' interests, and perceive CSR as motivated by self-interest. Therefore, such CSR perceptions can lead consumers to judge the corporations as hypocritical.

Similarly, Shim and Yang (2016) studied why certain CSR messages tend to generate corporate hypocrisy among consumers and how corporate reputation, consumers' perceptions of CSR efforts, and any corporate crisis might play a role in

corporate hypocrisy generation. These authors also identified corporate hypocrisy as beliefs about firms that claim to be something they are not (Wagner et al., 2009), and described that corporate hypocrisy reflects consumers' ethical judgments about the genuineness of corporations' social endeavors which eventually may also determine the effectiveness of these CSR initiatives. Shim and Yang (2016) found that corporations' bad reputations and a reputation crisis increase corporate hypocrisy amongst consumers, and, in turn, consumers' negative attitudes towards those corporations.

The study found that corporate reputation stands as an important antecedent that may influence consumers' corporate hypocrisy (Shim & Yang, 2016). That is, if businesses suffer from poor reputation already, consumers will more likely be suspicious about CSR efforts, and thus consider the corporation hypocritical. Additionally, Shim and Yang (2016) also stated that if corporations have reputation crises and they frame their CSR around the crisis, corporate hypocrisy amongst consumers increases. Interestingly, authors also found that prior CSR activities had no effect on corporate hypocrisy in consumers' minds.

The review of literature suggests that corporate hypocrisy can be created in consumers', employees', and investors' minds (Goswami & Ha-Brookshire, 2016; Janney & Gove, 2011; Wagner et al., 2009). Such perceptions of corporate hypocrisy can be problematic for the corporations' reputations and even economic performance (Brunsson, 1993b; Cour & Kromann, 2011; Hadadian, Navidi, Digehsara, & Sabet, 2016; Wagner et al, 2009). Given the background discussed above, perceived corporate hypocrisy is an important topic within the retail sector.

Gaps in Literature

Although Wagner et al (2009, p. 79) defined corporate hypocrisy as "the belief that a firm claims to be something that it is not" (Wagner et al., 2009, p. 79), the term hypocrisy is generally used to refer to a "practice of claiming to have higher standards or more noble beliefs than is the case" or "a pretense of having a virtuous character, moral or religious beliefs or principles, etc., that one does not really possess" (Dictionary.com, n.d.). Thus, in working language, hypocrisy usually refers to behavior or practices which might be perceived or judged by people as a characteristic of others. From the same perspective, this study describes corporate hypocrisy as corporations' practices of claiming or pretending to be something which they are not, and therefore, people would perceive CH, or PCH, by experiencing such practices.

Despite the context and vulnerability surrounding PCH that the retail sector may face, most research on PCH has focused only on consumers' and investors' perceptions as part of the businesses' brand management strategies (Janney & Gove, 2011; May Yee & Chee Fei, 2014; Wagner et al., 2009; Shim & Yang, 2015). While research about PCH applied to consumers is important, limited research has been done to investigate PCH amongst employees of corporations (Goswami & Ha-Brookshire, 2016). Employees, being important stakeholders (Delmas, 2001), can also experience PCH when the employers' actions diverge from their assertions.

A recent study of fashion retail employees' experience found that employees seem to experience PCH from their corporations, and such perceptions generate negative feelings towards the companies and affect employees' overall employment intentions (Goswami & Ha-Brookshire, 2016). Given that little research had been done regarding

PCH amongst employees, this study interviewed 16 employees from the US retail industry to reveal that employees can experience PCH both from their supervisors as well as from their corporations. While the authors explored the two possible sources of PCH amongst employees within the U.S. retail environment and its impact on employees' feelings and behavior, there still exists a gap in empirical evaluation of such perceptions.

Given that employees' attitudes and behaviors have important consequences on businesses' overall performance (Chambers, Foulon, Handfield-Jones, Hankin, & Michaels, 1998; Lawler, 1992; Mathieu & Zajac, 1990; Meyer, Allen, & Allen, 1997; Pfeffer, 1994), further investigation of PCH is necessary. Additionally, compared to consumers, employees generally seem to have an insiders' view of their employer corporations' policies and practices. Therefore, their experiences of perceived inconsistencies between corporate policies and executions generating PCH might be different than those experienced by consumers.

Also, as an employee, one might have a different set of obligations and expectations towards their employer corporations in comparison to expectations of consumers (Bal, Cooman, & Mol, 2013). Thus, employees might be more exposed to inconsistent corporate policy execution, and might also have a higher incentive to not quit their jobs, adding to their vulnerability of experiencing PCH. Goswami and Ha-Brookshire (2016) suggested that, compared to consumers' reactions to PCH, such as leaving negative reviews or boycotting brands (Smith, Read, & López-Rodríguez, 2010; Wagner et al., 2009), the consequences of PCH amongst employees could be more severe because employees were found to experience value compromise and visceral physiological responses to hypocritical corporate management.

One of the key reasons why such a gap exists in the literature is the lack of valid measurement items to estimate PCH that employees may experience when facing the employer. The study by Wagner et al. (2009) reported a scale to assess corporate hypocrisy that has been further adopted and adapted in various scholarly works (Kim, Hur, & Yeo, 2015; Shim & Yang, 2015). While such a scale might be a good start for capturing consumers' perspectives, it might not be able to capture the different types of employees' PCH, given that their experience can be different from consumers as explained above. Moreover, a closer analysis indicates that the scale items capture the conceptual definition of PCH only partially, and do not include several critical dimensions of hypocrisy, such as biased evaluations of moral transgressions within corporations, lack of morality or other factors of hypocrisy (Lammers, 2012; Lammers, Stapel, & Galinsky, 2010; Oxford English Dictionary, n.d.; Polman & Ruttan, 2012; Valdesolo & DeStono, 2007; Monnin & Merritt, 2012). Also, the scale seems to ask questions tautologically and self-referentially, so that while this increases the scale's internal consistency and generates strong reliability, such consistency should be avoided (Condon & Revelle, 2014).

In previous literature, researchers have tried to indicate a presence of hypocrisy by measuring differences among people's behaviors and claims in comparable situations through manipulated experiments (Batson, Kobrynowicz, Dinnerstein, Kampf, & Wilson, 1997; Batson, Thompson, & Chen, 2002; Lammers, 2012). While such an approach might have indicated the presence or absence of hypocrisy, such conclusions were either drawn as self-assessments by participants' own dissonance with their self-concepts, or as subjective interpretations of researchers. Given that people are more likely to judge

others than a characteristic of the self (Hale & Pillow, 2015), there seems to be a gap in how to measure the concept objectively and as perceived by others. In the organizational literature, few studies developed scales to measure the concept of organizational hypocrisy (Philippe & Koehler, 2005). While the studies considerably contribute to identifying different contexts or scenarios that form perceptions of hypocrisy, such as perceived management actions, organizational culture, and rewards (*idem*), they do not shed light on double standards or deception as components that PCH may have.

Other studies have tried to measure concepts analogous or related to PCH, such as behavioral integrity, deception, or moral hypocrisy (Batson, Thompson, & Chen, 2002; Simons, 2002; Monnin & Merrit, 2012; Lonnqvist, Irlenbbusch, & Walkowitz, 2014). However, considering that PCH is a complex, multi-faceted concept, which has been debated over time, regarding what elements constitute hypocrisy, by philosophers, psychologists, and organizational experts (Alicke, Gordon, & Rose, 2013), none of those single scales measuring the analogous concept of hypocrisy seem to measure employees' PCH formed toward the employer. Thus, there seems to be a lack of viable scale to estimate PCH amongst employees in the literature.

Purpose of the Study

To fill this gap in the literature, the study was designed to develop and preliminarily validate a scale for measuring PCH. The structure and dimensionality of the PCH scale was examined, and the scale's psychometric properties were assessed to confirm reliability and construct validity. The concept of PCH was discussed as early as 1980 when media published a letter of general interest, criticizing U.S. corporations for keeping immoral business connections and for disregarding ethics in business activities

(Chicago Tribune, 1980). Later, Wagner et al. (2009) revived the concept of PCH in the marketing and management literature by showcasing the cases in which corporations' behaviors contradicted their stated standards, particularly in the context of corporate social responsibility.

Although hypocrisy in research has mostly been applied to individuals, it could also be applied to surrounding organizations or groups (Hamilton & Sherman, 1996; Wagner et al., 2009). That is, a person could form hypocrisy against an organization or a group. Particularly, in U.S. law, a corporation is considered as a "legal person" under the legal concept of corporate personhood (Hess, 2013). Therefore, philosophers believe that a corporation has the same rights and responsibilities that humans bear. Some philosophers believe that corporations are moral agents who have moral expectations and responsibilities (Hess, 2013). In this light, humans may have PCH against corporations if they find that corporations act inconsistently with their own statements and assertions (Ha-Brookshire, 2015).

To meet the purpose of the study, a three-stage approach, namely item generation, item bank development, and psychometric evaluation (Margado et al., 2017; Schwab, 1980), was used. In the first stage, a deductive approach was taken to generate items related to PCH. Several scales and items from literature were used as inspiration to generate an item pool. In the second stage, this set of items and constructs related to PCH were reviewed, assessed, adopted and adapted to ensure that they represented the structure of PCH well, thus to develop the item bank. Finally, in the third stage of psychometric evaluation, the item bank was administered to the target population to assess and provide evidence of the items' psychometric properties, validity, and

reliability. For the first two stages of item generation and item bank development, a qualitative approach was taken via a thorough review of literature, focus group, psychometric expert revisions, and cognitive interviews. For the final stage of psychometric evaluation, a self-reported survey was administered through an online platform to field-test the item bank. With iterative analysis of the item bank, the final PCH scale was developed, which was then tested for association with employees' intention to leave the corporation and their attitude towards the corporation to confirm construct validity.

Significance of the Study

It is important to understand what employees experience, or what they perceive, when they are exposed to their employers' irresponsible or unethical business practices, especially when the employers claim otherwise. Thus, this research studied PCH amongst employees in the US retail sector to develop a reliable and valid scale to measure PCH perceived by employees by learning about various constructs salient for such perceptions.

This study developed a scale to measure PCH amongst employees. The PCH scale itself is completely new. Six out of nine items of the scale are adopted from others' research most of which tried to measure slightly different concepts, such as psychological breach, double standards, etc. With the lack of a viable and holistic scale, the literature mostly studied the presence or absence of hypocrisy using experimental manipulations, and mostly focused on assessment of the concept as self-characteristics. An available scale to measure corporate hypocrisy (Wagner et al., 2009) lacked items to tap into employees' experiences. The scale items from this study thus add to that literature and fill the gap focusing on experiences specifically relevant to employees in their work settings.

This scale may enable the industry to measure employees' PCH, helping them to get a better, in-depth understanding of the issues of concern. Particularly, corporations can use such a scale to understand their image and reputation among their employees, which can then help them to restructure areas of concern for a natural appeal.

Second, this study adds to the literature on employees' PCH and their experiences with employers who may not stand by their assertions and morality. It is one of the few studies that called attention to the fact that employees' experiences and perceptions might be different from those of other stakeholders, and it investigated employees' perceptions related to hypocritical employer behavior. By creating robust measurements of PCH, the findings can help corporations manage employees as they reshape their workplaces to attract and retain the new generation of millennials. More specifically, this can be helpful for the retail sector as the "bad" industry sector (Goswami & Ha-Brookshire, 2016; Williams & Connell, 2010) competes for business. Using the scale, corporations in the retail sector can assess their employees' PCH to address any potential problems that they may experience with employees as well as maintain employees with good perceptions about the corporations.

Third, the study presented the different underlying constructs that are salient for employees' PCH. By identifying constructs and experiences specifically relevant to employees and their PCH, corporations can better focus on those areas of concern and likewise potentially improve their management practices. With the knowledge of double-standards as one important contributor to employees' PCH, employers can now implement consistent standards and ideals regardless of employer or employee status. Similarly, with the knowledge of perceived lack of morality as being one of the most

important contributor to employees' PCH, corporations can now take extra care to focus on their ethical practices, values, and morality. Given that millennial employees value such aspects of their jobs beyond just regular financial compensation (Solomon, 2014), such simple but important business strategies can thus help corporations to create more favorable perceptions among their employees and avoid any potential PCH.

Overall, the study proposed that, by developing a scale to measure PCH amongst employees and by identifying and gaining a better understanding of the different underlying constructs of PCH, retail corporations might be able to use this scale when developing their management strategies, practices, policies, and decisions to improve their work environment and provide better employment experiences to their employees.

CHAPTER II. LITERATURE REVIEW

The literature review section includes the following: (a) theoretical frameworks of the study, and (b) item generation for PCH and conceptual model.

Theoretical Frameworks for the Study

Two grand theories are used to develop appropriate scales to measure employees' PCH: (a) theory of organizational culture and (b) theories of action.

Theory of organizational culture

Key tenants of the theory. The theory of organizational culture was proposed by Allaire and Firsirotu (1984). The theory finds its roots in various concepts of cultural anthropology and describes the implicit and explicit concepts of culture in the management and organizational literature (Allaire & Firsirotu, 1984). According to the authors, the theory of organizational culture states that there are three interrelated components, namely a sociocultural system, cultural system, and individual actors, which together constitute the organizational culture. Although the notion of organizational culture has been gaining popularity since the 1970s, it was in 1984 that Allaire and Firsirotu described organizations as having their own values and beliefs, nurtured legends, myths and stories, rituals, and ceremonies as their cultural properties. Since then, researchers have used this theory as a tool to interpret organizational life and behaviors, and to understand the process of radical changes, failures, and adaptations of organizations.

A sociocultural system, the first component of organizational culture, is composed of organizations' formal structures, strategies, management processes and policies, and

different components to support organizations' reality and functioning (Allaire & Firsirotu, 1984). Therefore, the authors explained that an organization's sociocultural system is represented by a variety of organizational behaviors, such as an organization's formal goals; authority and power structure; control mechanisms; reward and motivation system; procedures to recruit, select and educate employees; and other kinds of management practices. Therefore, the theory suggests that the organizational structures, strategies, processes, and policies are generated and impacted by organizational values and beliefs, based on the time, place and circumstances in which an organization functions. At the same time, the theory also acknowledges that the sociocultural system is influenced by the needs and preferences of its members.

The cultural system, the second dimension of organizational culture, consists of shared meanings and symbols, such as myths, ideologies, values, and multiple cultural artifacts, which demonstrate the expressive and affective aspects of an organization (Allaire & Firsirotu, 1984). The theory suggests that such a cultural system is influenced by the history of the organization, its dominant actors, and the surrounding society. Myths refer to the stories and narratives concerning organizational transformations and a glorified past, which can often be found in an organization's present actions in symbolic terms (Allaire & Firsirotu, 1984). Ideology can be described as an organization's accepted system of beliefs that may confirm or deny social realities, and thus influence the organization's collective action to establish their ideological goals (Allaire & Firsirotu, 1984). Values are symbolic representations of meanings of social actions and standards of social behaviors, and form the constitutive element of ideologies (Allaire & Firsirotu, 1984). According to the authors, an organization's cultural system may not

always have myths and ideologies, but it will always foster their distinctive set of values and symbolic artifacts.

Finally, Allaire and Firsirotu (1984) describe that the individual actors, with their experiences, personalities, characteristic features, leadership roles, and status, also contribute to the organizational culture. The authors describe that, although different members within an organization might have different interpretations of the cultural system and its symbols, over time such interpretations might start converging into similar shared meanings, adding to the organizational culture.

Along the same lines, another significant work related to organizational culture is by Schein (1985). The author describes culture as a pattern learned over a period of time, and therefore, defined culture as

> The pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to these problems (Schein, 1985, p. 9).

In other words, culture is a pattern of shared beliefs and assumptions that enable its actors/employees to behave in certain ways and understand organizational functioning. Schein (1985) referred to three levels, namely observable artifacts, values, and basic underlying assumptions, at which organizational culture is manifested.

Schein's (1985) work on organizational culture conceptually matches up with Allaire and Firsirotu (1984)'s theory, but takes a clinical approach to analyzing and

deciphering culture at various levels within an organization. Artifacts refer to the visible, tangible structures, processes, and behaviors (Schein, 1985). Values refer to the ideals, goals, ideologies, and standards intrinsic within an organization, and finally, assumptions are described as the basic, unconscious beliefs (Schein, 1985). According to the author, an analysis of these three levels sequentially within an organization can guide one to deciphering its culture.

According to the theory of organizational culture, the sociocultural and cultural systems of organizational culture are often in complex relationships. Ideally, the cultural system, with its myths, ideologies, and values, evolves over a period of time, and conforms to the structures, strategies, processes, and policies of the sociocultural system (Allaire & Firsirotu, 1984). This, in turn, supports and reinforces the cultural system, thus leading to a harmonious existence, according to the theory. For example, an organization's strong ethical values (cultural system) can be established through strategies of community development (sociocultural system), which in turn further upholds and supports the organization's ethical commitment (cultural system). However, the theory also shows that organizations are often exposed to uncertainties and random changes in the environment that disrupt the harmonious relationship. Although the organization's sociocultural system might be molded to accommodate the uncertainties, its cultural system is developed over time and cannot be adapted immediately, thus leading the two systems into a state of dissonance (Allaire & Firsirotu, 1984).

Additionally, researchers also suggest the existence of different 'sub-cultures' emerging from different groups or departments within an organizational culture, such that there might be a multiplicity of notions and even conflicting goals, values, and beliefs

(Martin, 1985; Sackmann, 1992). According to Brunsson (2002), such organizations with heterogeneous and conflicting values might create organizational hypocritical behaviors in order to achieve a balance between what is said, what is decided, and what is eventually practiced.

Application of theory of organizational culture in literature. Several studies investigated the theory of organizational culture to predict successful organizational performance. Marcoulides and Heck (1993) found that various components of organizational culture predict organizational performance differentially. Barney (1986) referred to organizational culture as a possible source for sustained competitive advantage and improved financial performance if the cultures are valuable, rare, and imperfectly imitable. Kotter and Heskett (1992) found that strength and the content of organizational culture are important contributors to a high level of financial performance. Particularly, Ahmed (1998), McLean (2005), van der Panne, Beers, and Kleinknecht (2003), Khazanchi, Lewis, and Boyer (2006), Laforet (2008) found that organizational culture is a key determinant of its successful innovational performance. Dale and Cooper (1992) and Stock, McFadden, and Gowen (2007) found that an analysis of organizational culture helps in determining different types of quality performance of organizations. Thus, researchers recommend organizational management focusing on analyzing their specific organizational culture and in turn improving their preferred area of organizational performance with strategic management of those components.

The theory of organizational culture has also found its popularity in the marketing literature. Different studies indicated that corporate culture is an important predictor of corporate reputation and identity, and helps create a competitive strategic advantage for

such organizations (Fombrun & Shanley, 1990; Flatt & Kowalczyk, 2000; Dukerich & Carter, 2000; Alsop, 2004; Kowalczyk, 2009). Carmeli (2004) found that organizational culture interacts with its communication and workplace environment to help predict the organization's external prestige and reputation. Strong cultures with shared core values, beliefs, norms, organizational goals, and a sense of mission increase consensus among employees, which also improves corporate reputation (Fombrun, 1996; Ravasi & Schultz, 2006). Flatt and Kowalczyk (2008) found that organizations with strong cultures help employees to better understand and validate their perceptions of corporate identity. Thus, researchers recommend that marketers maintain the high level of strength of organizational culture for ideal corporate reputation and identity.

Furthermore, studies have been done to identify the relationship between organizational culture and employees. O'Reilly, Chatman, and Cladwell (1991) found that a fit or congruence between an employee's preference of organizational culture and the actual culture of the employer organization can increase an employee's commitment and satisfaction, and reduce turnover. Researchers studied different kinds of organizational cultures and found differences in the impact of various types of organizational cultures on employees' job satisfaction and organizational commitment levels. Sheridan (1992) found that organizational culture emphasizing interpersonal relationship values was more effective in retaining employees compared to that emphasizing work task values. Others found that a bureaucratic organizational culture leads to low job satisfaction and commitment amongst employees compared to innovative and supportive organizational cultures (Brewer, 1994; Brewer & Clippard, 2002; Kratrina, 1990; Lok & Crawford, 2001; Silverthorne, 2004).

At the same time, other researchers found that different types of organizational cultures combined with appropriate leadership roles can improve employees' performances (Harris & Ogbonna, 2001; Hickman & Silva, 1984; Lim, 1995). Schein (1990) indicated that leaders (organizational founders and professional managers) play important roles in creating and embedding elements of organizational culture. Other researchers reported that leaders with their personality characteristics and actions can influence the organizational culture, and this particularly helps when organizations undergo changes (Kavanagh & Ashkanasy, 2006). Yet other researchers found that organizational culture has an impact on the emergence of specific leadership styles (Pillia & Meindi, 1998; Sharma & Sharma, 2010). Thus, leaders hold an important role in designing the organizational culture and vice-versa, and such relationships influence employees' experiences within an organization.

Thus, per the theory of organizational culture, a harmonious balance between its sociocultural system, cultural system, and its individual actors can lead to strong organizational cultures. When an organization's structures, policies, and formal strategies align with its shared and accepted beliefs over time, with the individual actors interacting between these two systems, a strong culture permeates within an organization (Allaire & Firsirotu, 1984). Conversely, when an organization's sociocultural system, cultural system, and its individual actors stand in dissonance with each other, or those of one sub-culture conflicts with the other one, the organizational culture system gets weakened. Most importantly, PCH may emerge from such dissonance, which may negatively impact employee performance, their association with the organization, and the overall organization performance. Therefore, knowing how organizational culture is formed and

how PCH could be potentially created within such organizational culture would be important.

Theories of Action

While the theory of organization culture offers a grand framework to explain complex organizational life and behaviors, the process of organizational changes, and failures via its different elements, the theory does not explain the psychology behind behaviors, how behaviors may interact toward change, and how such changes can facilitate the evolution of organizational learning. The theories of actions (Argyris & Schon, 1974) help us to explain such practices and interactions.

Theories of action specifically explain the discrepancy between one's belief and behavior, which could be potentially associated with corporate hypocrisy (Argyris & Schon, 1974). Theories of action were developed to explain the structures and processes of conscious and unconscious reasoning in both human and organizational actions (Dick & Dalmau, 1990). According to Argyris and Schon (1974), entities are designers of their own actions in which they form mental maps, or theories, for their actions. Yet, these mental theories can be different from those that people explicitly espouse (Argyris & Schon, 1974). Although the notion of the theories of action could be found in early studies of individuals' and organizations' relationships (Argyris, 1957, 1962, 1964), it was in 1974 that Argyris and Schon proposed the theories of action formally to describe how people plan, implement, and review their actions.

Espoused theory and Theory in use. There are two key components of theories of actions, the espoused theories and the theories-in-use. Espoused theories are the theories that one "claims to follow" explicitly (Argyris, Putnam, Smith, 1985, p. 82). In

other words, these are the theories, often reflected by values or views, one believes his or her behaviors are based on and how one would like others to think about him or her. On the other hand, theories-in-use are the governing theories that support one's action and eventually what is manifested in one's behaviors (Argyris & Schon, 1974).

The theories of action are applicable to not only individuals but at the organizational level as well (Argyris & Schon, 1978). A review of literature shows that studies have used the same theories of action to explain organizational learning and to analyze organizational transformations (Daft &Weick, 1984; Baskerville & Wood-Harper, 1998). For example, formal corporate documents, such as organizational charts, job descriptions, and/or policy statements, state what the organization wants to communicate and how it wants to be heard (Argyris & Schon, 1978). Argyris and Schon (1974) describe that, when asked about one's behavior in a certain situation, an organization communicates about its espoused theories. On the other hand, theories-in-use are the governing theories that support an organization's action (Argyris & Schon, 1974). That is, these are the implicit mental maps that an organization uses to perform its actions, typically based on its worldly views and values. The theories-in-use ultimately construct what one observes as an actual behavior of an organization (Argyris & Schon, 1978). These theories-in-use can be discovered in organizational practice exhibited by the rule-governed behavior of individual actors. Interestingly, the authors showed that an organization might have both of the theories of action. That is, although the organization gives allegiance to the espoused theories, it is the theories-in-use that govern its actions.

Argyris (1980) described that a congruence between these two types of theories of action often influences the effectiveness of action. While the two types of theories of

action imply differences between what an organization says and what it does, Argyris and Schon (1974) explained that the discrepancy is not necessarily between the words and actions, but rather exists in the governing theories behind what it espouses and what it enacts as practices and via its individual actors. That is, when espoused theories and the theories-in-use are incompatible with each other, the theories-in-use ultimately determine organizations' actions (Greenwood, 1992).

According to Argyris and Schon (1974), an organization is aware of its espoused theories since those are explicitly communicated; however, the theories-in-use are often tacit in nature given that these are the continuing practices of an organization as well as individual actors' self-constructed images of the organization. The authors describe that one is often unaware of theories-in-use due to the implicit nature of these governing theories within an organization. To explain how theories-in-use contradict the espoused theories, the authors further analyzed the theories-in-use, accounting for governing variables, action strategies, and consequences of actions. In their study, governing variables are defined as the values that organizations try to uphold within the acceptable range (Argyris & Schon, 1974). An organization might operate under several governing variables, which determine its actions and situations (Argyris, Putnam, & Smith, 1985). Action strategies are defined as initiatives taken to keep the governing variables within the acceptable range and to satisfy these sought values (Argyris & Schon, 1974). Finally, the authors describe consequences as the outcomes generated as a result of the actions taken, and such consequences can be intended or unintended, which may satisfy or conflict with the governing variables respectively. As governing variables help in designing an organization's action strategies, such actions and situations can in return

make an impact on such variables (Argyris, Putnam, & Smith, 1985). Therefore, an organization's multiple governing values might experience a conflict or might be compromised under different actions and situations. Similarly, the consequences, depending on intended or unintended types, can also have an impact on an organization's action strategies or its governing variables (*idem*).

A match between the consequences and expected results is when a theory-in-use is confirmed with the espoused theory (Argyris & Schon, 1974). Argyris, Putnam, and Smith (1985) suggested that if the consequence is not the same as intended, it indicates incongruence between actions strategies and the governing variables. The authors continue to describe that, when such incongruence arises, there can be two possible organizational responses to reduce the mismatch. First, the organization can try to search for another action strategy that can match the governing variables. In such a response, it is only the actions that are being changed to conform to predominant values; therefore, no adjustment is necessary to the organizational values themselves. Such a response system is called single-loop learning. Another way to reduce the mismatch is to consider changing the governing variables to avoid any mismatch. In this response system, also known as double-loop learning, an organization changes both its governing values as well as the action strategy. According to Argyris (1974), double-loop learning is a better way for an organization to make informed decisions about its behaviors.

Argyris and Schon (1974) suggested that there are two models to explain organizations' actions grounded by their theories-in-use, namely Model I and Model II. The authors described that if organizations' theories-in-use belong to the Model I group, and such organizations experience a mismatch between the governing variables and their

action strategies, they restrict themselves in single-loop learning and become defensive to protect the governing principles. On the other hand, if organizations' theories-in-use belong to the Model II group, and such organizations experience a mismatch between the governing variables and action strategies, they enhance double-loop learning by changing their governing principles.

While the above organizational responses and models describe an organization's readiness to learn and evolve, the incongruence between its espoused theories and theories-in-use can be related to perceptions of hypocrisy (Argyris & Schon, 1974). The disconnection between organizational espoused beliefs, values, principles, or given allegiance to these in communication and actual organizational behavior reflect the gap between what organizations say and what they do, developing perceptions of hypocrisy among observers (Argyris & Schon, 1974; Philippe & Koehler, 2005). Studies show that hypocrisy developed by inconsistencies between espoused theories and theories-in-use can reduce organizational members' interest in their existing jobs, increase anxiety and an incomprehensibility regarding their work environment, and turnover intentions (Greenberger, Strasser, Cummings, & Dunham, 1989; Kouzes & Posner, 2011). Therefore, understanding how organizations design their behaviors, how such plans and behaviors can be explained by the theories of action, and how PCH could be potentially created due to gaps between espoused and used theories would be important for scale development.

Item Generation

The review of the two theories, the theory of organizational culture and the theories of action, suggest two major levels where employees may form PCH, as

indicated in literature (Goswami & Ha-Brookshire, 2016): (a) at the system or organizational level, and (b) at the individual actor or member level. At the system level, a lack of perceived morality within the cultural system and psychological contract breach within the sociocultural system of corporate culture might be the salient constructs for PCH. At the individual level, double standards of individual actors within a corporate culture and value-behavior gaps manifested by corporate members through their theories of action might be the constructs for PCH. This section describes these four constructs at the system and individual level, and how these constructs are salient for PCH. Items measuring these four constructs, as relevant for measuring PCH, were then used to generate an initial item pool of 145 items.

PCH dimension at the Organizational Level

Perceived lack of morality. Perceived morality coincides with the cultural system of the organization culture theory. Given that the cultural system refers to shared meanings and symbols, such as myths, ideologies, values, and multiple cultural artifacts, which demonstrate the expressive and affective aspects of an organization, morality perceived by the employees can be influenced by the history of the organization, its dominant actors, or even the surrounding society (Allaire & Firsirotu, 1984). In this light, perceived lack of morality could be a key aspect of PCH, which constitutes the cultural system of the corporate culture.

Hypocrisy, as described as an enactment or enthusiastic pretension of morality with the intention to appear moral to others and gain self-benefits, indicates the presence of an aspect of morality or commitment to morality (Batson, Kobrynowicz, Dinnerstein, Kampf, & Wilson, 1997, p.1335; Batson, Thompson, Seuferling, Whitney, & Strongman,

1999; Batson, Thompson, & Chen, 2002). Monnin and Merrit (2012) described that although literature presents considerable scholarly works written specifically in reference to moral hypocrisy, moral hypocrisy is redundant terminology given that hypocrisy by definition suggests virtues or morality. Therefore, hypocrisy inherently includes morality issues. Lonnqvist, Irlenbbusch, and Walkowitz (2014) studied hypocrisy to understand whether hypocrisy is motivated by conscious impression management or unconscious self-deception, and described the importance of different morality values, and one's commitment to them, for explaining hypocrisy motivation.

Adding to the literature on hypocrisy, McKinnon (1991) described that people judge others as hypocrites and get annoyed with such perceptions because actors announce good intentions that contradict their professed bad intentions. However, the author further explained that it is the actor's use of pretentious morality, to conform to perceivers' standards and judgments of a morality system, that makes the perceivers more repulsed by one's hypocrisy. The actor doesn't simply deny or challenge the standards of morality of their perceivers, but instead manipulates their actions to make perceivers judge him or her favorably. In this process, the actor undermines the morality that perceivers hold in high standards. Additionally, the fact that an actor is not necessarily self-deceived in the process and is rather conscious of being judged for his or her contradictory or immoral values adds motive to their behaviors, which are then strongly judged as hypocritical (McKinnon, 1991).

In addition, Szabados and Soifer (1999) described that while disparity or conflict is a core of hypocrisy, such disparity must indicate the expression of, or claim to, some moral values to generate hypocrisy. The study described that, although inconsistencies

between words and actions, fake beliefs and genuine beliefs, or beliefs and desires exist to develop hypocrisy, such inconsistencies need to have moral conflicts. The authors further elaborated that it is the moral commitment and intentions that presumably differentiate between one being judged as hypocritical or perceived as someone who merely forgot to act on their words.

Reidenbach and Robin (1990) conducted a study to develop an improved scale for evaluating business ethics, and used different multidimensional scales of various normative moral philosophies as part of their initial scale development procedures. These normative scales, identifying the key concepts associated with different morality principles, generated a pool of 33 items that was further modified and streamlined by Reidenbach and Robin (1990) to generate a total of eight items. The initial 33 items were extracted from the moral philosophies of relativism, justice, egoism, utilitarianism, and deontology with a review of literature (Reidenbach & Robin, 1990), and were measured across different anchors on seven-point scales. The final condensed and streamlined eight items, as developed by Reidenbach and Robin (1990), were measured on five-point Likert scales and were reported to have scale reliability ranging from .71 to .92 under different scenarios created in the study. Both the initial item pool of 33 items, as well as the final eight items, were used as inspiration items in this study and included in Appendix A as tentative items to measure one's morality.

Moral practices and commitment to morality have been well studied in reference to integrity, a concept opposite to hypocrisy (Simons, 2002). Particularly applied to the management and leadership literature, different studies have discussed the importance of perceived ethics and morality of leaders amongst employees to determine the leaders'

integrity. Craig and Gustafson (1998) highlighted the enactment of moral behaviors in leaders' practices as crucial to how employees perceive their leaders. Similarly, Parry and Thompson (2002) highlighted the importance of ethical standards in overall business practices, and stated that a specific commitment to moral behavior among leaders, above and beyond legal mandates, impact employees' perceptions of such managers as effective leaders. Yet other studies described integrity as associated with behaviors better than expected ethical or moral behaviors, and not just with a presence or absence of unethical or immoral behavior (Palanski & Yammarino, 2007).

Other studies emphasized that perception of leaders' integrity is contingent upon both the judgments of leaders' morality and the consistency or commitment to such moral values over time (Dunn, 2009; Moorman et al., 2012). The studies further described that it is the commitment or consistency that helps perceivers to identify their leaders' integrity more so than regular moral behaviors. While integrity is often related to various moral or ethical behaviors, such as (Den Hartog, Schippers, & Koopman, 2002; Peterson & Seligman, 2004), trustworthiness (Baccili, 2001; Den Hartog, Schippers, & Koopman, 2002), justice (Baccili, 2001; Bews & Rossouw, 2002; Den Hartog, Schippers, & Koopman, 2002), respect (Baccili, 2001), openness (Baccili, 2001; Koehn, 2005; Peterson & Seligman, 2004) or empathy and compassion (Koehn, 2005; Lowe et al., 2004), the overall idea continues to be same: based on leaders' moral practices and commitment to such practices, employees determine leaders' integrity or hypocrisy within a corporate setting. Drawing from the inference that hypocrisy is conceptually opposite to integrity, one can expect that a similar commitment and adherence to morality among managers and leaders within corporations will also determine employees' PCH.

In this light, some studies have further focused on the moral or ethical realm of practices to determine which values or standards are used by employees while they perceive their leaders' integrity. Some authors have suggested that such perceptions amongst employees are often marred by their subjective standards of morality (Lowe et al., 2004; Mayer et al., 1995). In contrast, Craig and Gustafson (1998) developed this integrity scale on a rule-based utilitarian approach (Bentham, 1970) and explained that the consequences produced by any practice help in determining the practice to be a moral or immoral one. The authors labeled a practice as morally wrong or unethical if such practices contradicted the various explicit and implicit rules followed by all within an organization, and explained that a leader's perceived commitment to such moral or immoral practices influence how employees judge their integrity. Similarly, Burton, Dunn, and Goldsby (2006) recommended a pluralism theory-driven approach to determine what constitutes moral values. The authors included different principles, such as utilitarianism, right-based, virtue, and others, to position their moral values among these differing principles that are still universally held. Thus, considering the role of moral values critical to hypocrisy, it is proposed that an employer's lack of morality, as perceived by employees, is a dimension of PCH.

Moorman, Darnold, & Priesemuth (2013) discussed leaders' moral values and employees' perceptions about leaders' morality in their study of perceived leader integrity and the fundamental characteristics of effective leaders. The authors proposed that perceived integrity of leaders is a three-dimensional concept, with the degree of leaders' perceived morality as one of the important dimensions. This study used Burton et al.'s (2006) framework of different principles and developed a scale of six items to

measure leaders' perceived moral behavior. The authors measured these items on a five-point Likert scale, and found that all six items for this perceived morality dimension had high factor loadings to explain leaders' integrity. The six items from this scale were used as inspiration items to be adopted and adapted for measuring PCH in this study, and were included in Appendix A this study.

Proposition 1: Perceived lack of morality will be salient to PCH.

Psychological contract breach. Psychological contract breach represents the sociocultural system of the organizational culture theory. Given that the sociocultural system refers to organizations' formal structures, strategies, reward and motivation system, procedures to recruit, job descriptions, management processes, and policies, psychological contract breach can be influenced by the needs and preferences of their members (Allaire & Firsirotu, 1984). Therefore, a breach in the employees' psychological contract can be an important factor in assessing PCH.

Psychological contract is defined as "an individual's beliefs regarding the terms and conditions of a reciprocal exchange agreement between that person and another party" (Rousseau & McLean Parks, 1993, p. 19). In other words, these are employees' perceptions of what their employers owe them in exchange for their employment and service generated. Many scholars have noted the importance of psychological contract in organizational and management studies. Although Argyris (1960), Levinson (1962), and Schein (1980) originally defined this construct, their definition focused on the subjective nature of employee-organization relationships. The current definition, where one perceives his or her employer as having promised implicitly and explicitly and therefore

believes their employer to have obligations to fulfill such promises and to provide the employees what they are entitled to receive, has been accepted and used in the literature over time (Robinson, 1996; Simons, 2002).

The construct of psychological contract and its breach have often been studied in contexts of leadership (Palanski & Yammarino, 2007), organizational changes (Robinson, 1996), and leaders' integrity (Simons, 2002; Simons et al., 2007). If employees perceive their employers as having failed to fulfill their promised obligations, such as perceived promises about salary, promotions, performance based remunerations, assurance of job security, authoritative position and associated responsibilities, training, and professional development opportunities, employees will then experience a breach of their psychological contract, thus questioning leaders' or employers' integrity (Robinson, 1996; Simons, 2002). That is, a breach of psychological contract is interpreted as an inconsistency between employers' words of promises and actions, which undermines employees' perceptions of their employers' integrity. Because a lack of integrity has been described as analogous to perceptions of hypocrisy (Simons, 2002; Simons et al., 2007; Greenbaum, Mawritz & Piccolo, 2015), a breach of psychological contract can thus be considered as imperative to employees' perceptions of hypocrisy in their employers.

Greenbaum, Mawritz, and Piccolo (2015) studied leader hypocrisy as a perceived pattern of word-deed misalignment to find how such hypocrisy perceptions can mediate the interactive effect of managers' undermining behaviors and employees' interpersonal justice expectations to affect employees' turnover intentions as an outcome. In their study, the authors explained supervisors' undermining behaviors, such as belittling employees and their ideas, spreading rumors about employees, talking badly about them,

or making employees feel incompetent (Duffy et al., 2002). When contradicting supervisors' perceived expectations of fair interpersonal treatment, subordinate employees will view word-deed misalignment or hypocrisy in their supervisors. However, Greenbaum, Mawritz, and Piccolo (2015) controlled for employees' psychological contracts breach describing this construct as very similar to leader hypocrisy. The authors argued that, in prior literature (Simon et al., 2007), psychological construct was not accounted for in the estimation of employees' perceptions of their managers' behavioral integrity. Since Greenbaum, Mawritz, and Piccolo (2015) agreed leader hypocrisy to be analogous to being an antonym of managers' behavioral integrity, they identified psychological contract breach as a key conceptual component of leader hypocrisy.

However, it is important to note that although psychological contract breach can be interpreted as word-deed misalignment in general (Robinson, 1996), the perceived adherence to one's psychological contracts by his or her managers is a very subjective experience (Simons 2002; Simons et al., 2007). In other words, employees' psychological contracts are beliefs that exclusively focus on implicit and explicit promises made to *them*, and employees make judgments only when word-deed misalignment directly affects their own wellbeing (Robinson, 1996; Simons 2002; Simons et al., 2007). Psychological contract does not consider what *other* employees' beliefs are, and does not consider the impact of employers' treatment of *others* (Simons, 2002). In this light, psychological contract breach can be considered as an important aspect of PCH.

The construct of psychological contract has been extensively studied over time to formulate different types of measurement scales with no single agreed-upon measure

(Freese & Schalk, 2008; Rousseau & Tijoriwala, 1998; Conway & Briner, 2005). Considering that there are a variety of measures to estimate psychological contract and its breach, this section discusses some of the prominent scales that have been popularly used in literature (Chrobot-Mason, 2003; Robinson, 1996; Robinson & Morrison, 2000; Robinson & Rousseau, 1994).

Robinson (1996) did a longitudinal study for two and a half years to examine the relationships between employees' experiences of psychological contract breach and their trust in their employers. In this study, Robinson (1996) measured participants' perceptions of their psychological contract breach around seven obligations, namely promotion and advancement, high pay, pay based on current level of performance, training, long-term job security, career development, and sufficient power and responsibility. Robinson (1996), in his first survey, asked his participants about the extent to which they believe their employers to be obligated to maintaining their promises. This scale was measured on a five-point Likert scale anchored across "not at all obligated" to very high obligated". After 18 months with a second survey, the author measured participants' perceptions of to what extent their employers have fulfilled those obligations. This scale's items were also measured on a five-point Likert scale anchored across "not at all fulfilled" to "very well fulfilled". The scale was reported to have a reliability of .78 Cronbach's alpha. A difference between the two scores indicated a range of psychological contract breach in which the higher the difference, the higher the perceived breach. This scale thus captured the psychological contract breach as an aggregate of perceived fulfillment and perceived breach.

Robinson and Morrison (2000) examined the factors that impact employees' perceptions of their psychological contract breach and how such perceptions might cause those employees to experience feelings of contract violation. The authors attributed the violation of a psychological contract to employer reneging, organization-employee incongruence in understanding, and employee vigilance. To estimate the construct, the authors used a global measure assessing employees' perceptions of how well their employer organizations have fulfilled their psychological contracts. The scale contained five items measured on a five-point Likert scale anchored across "strongly disagree" to "strongly agree", and had a statistical reliability of .92.

Tekleab and Taylor (2003) studied the psychological contract with a special focus on the reciprocal obligations in the employer-employee relationship. The authors assessed both employees' as well as employers' levels of agreement on the reciprocal and mutual obligations according to employee and employer perceived psychological contracts to study consequential effect on both parties' perceptions of contract violations. This study thus used measures to estimate employees' obligations to the organization as well as organizational obligations to the employees, using an employee survey and a manager survey. To estimate the organizational obligations to the employees, i.e., employees' perceived psychological contracts, each participant was asked to answer three items similar to those in Robinson and Rousseau's (1994) study. Items were measured on a five-point Likert scale anchored across 'strongly disagree' and 'strongly agree', and had coefficient alpha of .92 reported in the employee survey.

Chrobot-Mason (2003) studied the psychological contract as perceived by minority employees regarding diversity and how breach of contract affected employees'

job satisfaction, commitment, and cynicism. Similar to Robinson's (1996) research, this study also measured the construct around five obligation items borrowed from the literature, namely, support with personal problems, high pay based on performance, training, long-term job security, career development, and sufficient power and responsibility. Next, Chrobot-Mason (2003) included two items in his scale to estimate the extent participants perceived those obligations as important and meaningful. These scale items were also measured on a five-point Likert scale for every obligation item enlisted in the first section. Finally, one single item was asked to measure participants' overall perceptions of contract breach or fulfillment, and was measured on a dichotomous scale borrowed from Robinson and Rousseau (1994).

All the above scales have been popularly used by various other studies researching psychological contract breach in the literature (Greenbaum, Mawritz, & Piccolo, 2015; Maclean, Litzky, & Holderness Jr., 2015; Moorman, Darnold, & Priesemuth, 2013). Thus, different studies have taken different approaches to estimate the concept of psychological contract and its breach, fulfillment, and violation. Keeping to the purpose of this study, i.e., considering the underlying factors which might contribute to PCH amongst employees, a perception of psychological contract breach might be expected to develop PCH. As a corporation fails to meet one or more obligations as perceived by employees to be implicitly or explicitly promised, employees might perceive such breaches as hypocrisy in the corporation's failure to deliver on their own promises. Therefore, it is proposed that employees' psychological contract breach is a dimension of PCH perceived by employees, and the various scale items discussed above

were added as inspiration items to the item bank for adoption and adaption in this study (see Appendix A).

Proposition 2: Employees' psychological contract breach by their employers will be salient to PCH.

PCH Dimension at the Individual Level

Double standards. The construct of double standards represents the individual actor dimension of the theory of organizational culture. Given that individual actors, with their experiences, characteristic features, and status contribute to the organizational culture (Allaire & Firsirotu, 1984), one's double standards of judgments for him/herself and for others can be influenced by people's personalities or leadership roles. Therefore, one's double standards could be salient in assessing PCH.

Valdesolo and DeStono (2007, p. 689) introduced "an equally unsettling, and perhaps more socially relevant type of hypocrisy (…) an interpersonal phenomenon whereby individuals' evaluations of their own moral transgressions differ substantially from their evaluations of the same transgressions enacted by others." In this expression, hypocrisy is believed to be formed when one holds different standards of judgments for him/herself than for others. It refers to the perceptions when a discrepancy exists between how one believes others should behave in a given situation and how they themselves actually behave in the same or similar situation.

Different from the previous dimension, which focuses on participants' hypocritical behaviors in themselves, the double standard dimension points out the difference between participants' judgment on others' behaviors and themselves. To

measure this construct, Valdesolo and DeStono (2007) used a target question of "how fairly did you (the subject) act?" on a 7-point scale to measure how one might be less critical of one's own transgressions compared to others' transgressions. In fact, the above study found that people tend to hold different levels of moral standards for themselves compared to others, such that they tended to be more lenient towards themselves. According to Valdesolo and DeStono (2007), this gap creates hypocrisy in the observers' minds.

Following the ongoing studies about hypocrisy, Monnin and Merritt (2012) referred to hypocrisy as "false appearance of virtue" (Monnin & Merritt, 2012, p. 5), and claimed that it is also the bad motives geared toward peoples' self-serving benefits that lead to hypocrisy in the observers' minds. These researchers suggested strategic demoralization as a reason for double standard practices in that people might rationalize and justify their selfish benefits as an appropriate approach, so therefore, a pretention of following their virtues is appropriate (Monnin & Merritt, 2012). Again, this pretention could form hypocrisy in the observers' minds.

In 2010, Lammers, Stapel, and Galinsky conducted a study to investigate whether peoples' power influences their hypocritical behaviors. In three of their experiments in the study, the authors regarded hypocrisy as manifestations of double standards for moral transgressions. However, instead of using specific scale items to measure this hypocrisy formed through the discrepancy in consistent standards, the authors compared participants' judgments of their own behaviors with judgments of others' behaviors on comparable scales. Any difference between these two measures was identified by the authors as hypocrisy. The authors assigned participants to two groups, namely others'-

transgression and own-transgression, and asked them to rate how acceptable it would be for others/themselves to engage in immoral behaviors such as cheating, speeding, and stealing. Each of these conditions was presented to participants as hypothetical narratives, and participants were randomly assigned to these cases. Responses were measured on 9-point scales with a scale reliability of .92.

Along the same lines, Polman and Ruttan (2012) conducted another study to further examine the effect of specific emotions, such as anger, guilt, and envy, on hypocritical judgments. These authors estimated the gap between acceptability and appropriateness of moral transgressions when performed by oneself and when performed by others. This study, too, placed its participants in a randomized between-participant experiment and compared participants' responses to find the difference in order to measure hypocrisy of double standards. Thus, by uncovering factors that contribute to double moral standards, Polman and Ruttan (2012) indicated that, while one's anger increases his or her use of double standards, feelings of guilt in oneself decreases in this form of hypocrisy.

Due to the lack of an established scale to assess hypocrisy itself as the perceptions formed through others' double-standard practices for moral transgressions, a review of literature was done to search for similar or comparable concepts. Dineen, Lewicki, and Tomlinson (2006) studied behavioral integrity to investigate its impact along with supervisory guidance on employees' organizational citizenship behaviors. Although the authors described having used items to specifically focus on the words and actions misalignment in their study, the items themselves seem to imply double standards exhibited by managers. The item, such as "my supervisor can get away with doing things

I can't" seems to indicate a discrepancy between how the supervisor believes others should behave in a given situation and how he himself actually behaves in the same or similar situation, thus perceiving double standard practice. Therefore, to determine if the employer is perceived as hypocritical with double standard practice regarding their own moral transgressions versus others, the four items from Dineen, Lewicki, and Tomlinson (2006) are included in the item bank in this study. The scale items were measured on a 5-point Likert scale anchored across strongly disagree to strongly agree, and had .82-.86 Cronbach's alpha reliability across different participant groups (Dineen, Lewicki, & Tomlinson, 2006; see Appendix A).

In yet another study conducted by Phillipe and Koehler (2005) that determined the constructs of organizational hypocrisy, the authors used various items and measures to enquire about employees' perceptions of their organizations. Perceived management actions, perceived culture, and perceived rewards were the three factors elicited in their study as the factors for organizational hypocrisy. While these factors refer to various contexts, such as management actions or rewards, certain specific items in their scale seemed to measure employees' perceptions of double standards in their organizations. For example, the items "management applies the same standards for performance to all employees" or "everyone at all levels is held accountable for their mistakes" seem to enquire about employees' perceptions toward the employer that may have different moral standards for different people. The overall scale consists of 40 items and has a scale reliability of .7 Chronbach's alpha. Therefore, it is proposed that employers' double standard practices are a dimension of PCH and relevant items discussed in this section are

included in the item bank as inspiration items for adoption and adaption in this study (see Appendix A).

Proposition 3: Managers' double standards practice will contribute to PCH.

Value-Behavior Gap. At the individual level, employees may experience the gap between corporate values and their enacted behaviors. This gap represents the inconsistency within the value-behavior gap explained by theories of action. Given that espoused theories, reflected by values or views a corporation wants to communicate, can contradict theories-in-use which govern its members' actions and actual behaviors (Argyris & Schon, 1974), the value-behavior gap perceived by employees can be explained by the gap between corporate members' espoused and used theories. Therefore, value-behavior gap can be a factor to assess PCH.

Hypocrisy is defined as the practice that "appear(s) moral yet, if possible, avoid(s) the cost of actually being moral" (Batson et al., 1999, p. 535). In other words, hypocrisy can be created when one behaves contradictory to his or her beliefs while pretending to support those, i.e., not practicing what one preaches. In 1997, Batson et al. found that hypocrisy is developed via a two-step process in which, first, a person perceives a decision or an action to be a moral one. Such perceptions are what one espouses to follow. This perception is then followed by a pretention (or deception) of supporting that moral decision or action and gaining maximum associated benefits, without undergoing the necessary hardships for being an actual moral person. That is, a person develops some espoused beliefs and values as normative ones, but acts in ways that do not conform to their espoused beliefs and are rather pretentions, as described by the theories of actions.

Kouzes and Posner (1993) and Simons (1999) discussed the divergence between managers' words and actions in that corporate managers preach about caring for their employees or customer service without implementing those in actions. Abrahamson (1996) studied Fortune 500 companies to find similar divergence in their actions in which managers will adopt certain values or philosophies as espoused ones in public, but will never really execute those and eventually abandon those values within few years. Alicke, Gordon, and Rose (2013) studied hypocrisy as judged by people and endorsed the foregoing description of hypocrites, i.e., people who implicitly or explicitly endorse principles as contradicted by their behaviors. In their study, the authors found people to unanimously judge others as hypocrites when others publicly condemned non-marital sexual activities but secretly engaged in such behaviors.

Simons (1999) found that this gap between managers' espoused values as expressed by words and those enacted in actions can negatively impact managers' credibility and trustworthiness among their subordinates. The author defined this concept of perceived congruency between espoused and enacted values as behavioral integrity. The extent to which managers "walk their talks" represents their behavioral integrity as perceived by employees (Simons, 1999, 2002). In this light, Simons (2002) referred to hypocrisy, the inconsistency between words and actions (Brunsson, 2002), as analogous to a lack of behavioral integrity.

The (mis)match between leaders' espoused values expressed through words and those enacted through actions is a well-represented concept in the literature. For example, Heider (1958) suggested that such inconsistent words-actions in managers are often attributed to managers' dispositional qualities and not to situational factors. Simons

(2002) studied that this gap of espoused and enacted values in managers can affect employees' performance and organizational citizenship behavior, can more readily subscribe to employees' perceptions of hypocrisy, and are more frequently created in the attempt to meet needs of increasingly turbulent business environments. Parry and Thompson (2002) found that when managers' espoused values are consistent with the enacted ones, such perceptions amongst employees improve organizational effectiveness. Dineen, Lewicki, and Tomlinlson (2006) reported that a consistency between supervisors' espoused and enacted values lead to a positive relationship between managers' guidance offered and employees' citizenship behavior towards the organizations. Yet other researchers found that along with a consistency between supervisors' espoused values and enacted behaviors, when employees find a match between their values and those of the supervisors, the employees' organizational citizenship behaviors are further strengthened (Tomlinson, Lewicki, & Ash, 2014).

Most empirical studies conducted about the (mis)match between managers' espoused values shared through words and enacted values executed in behaviors have used the scale items as developed by Simons and Parks (2000), and reported in Simons, Friedman, Liu, and Parks (2007). The scale measures the espoused-enacted gap, also known as the behavioral integrity, through eight items of reported reliabilities in English ($\alpha = .96$), Spanish ($\alpha = .94$), and Dutch ($\alpha = .90$).

Similarly, in order to measure the differences between leaders' espoused values and their enactment of those values, Palanski (2008) developed a survey measure consisting of two open-ended questions and two Likert-scale items. The researcher used the open-ended questions to elicit useful qualitative responses about leaders' espoused

and enacted values. The two scale items were reported to have strong predictive power, satisfactory interim correlations, and were found to have correlations with Simons and Parks's (2000) scale of behavioral integrity. While the authors described the open-ended questions as effective in generating information about specific promises and values, the two scales were reported to not have "ideal" (Simons, Tomlinson, & Leroy, 2011, p. 6) statistical properties. Although the specific scale items have been unpublished, they have been adapted in other scholarly works, and such items are included in the item bank as inspiration items for adoption and adaption in this study (see Appendix A).

Prottas (2008) studied the perceived inconsistencies between espoused values and enacted behaviors to find how such inconsistencies impact employees' attitudes, wellbeing, and absenteeism behaviors. The author conducted the study using national level data and used two items to measure the construct of perceived inconsistencies. The items were measured on a four-point Likert scale such that a higher score indicated a lower level of perceived inconsistencies. The scale has a reliability of .79 coefficient alpha and is included in Appendix A as inspiration for adoption and adaption in this study.

A few other studies have tried to measure the gap between the espoused values and enacted behaviors by separately measuring them (Cording, Simons, & Smith, 2009; Leroy, Halbesleben, Dierynck, Savage, & Simons, 2010). While such an approach allows for considering nuances such as overpromising and under promising, or focusing on issue-specific integrity aspects, this approach is often used to measure an actual inconsistency between espoused values and enacted behaviors rather than a perceived inconsistency. However, in our study, PCH is described as a perception or a belief

formed amongst employees and does not claim actual inconsistency within the corporation. Therefore, this study will adhere to scales used to measure perception or judgment of PCH and not separately measure corporations' actual espoused values and actual enacted behaviors to measure PCH.

A major component of value-behavior gap is how people use deception to advertise or display good moral values and deeds without actually practicing or performing them (Batson, Thompson, & Chen, 2002; Greenwald, 1980; von Hippel & Trivers, 2011). Deception is defined as "the act of misleading by a false appearance or statement" and "(of a person) cause (someone) to believe something that is not true, typically in order to gain some personal advantage" (Dictionary.com, n.d.). In this light, Graham, Meindl, Koleva, Iyer, and Johnson (2014) studied moral deception or moral duplicity as one of the important dimensions of moral hypocrisy. The authors explained that because hypocrisy is an interpersonal phenomenon, it involves the actor using deceptive public claims or deceptive display of high morality to mostly meet their end goal of appearing virtuous and gaining self-benefits.

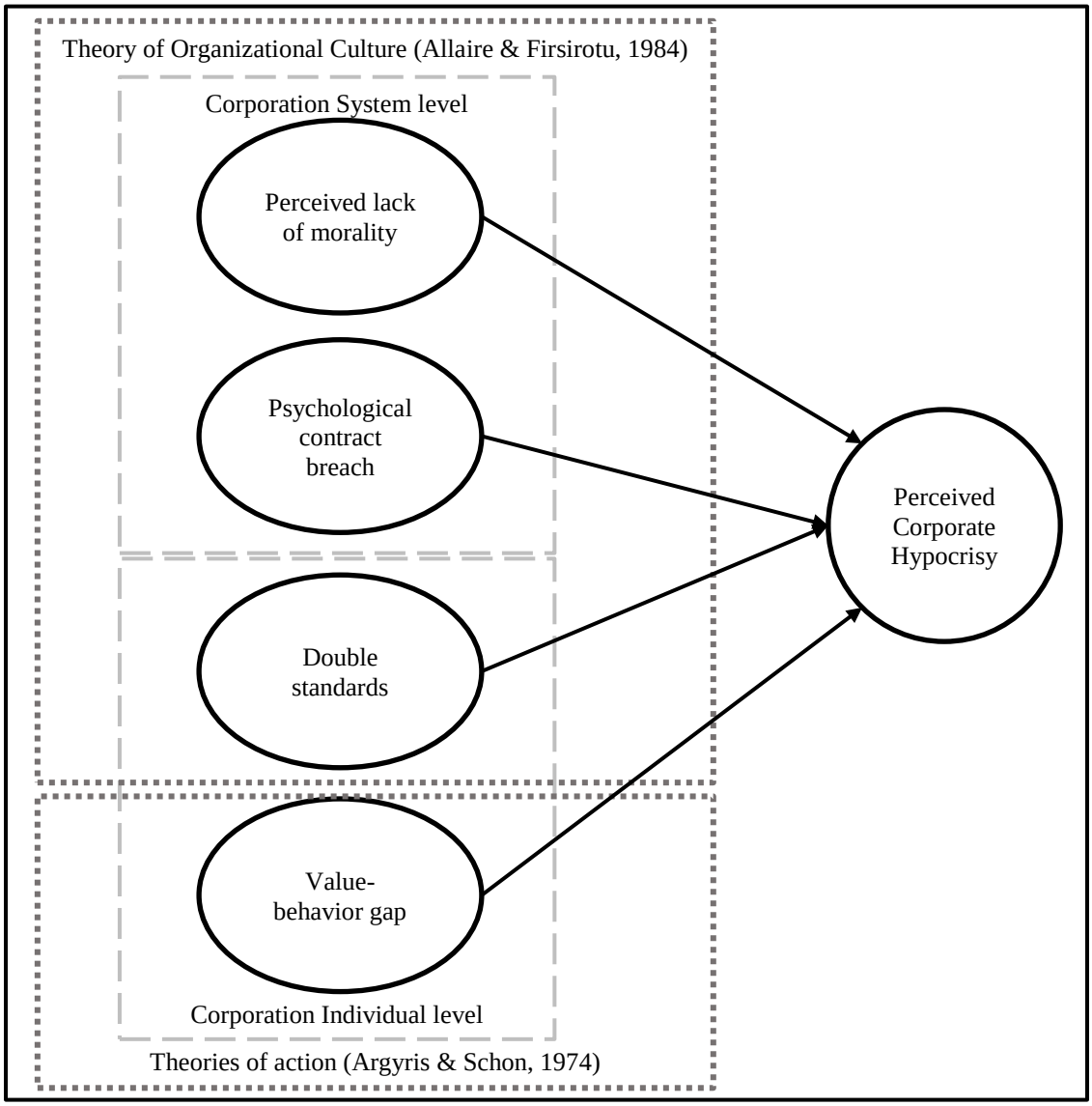
Several researchers suggest that deception is an important part of the value-behavior gaps and hypocrisy (Greenwald, 1980; Kittay, 1982; Batson et al., 1999; Szabados & Soiffer, 1999; von Hippel & Trivers, 2011; Monin & Merrit, 2012). In the past, researchers have used a combination of experimental and correlational methods, providing participants opportunities to act selfishly without appearing selfish and still propagate their asserted values, to show that the majority of their participants act in deceptive ways as they engage in hypocritical behaviors (e.g., Batson, Kobrynowicz, Dinnerstein, Kampf, & Wilson, 1997; Batson, Thompson, & Chen, 2002; Batson, 2011).

Kittay (1982), Szabados and Soifer (1999), and Batson, Thompson, and Chen (2002) also found that actors' intention to deceive plays a role in value-behavior gaps and hypocrisy. Researchers explained that, as people use deception to convince their audience about their moral espoused values, one is intentionally acting in that way to impress others, meet the audiences' standards of morality judgments, or avoid one's self-criticism and bad feelings. Lonnqvist, Irlenbusch, and Walkowitz (2014) conducted a recent study to determine the role of conscious deception or unconscious self-deception in hypocrisy, and observed that participants intentionally try to deceive experimenters and other participants as they behave contradictory to their espoused and asserted values. Thus, it is proposed that employees' perceived gap between their managers' espoused values and behaviors, and the intention to deceive is a key dimension of PCH. Relevant items measuring value-behavior gap and deception are included in the item bank as inspiration items for adoption and adaption in this study (see Appendix A).

Proposition 4: Managers' value-behavior gap and intentional deception will be salient to PCH among employees.

From the above systematic review of literature, a conceptual framework is developed indicating the tentative domains and item contents. Figure 2.1 shows the conceptual model and research propositions for this study.

Figure 2.1. Conceptual Framework



CHAPTER III: RESEARCH METHODOLOGY

The research methodology section includes the following: (a) item bank development, and (b) psychometric evaluation.

In this study, an Item Response Theory (IRT) approach was used to develop a scale for PCH. IRT is a research design and analysis paradigm that helps model latent traits based on a set of relevant items within a scale (Le, 2013). Using such an approach helps generate a total score associated with measuring a latent trait while identifying its underlying constructs, as well as determining the scale's adequacy as an instrument to measure the latent trait (*idem*). Therefore, IRT seemed to be a relevant approach for this study.

Following the item generation, the next two stages for the development of measures are item bank development and psychometric evaluation (Cella, Gershon, Lai, & Choi, 2007; Churchill, 1979; Germain, 2006; Hinkin, 1995; Hinkin & Schriesheim, 1989; Hinkin, Tracey, & Enz, 1997; Research Methodology Center, 2016; Schwab, 1980). In the item bank development stage, a qualitative research approach was taken to review, assess and examine the potential set of items and their constructs to ensure that they represented the structure of PCH well (Revicki, Chen, & Tucker, 2014; Hinkin, 1995). In the evaluation stage, this item bank was empirically tested and evaluated to confirm the psychometric properties of the developed scale. Quantitative data were collected from relevant target samples in this stage and analyzed for their item and scale properties. Thus, with these two stages of item bank development and psychometric evaluation in this study, a reliable and valid scale was developed to measure PCH.

Item Bank Development

After item generation, item bank development marked the second phase of this study in which several qualitative sub-phases together helped to review how well the generated items confirmed expectations about the structure of the latent trait of interest. These qualitative sub-phases included binning, winnowing, focus groups, item revisions, and cognitive interviews (DeWalt, Rothrock, Yount, Stone, & P.C. Group, 2007; Revicki et al., 2014). In a scale development study, careful and systematic preparatory stages are critical to the qualitative approach and help to assure the content validity of the generated item bank (Brod, Tesler, & Christensen, 2009; Lasch et al., 2010; Magasi et al., 2012).

Binning

A systematic review of literature helped to identify and generate various constructs and items for the item bank. Considering that several items were identified from identical or similar content areas across various disciplines, the item pool is conducive to a careful process of cleaning and organizing. Binning and winnowing are two sequential methods to ensure that the developed item bank is unique, caters to the main concept being measured, and that the items are not redundant in nature (Revicki et al., 2014). The process of grouping different items from the item pool based on similarity of their contents as well as the specific latent traits being measured is described as binning of the item pool (DeWalt et al., 2007). Thus, in this step, items were grouped according to their similarity of content and previous factor analyses of construct items. Each such group was referred to as a bin.

Additionally, certain items seemed to not match the designed bins very closely and such items were set aside to be further reviewed. This was done to determine if any

new groups of bins could be formed to reflect the content and characteristics of those filtered items. However, no such additional bins were formed, and while some items were deleted, a few items were added back to the existing designed bins. Thus, researchers used binning to not only identify and remove any redundant items from the pool, but also to recognize the strong potential items conforming to the literature review (Revicki et al., 2014). All the items, eventually grouped under different bins, were reviewed again to confirm that various relevant content related to the latent construct was included in the item pool. In this study, a total of four bins were created, namely perceived lack of morality, psychological contract breach, double standards, and value-behavior gap.

Winnowing

In addition to binning, winnowing is a way to reduce the large item pool under different bins so that all items are relevant to the construct characteristics definitions (Revicki et al., 2014). Thus, winnowing was another reductive procedure used in this study to clean the large item pool and remove any redundant items under different constructs. Following the specific criteria of item removal as suggested by Revicki et al., (2014), the item pool of this study was reviewed to remove items inconsistent with construct definitions, redundant in nature, confusing to understand, had narrow generalizability, and had contexts too specific.

For example, in the value-behavior gap bin, the item "*My manager does NOT do what he/she says he/she will do*" was deemed to be redundant with "*There is a DIFFERENCE between what my manager says and what he/she does*". The latter item was considered simpler and easier to understand than the former, and hence the former item was removed from the item pool. Similarly, an item under the perceived morality

bin, "*My manager would use my performance appraisal to criticize me as a person*" was reviewed as too context specific and lacking in generalizability, and was deleted from the item pool. Thus, the systematic process of binning followed by winnowing helped to generate items that were a more accurate representation of the relevant constructs. The large pool of adopted and adapted 145 items was thus reduced to generate a more unique smaller pool of 74 items (see Appendix B).

Content Expert Validation

An important part of scale development is to ensure that individuals' relevant experiences related to the construct being measured are well captured in the item bank (Brod et al., 2009; Strauss & Corbin, 1998). Capturing the content domain properly in the item bank helps ensure a rigorous instrument development process and content validity (Nunnally & Bernstein, 1994). Content validity is an important psychometric property to achieve, as it relates to measurement aims, usage, domains being assessed, and target population (Terwee et al., 2007). Content expert validation is thus recommended to facilitate the process of understanding and determining relevant vocabulary and experiences of the target population, and implementing the same in the item bank (Germain, 2006).

Having the item bank reviewed by experts in the areas of interest helps to confirm that the domain definitions of the item bank match those as described by the target population, helps to identify the common vocabulary for describing such domain concepts, identifies theoretically coherent items and deletes the incoherent ones, and also helps detect any important gaps yet to be covered by the item bank (Germain, 2006). Thus, in its qualitative approach, content expert validation helps a scale development

study to compare and update the item bank with the real experiences of the target population, thus ensuring that the scale demonstrates content adequacy (*idem*).

A key challenge in a scale development study is to ensure that the items are fair to every individual of the target population, such that the item bank can be applied to all relevant demographic groups without any bias in the measurement (Revicki et al., 2014). One way to achieve this objective is to strategically select participants as content experts so that experiences of all individuals across different demographic groups and different industries of the retail sector are well represented among those participants (*idem*).

In the retail sector, there are many different industries such as clothing, food, automotive, furnishing, general merchandise, and others (U.S. Census Bureau, n.d.). To adequately cover experiences of employees with different demographic characteristics working at different employee profiles across these different industries of the retail sector, a large number of sample populations would be required, and is not practical in nature (Revicki et al., 2014). Therefore, a purposive sampling technique was used to recruit content experts so that participants represent retail employees with age, gender, and ethnic diversity as well as some of the target industries of the sector.

After an approval from the Institutional Review Board, participants were recruited from the researchers' network and connections. Participants were required to have at least a year of current or past experience in their retail corporations. Having such experience was deemed necessary to ensure that participants had spent considerable time within their corporations and had sufficient experiences with the organization and their managers (Goswami & Ha-Brookshire, 2016). Participants were emailed by the researcher with a description of the research, an invitation to participate in the study, and a consent form to

indicate their participation interest. Each participant was compensated with $20 gift cards.

Given that some researchers recommend personal interviews for content validation (Song, 2013) while others suggest focus groups for the same (Revicki et al., 2014), this research adopted both approaches. Five participants were interviewed personally, where the item bank was shared with the participant experts. Questions were asked about their opinions regarding the items and their domains, what kinds of perceptions and thoughts regarding their corporations those items might generate, if they had experienced anything similar, which questions participants could relate more with, if they found any conceptually repetitive items, and if they recommended adding any unexplored construct (refer to Appendix C). A simultaneous transcription and analysis of the interviews indicated patterns in the experts' feedback about the items and their constructs, thus indicating data saturation (Spiggle, 1994).

Next, a focus group of four retail employees was conducted in which participants discussed their thoughts and feedback on the generated items, the extent to which the constructs represented their real-life experiences, the vocabulary of the item bank, and the need for any unexplored construct to explain PCH. Questions similar to the interview were used as prompts to initiate conversation among participants. An analysis of the focus group discussions revealed patterns of responses and feedback similar to those from the interviews. Thus, although nine participants might seem to be a relatively small sample size, patterns in feedback suggest data saturation (Spiggle, 1994). This in turn indicated that the collected data from the interviews and focus groups were similar and sufficient for exploration, and that further new data might not generate any new findings.

A total of nine content experts participated in the content expert validation. Attempts were made to ensure that the participants represented varying retail industries, job ranks, ethnicities, age, gender, and educational groups. Participants included 5 females and 4 males, 4 undergraduate students and 5 college graduates with some higher education, an age range from 19 to 60 years, and varying ethnicities (e.g., Caucasian, Hispanic, African-American, and Arabian). Participants had work experiences both on the retail shop floor and related corporate offices, and represented target populations from varying retail industries, such as food and beverage, clothing and accessories, and sporting goods, hobby, book, and music stores. See Appendix C for the characteristics of the content experts.

All nine participants agreed that they had similar prior experiences in their job settings as explained by the study constructs and items. Participants noted that the experiences represented by the constructs and their items were relevant to their practical experiences and perceptions about their employer corporations. The original item bank with the four constructs was deemed to properly reflect PCH amongst the participants. A rich set of comments were provided by the participants pertaining to the item bank. First, five items were identified as confusing or too broad in nature. For example, the item "*My company does not believe in equal distribution of good and bad*" was commented on as confusing since "good and bad" might be too broad of concepts to ask about, and was suggested to be deleted. Second, 16 items were identified as needing explanation or use of simple vocabulary, and were suggested for rephrasing for ease of understanding. For example, the item "*My company minimizes benefits while maximizes HARM*" was rephrased to "*My company prioritizes company's benefits over employees' benefits*" to

simplify the vocabulary. Finally, 18 items were thought to be overlapping as they generated similar thoughts and perceptions in readers' minds, and were suggested for deletion. For example, the item "*My company violates my idea of fairness*" was thought as identical to the item "*My company is unfair*". As a result, 74 items were reduced to a smaller item bank of 49 items. Appendix C shows all 74 items with summary of participants' comments that resulted in item reduction.

Item Revisions

Considering that the item bank was generated with scales and questions across various disciplines of literature, the items were expected to include a variety of phrases, have different response options, and reflect different literacy demands (DeWalt et al., 2007). Such differences in the item style and options could challenge the coherence of the item bank and generate questionable measures (Revicki et al., 2014). Therefore, the next step in generating a systematic and valid item bank was to revise the items. All the items under different constructs were revised to reflect a consistent response format, certain literacy level expectations, fewer cognitive difficulties, and less ambiguous statements (*idem*).

While designing the measurement items for a scale, some researchers express their concern over the use of negatively worded items (Jackson, Wall, Martin & Davids, 1993). Such researchers explain that using negatively worded items may result in artifactual or spurious response factors (Harvey, Billings & Nilan, 1985; Schmitt & Stultz, 1985). However, applied to this study which focuses on questionable morality, unfulfilled promises, and inconsistencies of a corporation, use of negatively worded questions were deemed to be relevant and a requirement. Additionally, other studies

reviewing scale development practices argue that no noticeable problem pattern was found in prior studies using negatively worded items (Hinkin, 1995).

Some researchers advocate using a forced-choice orientation as the item response format to force their participants to not take a middle ground on sensitive issues (Craig & Gustafson, 1998). A four-point or six-point Likert scale response format, with no central point indicating neutral opinion, can help researchers get their participants to avoid taking a neutral stand (*idem*), and are commonly used for IRT analyses (Bode, Lai, Cella, & Heinemann, 2003). Within the item bank, response format needs to be compatible and relevant for the type of construct being measured (Revicki et al., 2014). However, it is also important that there be some consistencies between the different response formats and the number of response levels within an item bank (*idem*). Thus, response choices of "strongly disagree" and "strongly agree" were designed so that a higher score indicated higher PCH amongst employees.

The wording of every item in an item bank is required to be clear, readable, and simple, without any ambiguous terms or jargon (Kamudoni, 2014). To achieve this, the literature suggests specific literacy levels so that specific literacy requirements do not challenge participants' ease in responding to the item bank. A general reading level of a sixth-grader or a 12-year old is suggested as the scale literacy level for an adult target population (Revicki et al., 2014; Streiner & Norman, 2008). Additionally, other survey design precautions, such as designing unambiguous, non-leading, single-barreled, concise, and unbiased questions (Janes, 1999) were also to be ensured while revising the items.

To achieve these objectives, in this study, psychometric scholarly experts associated with the University of Missouri were invited to review the bank of 49 items. An invitation email was sent to five experts explaining the basic goal of the research, the item bank introductions, and the purpose of this step. Two experts, one associated with the Biostatistics & Research Design Unit and the other associated with Educational, School, & Counseling Psychology Research Methods & Analysis, expressed their interest in participation. Thus, the scale was examined by two psychometric scholarly experts. Most of the review comments were related to grammatical issues in the items. While one expert gave specific feedback regarding the lack of clear instructions for participants, the other expert indicated the need for including a PCH relevant frame of reference in the instructions. A frame of reference indicates a particular time period that participants need to refer to when providing responses to the items (Norquist et al., 2011). Based on the suggestions, the instruction was clearly written and a time period of reference was included to guide participants: "*In this study, you will be asked to answer a few questions based on your current or past experience as an employee in your retail company. Please read the questions carefully and indicate your response choice based on your experience*." Appendix D shows a summary of the experts' comments.

Cognitive Interviews

The scope of a scale's content extends beyond just items and responses, and includes the structure of the instrument, such as instructions, response formats, layouts, and comprehensibility (Kamudoni, 2014). Thus, the last step of the item bank development of the study was to conduct cognitive interviews to further establish the scale's content validity (Revicki et al., 2014). Cognitive interviews are suggested to

ensure that respondents understand the items and their meanings, and that they know how to reply to the item bank (*idem*). This process was different from the previous content expert validation, as the former focused on ensuring inclusion of relevant experiences and vocabulary in the item bank, while the latter concerned item comprehensibility, understanding instructions, and layout (Brod et al., 2009; Revicki et al., 2014; Struass & Corbin, 1998).

One of the commonly suggested methods of conducting a cognitive review is retrospective verbal probing, in which participants first read the items and answer the item bank, and then discuss their understanding and the response scales with the interviewer (Willis et al., 2005). Thus, cognitive interviews help to ensure participants' comprehension of the items, the ease for participants to retrieve relevant information from memory, and a simplified decision process in choosing a response (Revicki et al., 2014).

A similar approach was used in this study, and retail professionals from the researchers' network with a year of retail experience in the United States were requested via email to participate in the interview. A minimum retail experience of at least one year, current or past, in their retail corporations was required for participation (Goswami & Ha-Brookshire, 2016). Since in the cognitive interviews, participants might have needed to retrieve relevant information from their memory, participants were required to have such relevant work experiences to answer the item bank. Considering the fewer number of items in the item bank, the sample size for cognitive interviews was deemed to be small (Revicki et al., 2014). Potential participants were emailed by the researcher with

a description of the research, an invitation to participate in the study, and a consent form to indicate their participation interest. Participants were compensated with $10 gift cards.

Using the verbal probing in this study, first each participant was emailed the developmental PCH items. It contained a total of 49 items addressing all four theoretical constructs of PCH, and each of those items were rated on a 4-point Likert scale. Participants were given an employment-related frame of reference and clear instructions as suggested previously by psychometric experts. Following the completion of the item bank, a structured interview was conducted with every participant to enquire about specific item information as relevant in order to systematically review the basis of every response chosen (Willis et al, 2005). All aspects including the design and organization of the items were discussed during the interviews. In the discussions, participants were asked open ended questions about the item content, instructions, and response scales. Questions such as, "*What do you think about the survey instructions? Were they comprehensible enough?*", "*What do you think about the questions in this section?*", "*How concise would you describe these questions to be?*", and others were asked to enquire about participants' experience while answering the items. See Appendix E for cognitive interview questions.

A total of 8 participants from the researchers' network and connections participated in cognitive interviews. Participants included six females and two males, an age range of 21-26 years, and varying ethnicities (e.g., Caucasian and African-American). Participants had work experiences both on the retail shop floor and related corporate offices, and represented target populations from varying retail industries, such as clothing

and accessories and sporting goods, hobby, book, and music stores. Appendix E shows the characteristics of the cognitive interview participants.

Interviews were analyzed to detect issues related to item misunderstandings, lack of comprehensibility, instruction incomprehensibility, and response scales. The basic layout of the interview, including the font size and type, location of instructions, and view of the questionnaire online, were considered appropriate and adequate. Two important suggestions were made by participants at this stage. First, participants indicated that often they might have experience with more than one retail corporation and not every such experience was necessarily bad. Based on the instructions, participants were unsure as to which corporation they should base their answers on. Second, participants also expressed concerns over the wordings of instructions in the survey. Initially, the instructions asked participants to reply to the items based on their own current and past experiences. Participants pointed out that, in real life, not everyone might have experienced all of the 49 negative experiences as suggested by the item bank. However, most people might associate with such negative experiences indirectly or hypothetically. Based on the instructions, participants were unsure as to how to respond to the items, especially those with which they might not have direct experiences.

The instructions and the items of the survey were reframed to implement two changes based on the feedback. First, participants were asked to answer items based on only their bad experiences. And second, participants should answer items hypothetically if they have not experienced it directly. The final instruction was then stated as, "*In this study, you will be asked to answer a few questions based on only your BAD experience as an employee in your retail company. As you take this survey, please read the questions*

carefully, recall your such BAD experiences, and indicate your response choices. I would be disappointed, if:…". To be consistent with this new instruction statement, each item was then slightly modified into a complete sentence. Appendix E shows the summary of the participants' comments based on the cognitive interviews.

Psychometric Evaluation

This section discusses the item bank evaluation using the 49 items, which is the third phase of the study.

Research design

The main purpose of psychometric evaluation is to assess the psychometric properties of the items developed to measure PCH amongst employees within the US retail sector. To achieve the purpose, a self-reported survey was designed. Given the current goal of the study, this design was considered appropriate since the researchers aim to describe, explain, and investigate a natural occurring phenomenon such as PCH generation within a specific population of retail employees (Heppner, Wampold, & Kivlighan, 2008).

Measures

For this phase of the study, the item bank modified and finalized after the cognitive interview was used to measure PCH. It consisted of a total of 49 core content items, represented by 15 items for psychological contract breach, 16 items for perceived lack of morality, 8 items for double standards, and 10 items for value-behavior gap adopted and adapted from the literature. In addition to the core content items, there were

seven questions related to construct validity that are described later. Refer to Appendix G for the item bank.

Sample Selection

Considering that the study aims to learn more about US retail employees, nationwide data were collected to recruit employees with retail experience. Participants were recruited with work experiences in brick-and-mortar retail stores, their related corporate offices, and any e-retail companies. Participants were recruited from multiple industries of the retail sector as represented by the North American Industry Classification System [NAICS] codes from 441110 to 453998 and 454111 (U.S. Census Bureau, n.d.). A total of 12 industries or sub-sectors, namely motor vehicle and parts dealers (441), furniture and home furnishings stores (442), electronics and appliances stores (443), building material and garden equipment and supplies dealers (444), food and beverage stores (445), health and personal care stores (446), gasoline stations (447), clothing and clothing accessories stores (448), sporting goods, hobby, book, and music stores (451), general merchandise stores (452), miscellaneous store retailers (453), and non-store retailers-electronic shopping (454111) were represented by participants (U.S. Census Bureau, n.d.).

Similar to the qualitative part of the study, one year of experience within a specific retail corporation was deemed necessary for the survey participants. This experience was expected to ensure that participants had spent considerable time within their corporations and had sufficient experiences with the organization and their managers (Goswami & Ha-Brookshire, 2016). Additionally, anyone in the retail sector was eligible for the study, including store-level retail employees to executive-level

employees working in corporate offices. Finally, all participants had to be eighteen years of age or older to be eligible to participate in the study.

Data Collection

Quantitative data for this study were collected in April 2017 via Qualtrics, a market research firm, to increase the diversity of study respondents. Qualtrics has its own panel of survey respondents representing a general sample of the United States population as well as a specific age range, gender, US state, or ethnicity, and thus helps in connecting a research survey with qualifying respondents on a commercial basis. Thus, this service was used for this research and participants were recruited using three screening questions about the sector of their work experience, years of work experience in a retail company, and the industry in the retail sector participants represent. Only those who indicated retail as their experience sector, had more than a year of work experience, and represented one or more of the 12 retail industries discussed earlier were selected for this study.

A total of 520 participants eventually participated in the research. In IRT, the recommended sample size for psychometric tests is contingent on the complexity of the constructs and the total number of items within an item bank (Revicki et al., 2014). A sample size of 10 participants for every item is considered a general rule of thumb to determine the overall sample size (*idem*). Considering that the survey had 49 items to measure the latent trait of PCH, a total of 520 participants seemed to be acceptable for this study. Reeves and Fayers (2005) also recommend using around 500 respondents when using polytomous response format items like a Likert-scale format to achieve

accurate parameter estimates. In total, $2,500 was paid to Qualtrics to receive these 520 responses.

Qualtrics was chosen over the Amazon Mechanical Turk (AMT) as the quantitative data collection platform since studies indicate that samples recruited via Qualtrics represent the U.S. population demography slightly better than that of the sample recruited by AMT (Berinsky, Huber & Lenz, 2012). Additionally, Qualtrics extends opportunities to monitor the data collection procedure and control for issues such as disqualification due to inattentiveness, high incompletion rates, or unreasonably quick completion times (Brandon, Long, Loraas, Mueller-Phillips, & Vansant, 2013).

The online interface of Qualtrics was used to provide participants with all instructions and the self-reported questionnaire items. In addition to the core-content survey measures, demographic information, such as age, gender, ethnicity, marital status, job profile, income, and educational qualifications were enquired of to understand the general characteristics of the study sample group. Two attention filters, namely "Type the word 'survey' in the text box below" and "Type the word 'research' in the text box below" were included in the survey to ensure participants were paying attention to the study (Smith, 2013). The average length of the survey was observed to be 8.58 minutes for the initial 50 responses, and this timeframe was later added as a speed check for the rest of the survey such that participants taking about one-third of the average time were considered as not responding thoughtfully and were automatically screened out. Data were collected in the last week of April 2017 and it took a week to gather 520 responses.

Data Analysis

The goal of this study was to develop a self-report viable measure that accurately assessed PCH amongst employees related to their work experiences. The data were analyzed to examine the structure and dimensionality of the developed PCH scale, and to determine the scale's psychometric properties to confirm test reliability and validity (Revicki et al., 2014). For descriptive statistics, the data were analyzed to determine the distribution of gender, age, education, ethnicity, income, and employment status. All statistical analyses were conducted using R-Studio, a programming language for statistical computing and graphics, and its specialized packages for specific statistical analyses, namely Multidimensional Item Response Theory (MIRT), Procedures for Psychological, Psychometric, and Personality Research (psych), and others.

In IRT, generally the process of data analysis proceeds with evaluating assumptions, selecting and fitting a model, and determining the fit (Morizot, Ainsworth, & Reise, 2007).

IRT assumptions. The three critical assumptions of IRT models relate to a) unidimensionality, b) local independence, and c) monotonicity (Le, 2013; Zanon, Hutz, Yoo, & Hambleton, 2016).

Unidimensionality. According to the assumption of unidimensionaility, a single underlying latent trait should be represented by all the items of the item bank (Zanon et al., 2016). While it is one of the important assumptions of IRT, researchers often describe this as too ideal to meet, such that no item bank can ever be strictly unidimensional and will most likely have some multidimensionaility (McDonald, 1981; Reise et al., 2013). Thus, researchers recommend assessing a "sufficient" unidimensionality to allow an unbiased scaling of individuals on the latent trait of PCH (McDonald, 1999; Reise et al., 2013). An important consideration for unidimensionaility is any potential change or improvement that can occur in the robustness of item parameters (item discrimination or factor loading) after removal of items representing other dimensions beyond the single underlying factor. If there are any significant changes in the item parameters, then the data represent multidimensions and the assumption of unidimensionality is violated (Harrison, 1986). Applied to this study, to establish the assumption of unidimensionality, all the items of the item bank had to co-vary only due to the presence of PCH and no other factors.

In IRT, unidimensionality is often determined using suitable methods such as conducting a principal component analysis (PCA) (Funk & Rogge, 2007; Revicki et al., 2014), inspecting dimensions' eigenvalues, ratio of the eigenvalue of the dominant dimension to the eigenvalues of the second and other subsequent dimensions, and the bend or 'knee' in scree plots (Hattie, 1985; Ruschio & Roche, 2012). For the purpose of this research study, a PCA was conducted to check for and confirm unidimensionality.

Some researchers recommend maintaining a certain minimum ratio of sample size to the number of parameters or variables such as 5 to 1, 7 to 1, 10 to 1, etc. for the PCA to

ensure stability of the results (Heppner et al., 2008; Kline, 2005; Thorpe & Favia, 2012). However, other researchers (Lee & Ashton, 2007) reject such requirements as misguided suggestions and assert that no specific large sample size is required for component analysis of a large variable set. Therefore, in this study, the entire sample size of 520 respondents was used for component analysis of the 49 core content items.

In PCA, conditions such as the high eigenvalue and variance accounted for in the largest dimension (greater than 20%), considerable comparative differences or ratio of the eigenvalues between the largest and second dimensions (a large ratio), and a total of eigenvalues of all dimensions other than the largest dimension (being less than one), are used to explore and determine unidimensionality (Hattie, 1985). The factor loadings and the scree-test are also reviewed to determine the underlying dimensions (Revicki et al., 2014). In a PCA, to confirm unidimensionality, a simple factor structure is desired such that all items primarily load on only one underlying dimension and minimum factor loadings occur on any other dimensions (*idem*). To check for this assumption being fulfilled by the collected data, a PCA with a review of the eigenvalues and scree plots was conducted.

Local independence. According to this second assumption in IRT, there should not be any association between the items after controlling the effect of the dominant dimension found through component analysis (Steinberg & Thissen, 1996; Wainer & Thissen, 1996; Yen, 1993). If there are leftover associations found among the items, the condition is described as a presence of local dependence and thus violates the assumption of local independence (Wainer & Thissen, 1996). A violation of this assumption influences item parameter estimates to challenge effective scale construction, generate inaccurate estimates, and make an item appear to be more informative (Revicki et al., 2014).

Identification of local independence among items, especially the polytomous response items such as Likert-scale format, can be accomplished by checking for a residual correlation matrix generated by the explored scale structure with its underlying dimensions (Revicki et al., 2014). In IRT, local independence can be tested through a Q_3 statistic (Yen, 1984, 1993) and local independence indices (Chen & Thissen, 1997). Under these analyses, a unidimensional model is fit to collected data, and an analysis of any residual association (or correlation) between item pairs is performed (Revicki et al., 2014). Absence of any residual correlation indicates that there is an independence between the items after controlling for the dominant dimension, thus establishing the second assumption (*idem*). In this study, the Q_3 statistics were used to detect any inter-item correlations after controlling for the latent trait and to check for local independence.

To obtain the Q_3 statistics for items in the item bank, first a relevant IRT model was fitted into the data and item parameters, and participants' PCH estimates were computed. Later, the residual scores between participants' observed responses and

expected probabilities of endorsing the items of the item bank were obtained. The Q_3 statistic is the Pearson correlation between such residual scores of every individual item of the item bank across all participants. The unique Q_3 values for all items of the item bank were thus generated. For the scale of 49 items in this study, Q_3 was represented by the lower triangle of the residual correlation matrix.

According to Yen (1993), for the items to be locally independent, the residual correlation should be zero in between any two items. However, other researchers explain that in reality, a zero correlation is an ideal condition not observed even when items are actually locally independent, and slightly negative residual correlations are more practically observed (Tao, 2008). For diagnostic purposes, Q_3 of 0.2 is recommended and was used in this study as the uniform critical value such that residual correlations greater than 0.2 were flagged and considered for possible local dependence (Chen & Thissen, 1997; Revicki et al., 2014).

According to Thompson and Pommerich (1996), identifying the existence and sources of local dependence (LD) is important to eventually manage those items since LD might impact item parameter estimates, item characteristic curve, test reliability, and PCH estimates. Literature indicates that presence of LD tends to overestimate the discrimination parameter, slightly decrease the difficulty (threshold) parameter, and generate inflated test reliability (Keller, Swaminathan, & Sireci, 2003; Reese, 1995). Thus, LD is undesirable in IRT and studies recommend that, after evaluating the influences of items associated with LD, such items need to be managed by stepwise deletion, evaluation of the context of such dependent items, or by combination of relevant items into testlets (Zenisky et al., 2002; Wainer & Kiely, 1987). Thus, in this research,

the items identified to have local dependence were iteratively deleted based on their item statistics and content to control for local dependence (*idem*).

Monotonicity. According to this final assumption of IRT, the probability of endorsing an item measuring a particular trait should increase as the underlying level of the dominant factor increases (Revicki et al., 2014). The relationships between a latent trait and its item responses, along with the probability of individuals answering those items based on their latent trait, need to be similar to a S-shaped curve (Zanon et al., 2016). The left side of such curves is indicative of lower levels of the latent trait being measured and the right side represents higher levels of the latent trait (idem). Applied to this study, the probability of getting a high response on an item should increase with an increase in participants' higher level of CH. The assumption of monotonicity was checked in this study by reviewing the plots generated with non-parametric IRT models and scaling technique for ordinal data using the Mokken scale analysis (Mokken, 1971; Sijtsma & Molenaar, 2002).

IRT model and item parameters. Once the assumptions were confirmed, the relevant IRT model was fit to the collected data. IRT presents different types of models to describe the relationship between response options of an item and a person's level of the latent trait that the scale intends to measure (Embretson & Reise, 2000; Hambleton, Swaminathan, & Rogers, 1991). Various IRT models for polytomous data, such as the graded response model (GRM; Samejima, 1969); the rating scale model (RSM; Andrich, 1978), the partial credit model (PCM; Masters, 1982), and the generalized partial credit model (GPCM; Muraki, 1992) are available in literature to aid item analysis, scale analysis, and item calibration. While the RSM, PCM, and GPCM are hierarchically

related to each other and are based on the Rasch-model framework, assuming that all items' discriminatory or slope parameters are equal to 1(Rasch, 1960), the GRM is a non-Rasch approach which describes probability of response options using boundary characteristic curves (Kang, Cohen, & Sung, 2005). In other words, the GRM is described as a more flexible model over the Rasch framework, since it allows item discrimination to vary across the scale, and is relatively easy to understand (Embretson & Reise, 2000; Revicki et al., 2014; Thissen & Orlando, 2001).

GRM has been reported by literature as a model suited for unidimensional scales with polytomous response options and has the advantage of being a comparatively flexible model over the Rasch framework (Embretson & Reise, 2000; Revicki et al., 2014; Thissen & Orlando, 2001). Additionally, GRM's flexible framework makes it easier for researchers to interpret participants' responses while investigating item and scale properties, item calibrations, and participants' response score patterns (Revicki et al., 2014). To summarize, GRM seems to be comparatively easier over other models for the clarity of explaining item calibration and item parameters, and logically relevant to the parametric, unidimensional, polytomous-response data of the PCH scale. Thus, the GRM was used in the analysis in calibrating the PCH scale items.

The data were fitted by the GRM to check for the probability of a participant endorsing a response category k or higher for an item at a given level of PCH being measured (Samejima, 1969, 1997). The GRM was formulated as:

$$P(X_i = k|\Theta, b_i, a_i) = (1/(1+\exp[-a_i(\Theta - b_{i,\,k-1})]) - (1/(1+\exp[-a_i(\Theta - b_{i,\,k})]). \quad (1)$$

where $P(X_i = k|\Theta, b_i, a_i)$ indicates the probability of choosing ordered responses X = k, such that k = 1, 2, 3, …m_i, and m represents the response chosen for highest PCH

level. a_i represents the item discriminatory parameter varying by item *i.* The threshold parameters $b_{i,k}$ is the item threshold parameter for the k^{th} response option in the i^{th} item, and varies within an item with the constraint $b_{k-1} < b_k < b_{k+1}$. θ is participants' PCH.

To analyze psychometric properties of items in IRT, item characteristic curve (ICC) and item parameters (threshold parameters, discrimination, and person location) of the GRM model were reviewed (Reeve, 2003; Reeve & Frayers, 2005). ICC is one fundamental unit of IRT (Lord, 1952) that describes the relation between an individual's level of a trait and the probability of endorsing a response of a scale item that measures the trait (De Ayala, 2009). In other words, it explains a relationship as how an individual will respond to an item when he or she has a certain level of latent trait. The ICC provides information that enables measurement of an individual's latent trait with precision (Lord, 1952). In this study, ICCs for every item were generated and reviewed to understand how participants' PCH was related to the responses chosen in the polytomous items of the test.

Threshold parameter is the location point on the latent trait axis (X-axis) where the ICC changes direction (the inflection point) (De Ayala, 2009). For a polytomous item, the threshold parameter 'b' varies within every individual item with the constraints $b_{k-1} < b_k < b_{k+1}$, where k represents response categories (Samejima, 1969). Thus, for a polytomous item, the threshold parameter refers to the point of the latent trait continuum (X-axis) where the response probability curves change direction (the inflection point) for each and every response category. Knowledge of threshold parameters of every response category for an item enables researchers to estimate which response category or higher will be chosen by a participant for that item. For example, if a 4-point Likert scale item

with 4 response categories has threshold parameters ('*b*') of -1.5, .7, and 2, a participant of PCH -1.3 will be estimated to choose the second response category. The PCH of -1.3 is more than -1.5, and at this level, the probability of second response category is higher than that of the first response category. Similarly, a participant with PCH at 0, i.e., more than -1.5, will have a higher probability of choosing the second response category. Also, knowledge of the threshold parameters helps researchers to approximately estimate the range of PCH covered by the individual items and eventually the overall developed scale. In this study, the threshold parameters were analyzed to understand how participants with different levels of PCH selected different response categories for every individual item of the item bank.

The discrimination or slope parameter 'a' refers to an item's ability to differentiate among individuals with different levels of a latent trait (De Ayala, 2009). Although, theoretically, this parameter can vary from –infinity to +infinity, a value of 0.01 to 0.34 is considered to represent very low discrimination, 0.35 to 0.64 represents low discrimination, 0.65 to 1.34 represents moderate discrimination, 1.35 to 1.69 represents high discrimination, and 1.7 or above represents very high discrimination (Baker, 1985, 2001). Applied to this study, this parameter described how effectively an item can discriminate individuals between low and high PCH amongst employees. As the item bank's underlying dimensional structure was determined, and items were deleted to create a parsimonious, interpretable, and valid scale, items with poor discrimination were flagged and reviewed for possible deletion without compromising the representation of all necessary aspects of PCH.

Person location or the latent trait (θ) describes an individual's magnitude or level of an unobserved characteristic, helps determining individual responses to various items, and is reflected on the latent trait continuum (X-axis) (De Ayala, 2009; Harvey & Hammer, 1999). Although it can range from –infinity to +infinity, generally a range of -3 to +3 is considered as a good representative range for a latent trait (*idem*). In this study, this parameter referred to an individual's varying levels of PCH and was reviewed from the ICCs.

Model-fit. Although fitting a model to data is frequently in practice, it does not fit the data exactly and thus researchers suggest assessing how well the fitted model reflects reality (Brown, 2006; Hu & Bentler, 1998). To ensure that the chosen model fits well with the data, IRT model fit is assessed using different indices at the individual item level and at the overall scale level. At the item level, the common statistic of S-X^2 is used to assess the fit for each item to the predictive model, to confirm whether the observed participant responses follow the expected pattern of the predictive model (Orlando & Thissen, 2000, 2003). This fit statistic compares proportions, i.e., compares the observed frequency in relation to the total sum score of the scale, or observed proportions, with the expected frequency in relation to the total sum score of the scale, or expected proportions, for every item (*idem*).

At the test-level, common statistics such as M_2, Pearson χ^2 and G^2 likelihood ratio are commonly used to assess a model's appropriateness of fit (Cai, Maydeu-Olivares, Coffman, & Thissen, 2006). Pearson χ^2 and G^2 likelihood ratio statistics analyze the differences or residuals between observed and expected response frequencies by item response categories, and help to interpret a model fit in IRT (Revicki et al., 2014). A

statistically significant difference in these statistics will indicate a poor model fit. However, often these statistics are challenged with Type I error rates and cannot be trusted to test for the lack of fit (Maydeu-Olivares & Joe, 2005).

The M_2 seems to resolve these issues as the statistic has good control of the Type I error and high power to detect model misspecifications (Jurich, 2014). The M_2 statistics belong to the family of M_r fit test statistics and is based on the contingency tables represented by moments instead of probabilities (Maydeu-Olivares & Joe, 2014). In M_2, means and cross-tabs of polytomous variables are used to generate limited information statistics with better approximation by asymptotic methods. Such an approach uses only low-order marginal information in the contingency table to evaluate the model–data fit (Cai & Hansen, 2013; Cai, Maydeu-Olivares, Coffman, & Thissen, 2006; Maydeu-Olivares & Joe, 2005). Considering that most of the IRT models, including the GRM, are identified using only univariate and bivariate information, researchers recommend using M_2 statistics for general IRT model fit tests (Maydeu-Olivares & Joe, 2005).

Further, a root mean square error of approximation (RMSEA) fit index is also recommended to assess the approximate goodness of fit (Maydeu-Olivares & Joe, 2014). For RMSEA, a general cut-off value of .08 is used as the guideline to indicate good model fit (MacCallum et al, 1996) such that the lower the value, the better the model fit (Hooper, Coughlan, & Mullen, 2008). Additional fit indices such as comparative fit index (CFI>0.95 for acceptable model fit), Tucker-Lewis Index (TLI>0.95 for acceptable model fit), and standardized root mean square residuals (SRMR<0.08 for acceptable model fit) are also suggested to check for a model fit (Bentler, 1990; Browne & Cudeck, 1993; Hu & Bentler, 1999; Kline, 2010; McDonald, 1999; Reeve et al., 2007). In this

study, M_2 statistic, RMSEA, CFI, TLI, and SRMR fit indices were used to check for and confirm the model fit.

Reliability. One central concept in scale development and testing is to ensure item and scale reliability, the degree to which the items and scales are error free (Crocker & Algina, 1986). In IRT, reliability is described in terms of the information available in an item and in the entire test (Revicki et al., 2014). Information relates to the standard error of estimate (SEE) with which a parameter is estimated, such that a parameter estimated with lower SEE would have more information about the value of the parameter (Frank, 2001). The statistical relationship between information (I) and SEE is defined as information (I) being equal to the reciprocal of the SEE (i.e., $I= 1/SEE^2$) (*idem*). Therefore, reliability is examined as information availability or SEE as it differs across various levels of the latent trait. Based on the formula, it can be said that better information is derived when SEE is lower, thus, making an item and a scale more precise and reliable.

According to the IRT, each item of a scale measures the underlying trait of interest. The amount of information available from a single item can be derived from the Item Information Function (IIF) of that item, and the information pertains to a range of the latent trait (Frank, 2001). The height of the curve is indicative of the amount of information an item represents so that an item is most informative for a range of the latent trait it measures (De Ayala, 2009). In IRT, an item measures a latent trait with greatest precision at a specific level or a range of level of that trait corresponding with the item's threshold parameters (*idem*). Therefore, an item is considered as more informative and reliable at the peak of IIF at a specific level or a range of level of the latent trait.

Considering that a scale or test is a set of different items, the test information at a specific level of latent trait for a polytomous item is simply described as the total sum of all the item information at that level (Culligan, 2011; Culpepper, 2013; Frank, 2001). A curve denoting this test information is referred to as Test Information Function, and the level of this function is in general much higher than that of the individual IIFs (Frank, 2001). Thus, a scale or test measures a latent trait more precisely and reliably than a single item of the test. In fact, in IRT, the amount of test information at a latent trait level is considered as of primary interest compared to individual item information to measure the latent trait with considerable precision or reliability (*idem*). Thus, in this study, both item and test information were reviewed iteratively for reducing the item bank into a parsimonious one, with test information being of primary interest to confirm the scale reliability.

Using the same statistical relationship between Test Information Function (TIF) and SEE, where test information is expressed as the square of the reciprocal of SEE (i.e., $I= 1/SEE^2$), a scale precision or reliability can be estimated (Zhang, Breithaupt, Tessema, & Chuah, 2006). Thus, better test information is derived when SEE is lower, thus making the scale more reliable. A scale will be considered as most informative and therefore reliable across a range of the latent trait being measured if the TIF curve gets relatively flatter at the peak (Frank, 2001). If a TIF curve has several peaks (instead of being flat) at different points across a range of the latent trait, the scale will be considered reliable to measure the levels of latent trait falling near those peaks (Frank, 2001). The shape of a desired TIF depends on the purpose of the test. Applied to this study, the peak of the TIF along with the range of PCH covered by the curve were reviewed for reliability.

Construct Validity. Validity of a scale ascertains that a scale is measuring a concept as intended and not something else (Gall, Gall, & Borg, 2007; Hays & Revicki, 2005). To establish construct validity of a scale, there needs to be empirical evidence that the scale is measuring what it is intended to measure. Although there are no specific suggested type, form and nature of such empirical evidence, construct validity needs to be demonstrated for every new measure that is developed (Streiner & Norman, 2008). Evidence demonstrating the adequacy with which the content of the new scale of PCH covers and represents the full constructs of PCH was presented in chapter two. Additional construct validation data based on the internal structure of the new measure, applying the principal component analysis as well as modern test theory's Graded Response Model, were discussed earlier in this chapter.

Further construct validation of the PCH scale would be assessed by testing the relationship between scores of PCH scale and those of other established instruments with convergent validity and discriminant validity (Messick, 1995; Social Research Methods, n.d.). Convergent validity is described as the degree to which a set of items of similar or overlapping variables, expected to be related theoretically, are found to be related statistically (Heppner et al., 2008; Wang, French, & Clay, 2015). That is, if two variables are explained to be theoretically related and are found to be statistically correlated at moderate magnitude, convergent validity is established. Also, if items from a latent variable are statistically found to belong to that latent variable, convergent validity is established (Wang, French, & Clay, 2015).

Discriminant validity, on the other hand, refers to the degree a set of items of variables, theoretically distinct from each other, are found to be unrelated and exist as

unique different entities (Heppner et al., 2008; Wang, French, & Clay, 2015). Thus, if two variables are explained in literature as existing as two distinct constructs, and are empirically found to exist as separate factors, discriminant validity is established. In other words, if items from a latent variable are statistically found to not belong to other latent variables, discriminant validity can be established (Wang, French, & Clay, 2015). It is important to note that, although the constructs being tested might be correlated, the fact that these constructs cannot be merged into one single factor and exist as two separate constructs establishes discriminant validity (Shim & Yang, 2016).

Convergent validity. Turnover intentions or intention of employees to quit working within an organization perceived to be hypocritical has been studied in the literature. According to studies, a lack of consistency between what organizations assert and what they do, i.e., organizational hypocrisy is mirrored in employees and it reduces employees' desire to remain within the same corporation and increases their turnover intentions (Greenberger et al., 1989; Kouzes & Posner, 1993; Philippe & Koehler, 2005). Such studies have been also conducted with a special focus on leaders and managers, and similar results have been found that inconsistencies between managers' words and actions increases employees' intentions to quit or turnover intentions (Craig & Gustafson, 1998; Greenbaum et al., 2012). Hence, intention to leave a corporation is an essential facet related to behavior-assertion inconsistencies and should be observed in relation to PCH among employees.

Specifically, Philippe and Koehler (2005) found significant positive correlations between organizational hypocrisy and turnover intentions when they conducted a study about employees' hypocrisy perceptions among a graduate student sample. Subsequently,

PCH among retail employees could be argued and expected to be positively correlated to those employees' turnover intentions toward their corporations. To measure employees' turnover intentions, a three-item scale from Alniacik et al. (2013) on a four-point Likert scale anchored across "Strongly disagree" and "Strongly agree" was used in this study. Data were analyzed to check for positive correlation between PCH and turnover intentions. See Appendix H for the items.

Discriminant validity. Attitude towards a corporation, simply described, is a way of thinking or feeling as manifested in one's behavior towards the corporation (Dictionary.com, n.d.). Wagner et al. (2009) reported that when corporations have inconsistencies in their behaviors and assertions, and when such inconsistencies generate CH, that PCH affects consumers' attitude towards the corporation. Negative attitude towards corporations has been reported to affect consumers' future business intentions with those corporations (Lichtenstein, Drumwright, & Braig 2004). Other researchers also suggested that with CH, especially related to CSR activities and assertions, consumers might feel betrayed, might develop negative attitude towards the corporation, and might try to avoid the corporation (Kim, Hur & Yeo, 2015; Shim & Yang, 2016).

While PCH among consumers is related to their negative attitude towards corporations, such a negative attitude exists among employees within a corporation. Davis and Rothstein (2006) reported that when employees perceive a misalignment between managers' words and actions, they develop a negative attitude towards the corporation. Thus, the construct of attitude towards the corporation seems to be related to CH, and can be used to assess the construct validity of PCH measures. For instance, Shim and Yang (2016) used the attitude towards the company to test for discriminant validity

of the PCH scale for consumers. Although the authors found these constructs to be correlated, they reported these constructs as existing as two separate unique constructs and not as one single factor (Shim & Yang, 2016).

For an established measure of attitude towards corporation, the scale from Wagner et al. (2009) was adapted in this study. A total of four items, namely favorable/unfavorable, good/bad, pleasant/unpleasant, and positive/negative, were used to ask about attitude towards a corporation on four-point Likert scales to measure discriminant validity (Wagner et al., 2009). Given that the items do not enquire anything specific regarding consumers' context, the same items were adapted to measure employees' attitude towards the corporation in this study. To confirm discriminant validity, it was hypothesized that the two constructs of PCH and attitude towards corporation would exist as two separate unique variables and not as one single factor. Also, a low or negative correlation was expected between these two variables. For this analysis, the final PCH scale was concatenated with the four items measuring attitude into one single scale. Then, a confirmatory factor analysis (CFA) was conducted in which a two-factor model was imposed on the concatenated scale (PCH and attitude towards the company) to check for two separate variables. Also, the variables' correlations were measured. See Appendix H for specific items.

Content validity. This type of validity concerns whether the scale and its items are proper representatives of all the facets or domains of a given construct being measured (Gall et al., 2007; Heppner et al., 2008). Researchers establish content validity of scales by thorough review of literature as well as by following systematic and methodological approaches for scale development (Philippe & Koehler, 2005). Other

researchers also suggest expert opinions as an important basis to establish that the scale items correctly represent all relevant facets of the construct (Gall et al., 2007; Heppner et al., 2008). Therefore, in this study, content validity had been established with a careful and systematic review of literature, with methodical scale development steps, such as binning and winnowing, and with expert opinions received through focus groups and cognitive interviews.

Test-fairness. A scale will need to be fair and unbiased to all respondents while measuring latent traits of interest (De Ayala, 2009). Test fairness is important such that a scale should generate the same or similar results while measuring a latent construct among individuals with similar levels of the latent trait, irrespective of any age, gender, race, education, and culture differences among these individuals (Revicki et al., 2014). To establish test fairness, differential item functioning (DIF) is used as a common practice in IRT (De Ayala, 2009). Thus, DIF is described as a condition in which an item generates different statistical properties for different groups of individuals although the groups have matched levels of the latent trait being measured (Angoff, 1993). Existence of DIF is considered as a threat to the scale validity and therefore is not desired (Revicki et al., 2014). Graphically, DIF can be assessed by comparing the item trace lines among different groups for any difference. If the trace lines do not superimpose on one another, the item is identified as exhibiting a DIF condition (De Ayala, 2009).

Mellenbergh (1982) described two different types of DIF conditions, namely uniform and nonuniform DIF. Uniform DIF refers to the condition when the differences between groups stay constant across the entire range of the latent trait being measured (De Ayala, 2009). Therefore, the reference group, towards whom the item will be biased,

will always have a higher probability of endorsing the item than the focal group. For a nonuniform DIF condition, the differences between groups vary at different levels of the latent trait (*idem*). Therefore, in a nonuniform DIF, the reference group might have a higher probability of endorsing the item than the focal group (group of interests) at a specific level of the latent trait, but might have a lower probability of endorsing the same item as the focal group at a different level of the latent trait.

Considering that existence of DIF threatens the scale fairness and validity, one needs to detect DIF conditions. Some common approaches to DIF detections are the Mantel-Haenszel statistics [MH] and the TSW likelihood ratio test (De Ayala, 2009). The MH Chi-square determines independence of two variables while conditioning for a third variable (Mantel & Haenszel, 1959). To analyze for DIF, item responses are checked if those vary based on individuals' group membership, after conditioning the observed scores. A conditional independence among the item responses and group memberships are expected to confirm absence of DIF in an item. In this chi-square test, the odds of the focal group members of endorsing an item is calculated in comparison to the odds of the reference group endorsing the same item. In other words, the comparative estimate indicates whether the focal group, on average, is better or worse in endorsing an item than the reference group members. A value of 1 for this comparative estimate indicates absence of DIF, a value higher than 1 indicates presence of DIF with the item being biased towards the reference group, and a value lower than 1 indicates presence of DIF with the item being biased towards the focal group.

Another way to detect the presence of DIF condition is the likelihood ratio test (Thissen, Steinberg, & Wainer, 1988). In this method, two IRT models are fit to data of

different groups under consideration, and comparing the location estimates of these two models help to determine whether there is a DIF condition (De Ayala, 2009). To run a likelihood ratio test, a three-step approach is taken, as described (*idem*). First, an IRT model is fit to both groups, restricting the item parameters to be equal across groups for all but one item. This allows the free item to have different parameter estimates across both groups. Second, the same IRT model is again fit to both groups, restricting items parameters of all items to be equal across groups. Finally, a comparison of the likelihood ratios of both these models is done. A statistically significant difference among these models indicates presence of DIF conditions, and thus is not desired.

For the scale items identified with presence of DIF conditions, further actions are recommended (De Ayala, 2009). The items identified as exhibiting DIF are reviewed to determine whether the item design, its wording or item response categories can explain the bias among different groups. Likewise, such items can be revised and modified to test for DIF again. However, if no such error is observed in the item design, the item might need to be deleted from the scale to remove bias possibilities.

While determining relevant actions to remove DIF conditions, it is important to consider the impact of the item, flagged for DIF, on the overall analysis. Holland and Thayer (1988) suggest that if a DIF-flagged item is fundamental to explain the latent trait being measured, it may be retained in the item bank unless it has 'substantial' DIF. Other researchers recommend deleting DIF items iteratively, starting with the item exhibiting the greatest DIF, and analyzing the data again for test-fairness (Camilli & Shepard, 1994). Revicki et al (2014) suggest treating such DIF characterized items differently based on the group they are biased to.

Further, it is important to consider the meaning of the DIF conditions and the result in the context of the latent trait that is being evaluated (De Ayala, 2009). A statistically significant DIF condition might not necessarily indicate meaningful explainable differences among groups. An item flagged with DIF, but one in which the differences among groups cannot be theoretically explained in a meaningful way, might be retained in the measurement scale.

Applied to this study, the item bank was tested for differential item functioning for gender, age, and respondents' workplace. An in-built package in the data analysis software, called *lordif*, was used which identifies items with DIF conditions using an iterative hybrid of ordinal logistic regression and IRT. This package generated DIF-free datasets using the one-group item parameter estimates and purified trait estimates from the real data, but preserving observed group differences and keeping dimensions same as that of the empirical dataset. Considering that the age variable had six categories and only two groups/categories could be compared and analyzed at a time for DIF conditions, six separate analyses were computed for DIF in age. Additionally, the first category of 18-20 years of age covered a very narrow age range with only 28 participants, and thus was merged with the second category (21-30) for practical considerations. The six analyses represented comparisons across six different age group pairs, such as 18-30 versus 31-40, 41-50 versus 51-60, 18-30 versus 41-50, 18-30 versus 51-60, 31-40 versus 41-50, and 31-40 versus 51-60. Finally, presence of DIF was checked among participants belonging to different workplaces. Participants working on retail shop floors were compared with participants working the retail corporate offices (both onsite and off-site).

However, while DIF detection was conducted and some items were identified with DIF conditions, iterative strategies to manage DIF were not a part of this dissertation and were recommended as future studies.

CHAPTER IV: RESULTS

This section includes (a) description of the sample including demographic information, (b) initial item bank analysis, (c) iterations, (d) final model, and (e) construct validity.

Description of the Sample Including Demographic Characteristics

A total of 520 participants completed the online survey within a week in April. A descriptive analysis of the data were conducted to understand the demographic characteristics of the study participants. Age of the participants ranged from 18 to 61 and over. Twenty-eight (5.4%) of the participants were aged between 18-20 years, 184 (35.5%) between 21-30 years, 150 (28.8 %) between 31-40 years, 82 (15.7%) between 41-50 years, 62 (11.9%) between 51-60 years, and, 14 (2.7%) between 61 and up. The sample represented 137 males (26.3%) and 378 females (72.7%); four participants refused to answer the query. Participants represented a diverse mix of ethnicities with 392 (75.2%) identifying themselves as Caucasian, 47 (9.0%) as Hispanic, 39 (7.5%) as African American, 17 (3.1%) as Asian, 27 (5.2%) as belonging to another ethnic origin. Moreover, 13.7% of the population was 65 years or older. According to the 2016 estimate of the US Census Bureau, the retail population was comprised of 17% of Hispanic or Latino ethnicity, 12% African Americans/ Blacks, 5.9% Asians, and 65.1% including Whites and other races (Bureau of Labor Statistics, 2016).

Regarding marital status of the participants, 166 (32.1%) identified themselves as being single, 92 (17.7%) as in a relationship, 209 (40.1%) as being married, and 53 (10.2%) as divorced/widower. With respect to highest education level, 6 (1.2%) of the participants received some high school education, 98 (18.8%) a high school degree, 183

(35.1%) some college education, 170 (32.6%) a college degree, 12 (2.3%) some graduate education, 47 (9.2%) a graduate degree, and, 4 (0.8%) reported as other.

One hundred and seventy-two (33%) of the participants reported their employment status as part-time employed (1-39 hours/week), 331 (63.7%) as employed full time (40 or more hours/ week), 9 (1.7%) as unemployed, and 8 (1.5%) as retired. Among the participants, 417 (80.2%) identified retail shop floor as their workplace, while 103 (19.8%) reported corporate office (on-site and off-site) as their workplaces. Three (0.6%) of the participants represented the motor vehicle and parts dealers (NAICS 441) industry of the retail sector, 20 (3.8%) represented the furniture and home furnishings industry (NAICS 442), 37 (7.1%) represented the electronics and appliances industry (NAICS 443), 26 (5%) represented the building materials, garden equipment and supplies industry (NAICS 444), 71 (13.6%) represented the food and beverages industry (NAICS 445), 37 (7.1%) represented the health and personal care industry (NAICS 446), 14 (2.7%) represented the gasoline industry (NAICS 447), 124 (23.8%) represented the clothing and clothing accessories industry (NAICS 448), 34 (6.5%) represented the sporting goods, hobby, books and music industry (NAICS 451), 117 (22.6%) represented the general merchandise industry (NAICS 452), and 37 (7.1%) represented the miscellaneous industry (NAICS 453).

Annual household income of the participants ranged from less than $20,000 to above $100,000. Seventy-one participants (13.8%) reported their annual household income to be less than $20,000, 124 (23.8%) as $20,000-$34,999, 101 (19.4%) as $35,000-$49,999, 111 (21.3%) as $50,000-$74,999, 63 (12.2%) as $75,000-$99,999, and 50 (9.6%) as $100,000 and above. Table 4.1 shows demographic information in detail.

Table 4.1. Demographic Characteristics of Online Survey Participants

Variable	Levels	Frequency	Percentage
Age	18-20	28	5.4
	21-30	184	35.5
	31-40	150	28.8
	41-50	82	15.7
	51-60	62	11.9
	61 and above	14	2.7
Gender	Male	137	26.3
	Female	378	72.7
	Prefer not to disclose	5	1
Ethnicity	Caucasian	392	75.2
	Hispanic	47	9
	African-American	39	7.5
	Asian	15	3.1
	Other	27	5.2
Marital status	Single	166	32.1
	In a relationship	92	17.7
	Married	209	40.1
	Divorced/Widower	53	10.2
Employment Status	Part-time	172	33
	Full time	331	63.7
	Not employed	9	1.7
	Retired	8	1.5
Workplace	Retail shop floor	417	80.2
	Corporate office (on-site and off-site)	103	19.8

Note. Number of participants (n) = 520.

Table 4.1. Demographic Characteristics of Online Survey Participants (Continued)

Variable	Levels	Frequency	Percentage
Work Industry	Motor vehicle and parts	3	0.6
	Furniture and home furnishing	20	3.8
	Electronic and appliances	37	7.1
	Building material, garden equipment, and supplies	26	5
	Food and beverage	71	13.6
	Health and personal care	37	7.1
	Gasoline	14	2.7
	Clothing and clothing accessories	124	23.8
	Sporting goods, hobby, book, and music	34	6.5
	General merchandise	117	22.6
	Miscellaneous	37	7.1
Income	Less than 20,000	71	13.8
	20,000 – 34,999	124	23.8
	35,000 – 49,999	101	19.4
	50,000 – 74,999	111	21.3
	75,000 – 99,999	63	12.1
	100,000 or above	50	9.6

Note. Number of participants (n) = 520.

Initial Item Bank Analysis

The item bank of 49 items theoretically represented four domains of CH, namely perceived lack of morality, psychological contract breach, double standards, and value-behavior gap. As an initial analysis, the descriptive statistic of the item responses was assessed. For all 49 items, every response category was endorsed by participants with none of the categories being *null* categories, showing reasonable variability in the item endorsements (De Ayala, 2009). Category 4 was the most endorsed category for 33 out of 49 items, being as high as 53% for item 16. These highest frequency categories indicate items' baseline response categories (*idem*). No missing data occurred in the data. Refer to Table 4.2 for the descriptive statistics of the initial item bank.

Table 4.2. Item Descriptive Statistics

No.	Items	N	Mean	Std. Dev.	Proportion of participants (%) with each response category			
					1	2	3	4
1	My company BREAKS most of the promises made during recruitment.	520	3.092	1.036	11.30%	15.40%	26.10%	47.20%
2	My company breaks many of its promises to me for NO fault of my own.	520	2.881	1.044	12.50%	23.60%	27.30%	36.70%
3	My company mostly FAILS to meet its obligations to me.	520	2.806	1.003	11.50%	27.30%	30.30%	30.90%
4	My company often does NOT fulfill its most important obligations to me.	520	2.775	1.025	13.40%	25.90%	30.30%	30.30%
5	My company often LIES to me.	520	2.727	1.100	17.10%	26.50%	23.00%	33.40%
6	My company does NOT acknowledge employees as humans.	520	2.749	1.137	18.60%	24.40%	20.50%	36.50%
7	My company often THROWS ME UNDER THE BUS for its own benefits.	520	2.747	1.098	17.70%	23.00%	26.30%	33.00%
8	My company has NO compassion for its employees.	520	2.770	1.069	15.40%	25.20%	26.70%	32.80%
9	My company uses my mistakes to INDIVIDUALIZE me.	520	2.992	0.881	7.30%	17.30%	44.30%	31.10%
10	My company TAKES CREDIT for my ideas.	520	3.115	0.919	6.50%	17.50%	34.00%	42.00%

Table 4.2. Item Descriptive Statistics (Continued)

No.	Items	N	Mean	Std. Dev.	Proportion of participants (%) with each response category			
					1	2	3	4
11	My company RANDOMLY changes its goals without communicating this to employees.	520	3.067	0.897	7.50%	14.60%	41.70%	36.30%
12	My company does NOT have employees' best interests at heart.	520	3.129	0.941	7.70%	15.50%	33.00%	43.80%
13	My company tends to look out only for ITSELF.	520	3.144	0.937	8.10%	13.40%	34.50%	44.00%
14	My company's policies do NOT match the promises made to employees.	520	3.065	0.953	7.70%	19.20%	32.10%	41.10%
15	My company makes promises to employees, which I can RARELY expect to actually happen.	520	2.992	0.955	9.00%	18.80%	36.10%	36.10%
16	My company is UNJUST to its employees.	520	3.286	0.901	6.00%	12.50%	28.60%	53.00%
17	My company is UNFAIR to its employees.	520	3.192	0.939	7.10%	15.00%	29.60%	48.40%
18	My company is SELFISH.	520	3.106	0.911	7.30%	14.80%	38.00%	39.90%
19	My company has almost NO moral principles.	520	3.058	1.025	9.60%	20.90%	23.60%	45.90%
20	My experience in my company is often NOT personally satisfying.	520	2.998	0.929	8.40%	17.90%	39.20%	34.50%

Table 4.2. Item Descriptive Statistics (Continued)

No.	Items	N	Mean	Std. Dev.	Proportion of participants (%) with each response category			
					1	2	3	4
21	My company does NOT care for its employees, but only for money.	520	3.136	0.915	6.50%	16.30%	34.20%	43.00%
22	My company is INEFFICIENT in enacting its own set principles.	520	3.002	0.921	7.30%	20.30%	37.20%	35.10%
23	My company often COMPROMISES its important values as shared in public.	520	3.035	0.928	7.70%	18.20%	37.00%	37.00%
24	My company PRIORITIZES its benefits over employees' benefits.	520	3.202	0.820	4.20%	12.90%	41.50%	41.50%
25	My company PRETENDS to appear moral.	520	3.121	0.883	6.10%	15.20%	39.20%	39.50%
26	My company engages in morally WRONG acts when it can get away with them.	520	3.054	1.000	10.20%	16.90%	30.30%	42.60%
27	My company FIRES people on unjust grounds when it can get away with it.	520	3.144	1.002	9.80%	14.60%	27.10%	48.60%
28	My company's moral values are NOT the same as my moral values.	520	2.941	0.891	7.70%	19.80%	43.40%	29.20%
29	My company's values often CHANGE when it comes to getting things done.	520	3.023	0.883	7.10%	16.50%	43.40%	33.00%
30	My company does NOT behave honestly when dealing with employees.	520	3.119	0.957	8.30%	15.70%	31.90%	44.10%

Table 4.2. Item Descriptive Statistics (Continued)

No.	Items	N	Mean	Std. Dev.	Proportion of participants (%) with each response category			
					1	2	3	4
31	My company does NOT behave ethically when dealing with employees.	520	3.136	0.968	8.30%	16.10%	29.40%	46.30%
32	My supervisor does NOT practice what (s)he preaches.	520	3.276	0.862	6.00%	9.20%	36.10%	48.80%
33	My supervisor GETS AWAY with doing things I can't.	520	3.154	0.890	5.20%	17.50%	34.20%	43.20%
34	There is an 'us' VERSUS 'him/her' between employees and supervisor.	520	3.115	0.923	6.70%	17.30%	33.80%	42.20%
35	My supervisor does NOT apply the same standards for performance to all employees.	520	3.250	0.922	6.50%	13.40%	28.60%	51.40%
36	My supervisor does NOT hold everyone at all levels equally accountable for their mistakes.	520	3.273	0.859	5.40%	10.70%	35.10%	48.80%
37	My supervisor does NOT give me enough authority to carry out my job responsibilities, but penalizes me for lack of performance.	520	3.109	0.949	7.50%	17.70%	31.30%	43.60%
38	The amount of work my supervisor requires me to do CONFLICTS with the quality of work (s)he expects.	520	3.121	0.946	7.90%	15.70%	32.80%	43.60%
39	My supervisor FAVORS employees based on her/his personal preferences rather than employees' abilities.	520	3.276	0.892	6.00%	11.90%	30.70%	51.40%
40	My supervisor does NOT conduct herself/himself according to the same values (s)he talks about.	520	3.257	0.843	5.20%	10.40%	38.00%	46.40%

Table 4.2. Item Descriptive Statistics (Continued)

No.	Items	N	Mean	Std. Dev.	Proportion of participants (%) with each response category			
					1	2	3	4
41	My supervisor PRETENDS to be someone (s)he is not.	520	3.079	0.924	7.30%	17.10%	36.10%	39.50%
42	The values my supervisor communicates to the society are NOT consistent with employees' experiences at work.	520	3.127	0.861	5.60%	14.80%	41.10%	38.60%
43	The way my supervisor represents himself/herself to the public is very DIFFERENT from what happens internally.	520	3.069	0.948	8.30%	16.90%	34.50%	40.30%
44	There is a DIFFERENCE between what my supervisor says and what (s)he does.	520	3.182	0.901	6.10%	14.60%	34.20%	45.10%
45	My supervisor's behaviors do NOT reflect the company's values.	520	3.033	0.862	5.60%	18.80%	42.40%	33.20%
46	My supervisor MISLEADS employees with her/his communication and conflicting actions.	520	3.204	0.908	6.50%	13.40%	33.20%	46.80%
47	My supervisor is DECEPTIVE.	520	3.180	0.976	8.40%	14.80%	27.10%	49.70%
48	My supervisor shows employees what they want to see INSTEAD of the reality of the situation.	520	3.060	0.900	7.30%	15.70%	40.70%	36.30%
49	My supervisor MISLEADS employees about the real motives of the company.	520	3.109	0.937	7.50%	16.50%	33.60%	42.40%

IRT Assumptions

After reviewing descriptive analysis, the three IRT assumptions, namely unidimensionality, local independence, and monotonicity, were checked. A principal component analysis (PCA) extraction method was used to check for the first IRT assumption and to determine the underlying structure of the item bank (Conway & Huffcutt, 2003). Using the criterion of eigenvalue greater than 1 (Kaiser, 1960), PCA yielded five principal dimensions for the item bank, accounting for 68.97% of the total variance. The eigenvalues indicated that the first dimension accounted for 51.61% of the variance, the second dimension explained 8.59% of the variance, and the third dimension explained 4.17% of the variance in the total collection of items. The fourth and fifth dimensions explained 2.32% and 2.25% of the variance, respectively. A total of 17 items loaded on more than one dimension. According to Kaiser (1960), dimensions with eigenvalues greater than 1 need to be retained and are indicative of multidimensionality, but other researchers have noted this rule to be rather stringent for selecting the number of dimensions and that it should not be used in isolation (Conway & Huffcutt, 2003; Costello & Osborne, 2005).

The amount of variance explained by the first principal dimension and whether this dimension explained the maximum variance were also checked for unidimensionality (Hattie, 1985). Using Reckase's (1979) threshold of a minimum of 20% variance explained by the first dimension, the first principal dimension extracted from the data explained 51.61% variance. Additionally, the magnitude of the ratio of first and second eigenvalues was analyzed and a large ratio of the eigenvalues (6.00) was observed between the largest and second dimensions (Lumsden, 1961; Hutten, 1980). Therefore,

these two criteria for unidimensionality were confirmed as indicated by Table 4.3. Refer to Table 4.4 for the factor loadings of the 49 items onto the five dimensions.

Table 4.3. PCA Results for Test of Unidimensionality for the Initial Item Bank

PCA	
% of variance explained by first PC	51.61%
% of variance explained by second PC	8.59%
% of variance explained by third PC	4.17%
% of variance explained by fourth PC	2.33%
% of variance explained by fifth PC	2.26%
Ratio of first PC to second PC	6.00

Table 4.4. Factor Loadings of the Initial Item Bank

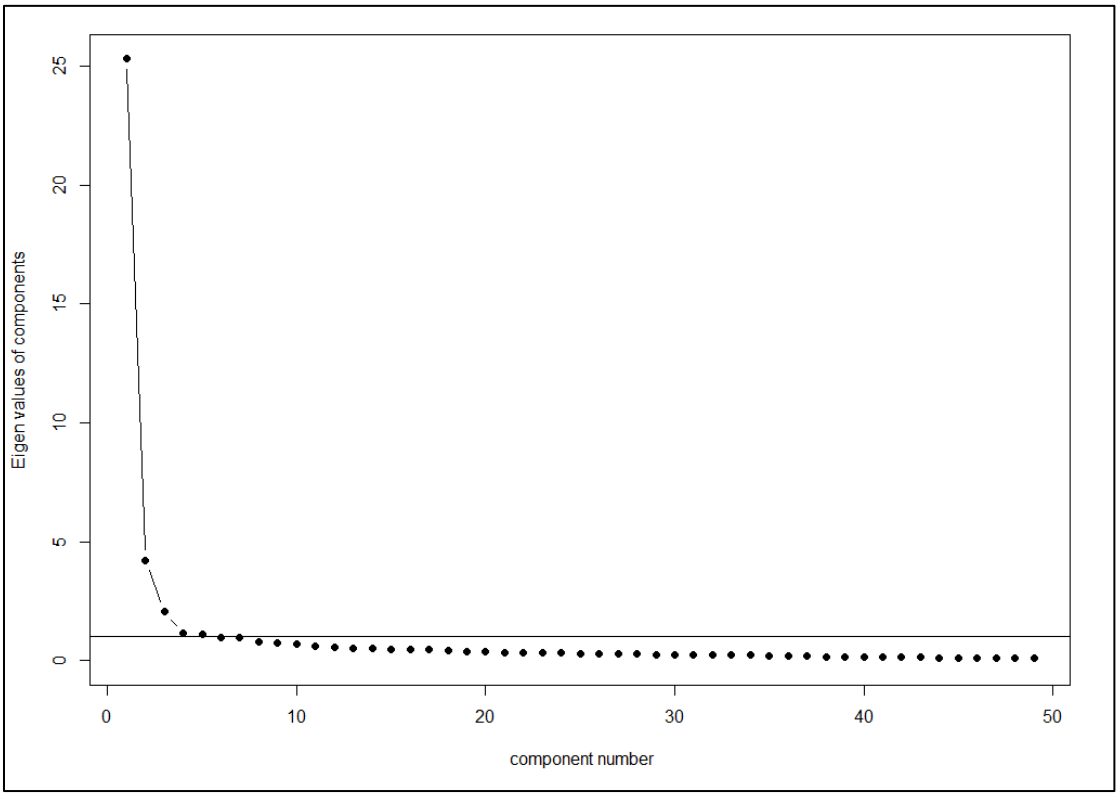
Items	Loading on Dimension 1	Loading on Dimension 2	Loading on Dimension 3	Loading on Dimension 4	Loading on Dimension 5
Item 1	0.462	0.393	0.218	-0.134	0.401
Item 2	0.599	0.55	0.261	-0.027	0.113
Item 3	0.597	0.584	0.248	-0.055	0.136
Item 4	0.63	0.565	0.244	-0.004	0.091
Item 5	0.638	0.564	0.319	0.013	-0.08
Item 6	0.644	0.549	0.265	0.022	-0.118
Item 7	0.617	0.578	0.299	0.017	-0.064
Item 8	0.656	0.579	0.222	0.045	-0.1
Item 9	0.535	0.064	-0.26	0.126	0.437
Item 10	0.69	0.132	-0.227	0.105	0.012
Item 11	0.714	0.126	-0.188	0.167	0.041
Item 12	0.737	0.216	-0.275	0.235	-0.048
Item 13	0.749	0.258	-0.222	0.25	-0.131
Item 14	0.78	0.272	-0.133	0.132	-0.121
Item 15	0.749	0.222	-0.169	0.167	-0.104

Table 4.4. Factor Loadings of the Initial Item Bank (Continued)

Items	Loading on Dimension 1	Loading on Dimension 2	Loading on Dimension 3	Loading on Dimension 4	Loading on Dimension 5
Item 16	0.714	0.025	-0.197	-0.195	0.185
Item 17	0.805	0.041	-0.208	-0.19	-0.018
Item 18	0.779	-0.013	-0.314	-0.107	-0.033
Item 19	0.796	0.021	-0.243	-0.276	-0.134
Item 20	0.721	0.136	-0.238	0.013	-0.024
Item 21	0.808	0.098	-0.255	0.015	-0.06
Item 22	0.801	0.077	-0.209	-0.076	-0.056
Item 23	0.765	0.122	-0.251	-0.108	-0.042
Item 24	0.587	-0.084	-0.24	-0.031	0.418
Item 25	0.795	-0.031	-0.163	-0.162	0.05
Item 26	0.791	-0.107	-0.084	-0.26	-0.113
Item 27	0.79	-0.127	-0.067	-0.19	-0.158
Item 28	0.665	0.022	-0.236	-0.009	0.068
Item 29	0.766	-0.047	-0.167	-0.055	-0.029
Item 30	0.84	-0.048	-0.02	-0.169	-0.139
Item 31	0.843	-0.071	-0.008	-0.21	-0.109
Item 32	0.695	-0.212	0.034	0.187	0.283
Item 33	0.612	-0.252	0.04	0.372	0.094
Item 34	0.738	-0.229	0.064	0.234	0.002
Item 35	0.737	-0.284	0.1	0.274	-0.061
Item 36	0.77	-0.255	0.097	0.224	-0.087
Item 37	0.758	-0.244	0.111	0.021	-0.083
Item 38	0.755	-0.245	0.047	0.124	-0.062
Item 39	0.768	-0.283	0.127	0.135	-0.056
Item 40	0.678	-0.283	0.115	0.007	0.269
Item 41	0.675	-0.306	0.198	0.034	0.034
Item 42	0.75	-0.289	0.138	0.015	-0.054
Item 43	0.726	-0.282	0.19	0.117	-0.053
Item 44	0.766	-0.305	0.194	0.029	-0.058
Item 45	0.578	-0.295	0.205	-0.209	0.329
Item 46	0.76	-0.305	0.254	-0.102	-0.011
Item 47	0.75	-0.314	0.283	-0.13	-0.049
Item 48	0.679	-0.331	0.286	-0.074	0.011
Item 49	0.721	-0.332	0.235	-0.177	-0.111

In addition, a scree test was also used to determine the optimal number of dimensions to be extracted and evaluate unidimensionality (Cattell, 1966; Field, 2005). Five dimensions were found to lie above the point of inflexion in the scree test indicating a five-dimensional scale structure (Costello & Osborne, 2005; DeVellis, 2003; Field, 2005; see Figure 4.2). Thus, based on the ratios of eigenvalues, the assumption of unidimensionality could be described as sufficiently met. However, based on the Kaiser-Guttman eigenvalues >1.00 rule and the scree test, the data were observed to have multidimensionality and violate the assumption of unidimensionality.

Figure 4.1. Scree Plot of the Initial Item Bank



The assumption of unidimensionality closely associates with local independence among items, the second assumption of IRT (Morizot, Ainsworth, & Reise, 2007). A Q_3 statistic was computed for every item of the item bank to check for any residual

correlations among items, after controlling for the dominant dimension, to check for the assumption of local independence (Yen, 1993). In the lower triangle of the Q_3 matrix representing data, several item pairs were observed to have high residual correlations beyond the critical value of .2, thus indicating local dependence amongst items and violating the second assumption of IRT (Chen & Thissen, 1997). A total of 143 item pairs were observed to have residual correlations higher than the critical value. Considering that previously the PCA and scree test analyses indicated five dimensions as the underlying scale structure, and considering that dependence among items closely relates to presence of multidimensions (Morizot, Ainsworth, & Reise, 2007), existence of residual correlations among item pairs and violation of the assumption of local independence was expected. Refer to Appendix I for the Q_3 matrix.

The data well established the third IRT assumption of monotonicity such that participants with increasing levels of PCH responded to items with increasing probabilities of selecting the higher response categories. Using the Mokken scale analysis ((Mokken, 1971; Sijtsma and Molenaar, 2002), two plots for each item, with the x-axis representing the rest score, were generated. For an item, rest scores referred to the total score received by a participant on all items but that selected one from the item bank, and such scores were indicated with various ranges between 0-54, 55-77 and similar.

The first plot showed three item-step-response functions comparing response categories in increasing steps, such as comparing category 1 vs. 2,3,4 categories, or comparing categories 1,2 vs 3,4, and likewise. With those three item-step-response functions increasing monotonically, the assumption of monotonicity was confirmed for each of the 49 items (Van der Ark, 2007). For example, for item 5, three item-step-

response functions were obtained comparing categories 1 vs. 2,3,4, categories 1,2 vs. 3,4, and categories 1,2,3 vs. 4 respectively. Reviewing these three functions graphically and comparing these functions with a participant's rest scores, an increase in scores was observed for all functions. A participant's probability of endorsing the last response category for item 5 increased from approximately 0 to .8, similarly as how his/her scores increased from the range 0-55 to above 130 on rest of the 48 items from item bank.

Additionally, a second plot representing a mean item response function based on the average of all the step-response functions, was also generated for all 49 items. Given that the second plot also grew monotonically for all 49 items, the data were considered to satisfy the assumption of monotonicity in IRT (Van der Ark, 2007). For example, the mean response function for the same item 5 indicated that a participant's probability of endorsing the item increased similarly as how his/her scores increased from the range 0-55 to above 130 on increased for rest of the 48 items from item bank. Refer to Appendix I for item-step-response function plots and mean response function plots for the initial item bank.

Item Parameters and Model Fit

The GRM, a model based on the logistic function which describes the probability of a participant endorsing a specific response category or higher at a specific level of PCH, was fitted to the data for item calibration (Samejima, 1969). Participants' PCH were mapped to a scale of −3 to 3 standard deviation below and above the average level of PCH. Participants with average PCH were mapped to zero on the scale, those with lower than average PCH were mapped on the negative range of the scale, and those with

higher than average PCH were mapped on the positive range of the scale. Higher score of test items represented higher PCH.

The IRT model fit was assessed using multiple indices of M_2 statistic, RMSEA, CFI, TLI, and SRMR fit indices. The M_2 statistic for the GRM model fitted to the data was computed as M_2 (1029) = 8795.423 and found significant at p <.01. It indicated that the model did not replicate the observed reality well and there existed a lack of fit between the two. Further, a root mean square error of approximation (RMSEA) fit assessment was conducted to estimate the approximate adequacy of fit (Maydeu-Olivares & Joe, 2014) and was estimated as .12 for the model. For RMSEA, a general cut-off value of .08 is used as the guideline to indicate good model fit (MacCallum, Browne, & Sugawara, 1996) such that the lower the value the better the model fit (Hooper, Coughlan, & Mullen, 2008). Additionally, SRMR (.13), CFI (.91), and TLI (.90) were also calculated to check for model fit. All the fit indices indicated a poor fit of the data to the model (see Table 4.5)

Table 4.5. Model Fit for Initial Item Bank

Fit index	**Statistic**	***df***	***p-value***
M2 statistic	8795.42	1029	<.001
RMSEA	.12		
SRMR	.13		
CFI	.91		
TLI	.90		

The model fit was also evaluated at the individual item level using the $S\text{-}X^2$ statistic. The $S\text{-}X^2$ statistic for 12 items fell above 100, while the rest of the items ranged

between 50 and 100. All items except for three indicated a good fit with $p>.05$. Items "*My company takes credit for my ideas"*, "*my company has almost no moral principles*", and "*the way my supervisor represents himself/herself to the public, is very different from what happens internally*" were found to have significantly poor fit and were flagged.

Along with the model and item fit, the item parameter estimates were reviewed. The items discrimination parameter '*a*', a measure of how well items can distinguish between participants with high PCH and low or no PCH, for the entire test ranged between .89 to 3.09. Comparing these values with the suggested range of .8 or above for well discriminating items, these discrimination parameters represented an acceptable range indicating that these items could well differentiate among individuals with various levels of PCH, the latent trait. Item 30 "*My company does not behave honestly when dealing with employees*", and item 1 "*My company breaks most of the promises made during recruitment*" were observed to have the steepest and the flattest slope, indicating the most and the least discriminating items in the item bank respectively. Both the items with highest and lowest discrimination parameters assessed a narrow range of the PCH construct based on the threshold parameters. The threshold parameter for all the items of the test ranged from -3.38 to .978. Considering that the items had four response categories, there were three threshold parameters observed for every individual item. All the items' higher threshold parameter estimates were close to or slightly higher than 0, indicating that participants with lower or close to average levels of PCH were prone to answer higher response options in items. In other words, all the items in the item bank could well capture lower and average levels of PCH. Based on the ICCs, all items but one show that all the response categories were endorsed by participants. The ICC of Item 1

"*My company BREAKS most of the promises made during recruitment*" showed that the second response category was comparatively less chosen and was overlapped by category one and three, indicating that this item did not need the second response category. In short, this item was functioning with fewer categories than were specified for the calibration. Refer to Figure 4.2 for item characteristic curves of the initial item bank, and to Table 4.6 for item parameter estimates and item fit statistics of GRM.

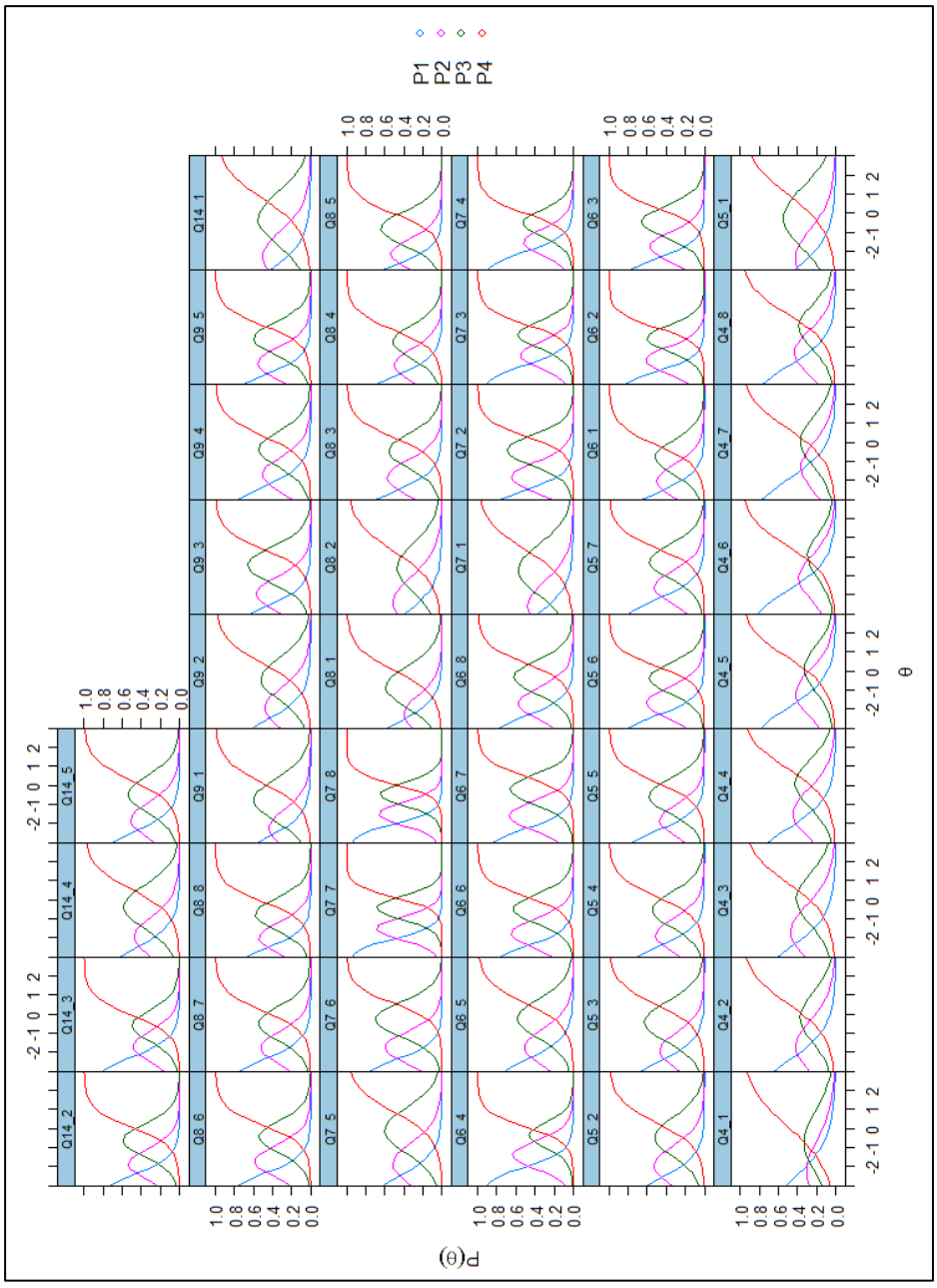


Figure 4.2. Item Characteristic Curves (ICCs) for the Initial Item Bank

Table 4.6. Item Parameter Estimates and Item Fit Statistics

No.	Items	a	b1	b2	b3	s-x2	df	p
1	My company BREAKS most of the promises made during recruitment.	0.891	-2.874	-1.461	0.097	109.106	114	0.612
2	My company breaks many of its promises to me for NO fault of my own.	1.120	-2.460	-0.857	0.544	122.489	110	0.196
3	My company mostly FAILS to meet its obligations to me.	1.097	-2.596	-0.725	0.879	101.898	108	0.647
4	My company often does NOT fulfill its most important obligations to me.	1.212	-2.253	-0.648	0.851	111.339	104	0.293
5	My company often LIES to me.	1.222	-1.919	-0.436	0.687	115.618	110	0.338
6	My company does NOT acknowledge employees as humans.	1.246	-1.776	-0.455	0.528	109.847	117	0.668
7	My company often THROWS ME UNDER THE BUS for its own benefits.	1.164	-1.957	-0.645	0.700	125.874	116	0.250
8	My company has NO compassion for its employees.	1.289	-2.024	-0.582	0.692	100.320	108	0.688
9	My company uses my mistakes to INDIVIDUALIZE me.	1.020	-3.211	-1.446	0.978	110.158	100	0.229
10	My company TAKES CREDIT for my ideas.	1.550	-2.709	-1.187	0.302	111.002	86	0.036
11	My company RANDOMLY changes its goals without communicating this to employees.	1.645	-2.541	-1.302	0.494	87.922	77	0.185
12	My company does NOT have employees' best interests at heart.	1.777	-2.490	-1.215	0.175	93.931	84	0.215
13	My company tends to look out only for ITSELF.	1.873	-2.380	-1.282	0.153	83.129	79	0.354
14	My company’s policies do NOT match the promises made to employees.	2.120	-2.335	-0.998	0.245	52.407	76	0.982

Table 4.6. Item Parameter Estimates and Item Fit Statistics (Continued)

No.	Items	a	b1	b2	b3	s-x2	df	p
15	My company makes promises to employees, which I can RARELY expect to actually happen.	1.855	-2.242	-0.975	0.451	76.362	77	0.499
16	My company is UNJUST to its employees.	1.792	-2.658	-1.434	-0.152	71.473	77	0.656
17	My company is UNFAIR to its employees.	2.481	-2.293	-1.124	0.001	69.794	70	0.484
18	My company is SELFISH.	2.167	-2.367	-1.158	0.290	88.678	71	0.076
19	My company has almost NO moral principles.	2.418	-2.002	-0.759	0.081	98.424	73	0.025
20	My experience in my company is often NOT personally satisfying.	1.651	-2.411	-1.052	0.577	97.090	83	0.138
21	My company does NOT care for its employees, but only for money.	2.305	-2.446	-1.108	0.173	58.659	70	0.831
22	My company is INEFFICIENT in enacting its own set principles.	2.358	-2.273	-0.895	0.460	65.139	69	0.609
23	My company often COMPROMISES its important values as shared in public.	2.006	-2.359	-1.040	0.405	60.642	75	0.885
24	My company PRIORITIZES its benefits over employees' benefits.	1.265	-3.381	-1.737	0.351	93.635	89	0.348
25	My company PRETENDS to appear moral.	2.313	-2.515	-1.173	0.314	66.341	65	0.430
26	My company engages in morally WRONG acts when it can get away with it.	2.396	-1.958	-0.917	0.187	55.287	71	0.915
27	My company FIRES people on unjust grounds when it can get away with it.	2.334	-2.004	-1.013	-0.002	92.434	75	0.084
28	My company's moral values are NOT the same as my moral values.	1.452	-2.646	-1.066	0.861	79.838	87	0.694
29	My company's values often CHANGE when it comes to getting things done.	2.091	-2.416	-1.093	0.561	67.366	67	0.464
30	My company does NOT behave honestly when dealing with employees.	3.091	-2.042	-0.961	0.130	56.281	56	0.464

Table 4.6. Item Parameter Estimates and Item Fit Statistics (Continued)

No.	Items	a	b1	b2	b3	s-x2	df	p
31	My company does NOT behave ethically when dealing with employees.	3.047	-2.020	-0.965	0.059	53.234	56	0.580
32	My supervisor does NOT practice what (s)he preaches.	1.562	-2.799	-1.707	0.012	53.188	68	0.906
33	My supervisor GETS AWAY with doing things I can't.	1.196	-3.349	-1.448	0.254	120.681	102	0.100
34	There is an 'us' VERSUS 'him/her' between employees and supervisor.	1.835	-2.584	-1.152	0.225	79.523	81	0.526
35	My supervisor does NOT apply the same standards for performance to all employees.	1.875	-2.546	-1.357	-0.132	91.949	81	0.190
36	My supervisor does NOT hold everyone at all levels equally accountable for their mistakes.	2.024	-2.722	-1.540	-0.025	61.782	66	0.624
37	My supervisor does NOT give me enough authority to carry out my job responsibilities, but penalizes me for lack of performance.	2.013	-2.383	-1.046	0.172	71.052	78	0.698
38	The amount of work my supervisor requires me to do CONFLICTS with the quality of work (s)he expects.	1.876	-2.392	-1.151	0.177	83.577	80	0.370
39	My supervisor FAVORS employees based on her/his personal preferences rather than employees' abilities.	2.033	-2.605	-1.411	-0.104	63.024	65	0.546
40	My supervisor does NOT conduct herself/himself according to the same values (s)he talks about.	1.574	-2.846	-1.645	0.118	80.136	76	0.351
41	My supervisor PRETENDS to be someone (s)he is not.	1.458	-2.664	-1.215	0.378	93.527	88	0.323

Table 4.6. Item Parameter Estimates and Item Fit Statistics (Continued)

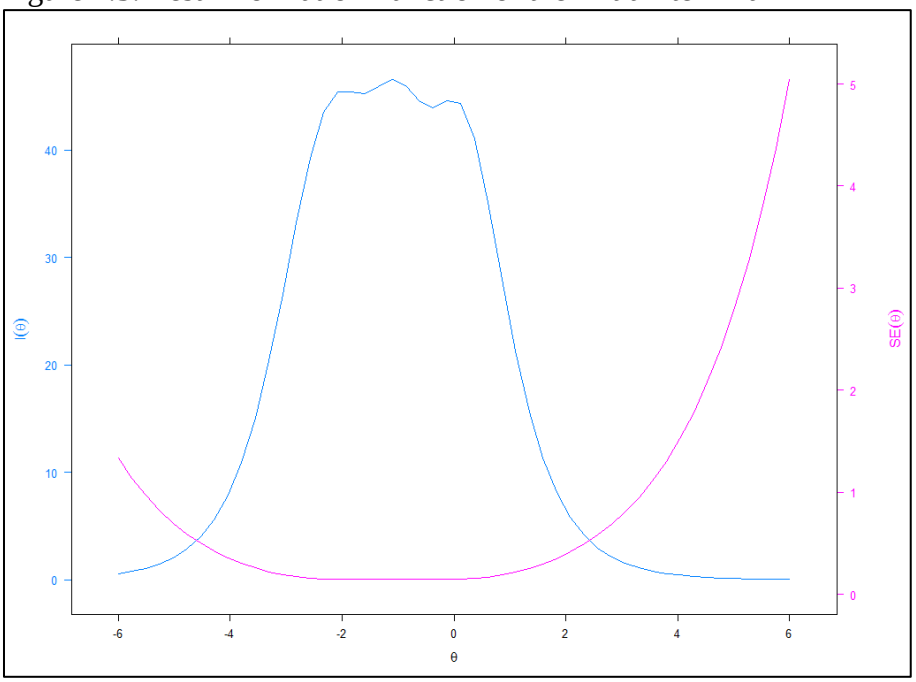
No.	Items	a	b1	b2	b3	s-x2	df	p
42	The values my supervisor communicates to the society are NOT consistent with employees' experiences at work.	1.898	-2.667	-1.282	0.386	80.962	74	0.271
43	The way my supervisor represents himself/herself to the public is very DIFFERENT from what happens internally.	1.752	-2.345	-1.065	0.325	112.079	81	0.013
44	There is a DIFFERENCE between what my supervisor says and what (s)he does.	2.016	-2.504	-1.245	0.126	81.340	75	0.288
45	My supervisor's behaviors do NOT reflect the company's values.	1.193	-3.190	-1.328	0.754	89.998	97	0.680
46	My supervisor MISLEADS employees with her/his communication and conflicting actions.	2.015	-2.464	-1.285	0.066	65.161	74	0.759
47	My supervisor is DECEPTIVE.	1.958	-2.241	-1.155	-0.045	89.018	83	0.306
48	My supervisor shows employees what they want to see INSTEAD of the reality of the situation.	1.506	-2.638	-1.261	0.540	72.857	83	0.779
49	My supervisor MISLEADS employees about the real motives of the company.	1.711	-2.491	-1.161	0.256	94.109	83	0.190

Reliability

Plots of item information curves (IIFs) against the PCH level (θ) were analyzed to estimate the range of PCH where an item best discriminated among the participants (see Appendix I for IIFs of the initial item bank). Higher curves would indicate greater precision for estimating a participant's level of PCH. The IIFs for certain items, such as

some items associated with psychological contract breach, were comparatively lower in the entire item bank. These suggested that such items did not add much value to the precision of the overall test. Therefore, these items can be identified as comparatively less informative and the same is reflected in the lower discriminatory power of these items. Items contributing more information were mostly under the domain of morality, and spread over the domains of double-standards and value-behavior gap. Analysis of the Test Information Function (TIF) illustrated higher curve at the left end of the scale, indicating that more precise PCH was estimated for participants with lower to slightly more than average levels of PCH ranging between -4 and 2 levels (see Figure 4.3). From the classical test theory perspective, the initial item bank was analyzed to have a reliability of .98 Cronbach's alpha.

Figure 4.3. Test Information Function of the Initial Item Bank



To summarize, based on the analyses of the initial item bank of 49 items, it was determined that the current item bank violated the two IRT assumptions, had interrelated items after controlling for the prominent dimension, and items were cross loading on multiple dimensions. Additionally, item fit indicated that some items were poor replications of the reality and the overall item bank had a poor model fit. Researchers recommend controlling for items with local dependence in the item calibration to control for any influence of these highly-correlated items on scale's psychometric properties. Thus, the initial item bank of 49 items was subjected to iterative item reduction process to delete any problem items and generate a parsimonious PCH scale.

Item Reduction

Gorsuch (1997) suggests that examination of the relationship between individual items and their related constructs can help identify the best and poorest performing items. The goal of item reduction was to identify the problem item(s) and take relevant actions while simultaneously reducing the item bank to create a parsimonious and interpretable instrument. Revicki et al. (2014) suggested flagging locally dependent items as problem items, individually removing such items one at a time, and iteratively reexamining the assumptions, factor loadings, item parameters, and model fit for the altered item bank. Literature also recommends reviewing the content of every locally dependent item to check if potential testlets can be formed in the test (*idem*). Other researchers also recommend checking for items which load on more than one dimension and likewise deleting such items (Kamudoni, 2014). Thus, in this study, all the items pairs with high residual correlations and items cross-loading on multiple dimensions were flagged, their item parameters and model fits were checked, and the item contents were reviewed to

determine items with poor psychometric properties. Poorly performing items were iteratively removed, and this in total included removal of forty items (see Table 4.7).

Table 4.7. Iterations Conducted for Scale Reduction

Iterations	Actions taken	Number of items	Locally Dependent items	Cross-load	Number of dimensions extracted	M2	RMSEA	SRMR	CFI	TLI
Initial item bank	-	49	Items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49	Items 1, 2,3,4,5,6, 7,8,9,24,4 1,44,45,4 6,47,48,4 9	5	M2 (1029) = 8795.42, p<0.001	0.12	0.13	0.91	0.90
1	Delete Items 1, 5, 9, 24, 45	44	Items 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 46, 47, 48, 49	Items 2, 3, 4, 6, 7, 8, 14, 18, 26, 33, 41, 44, 46, 47, 48, 49	4	M2 (814) = 7426.25, p<0.001	0.12	0.12	0.92	0.91

Table 4.7. Iterations Conducted for Scale Reduction (Continued)

Iterations	Actions taken	Number of items	Locally Dependent items	Cross-load	Number of dimensions extracted	M2	RMSEA	SRMR	CFI	TLI
2	Delete Items 2, 3, 4, 6, 7, 18, 27, 33	36	Items 8, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 28, 29, 31, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 46, 47, 48, 49	Items 8, 12, 13, 14, 15, 20, 23, 41, 44, 46, 47, 48, 49	3	M2 (522) = 5440. 66, p<0.001	0.13	0.11	0.89	0.89
3	Delete Items 8, 11, 12, 13, 15, 20, 23, 41, 44, 46, 47, 48, 49	23	Items 10, 14, 16, 17, 19, 21, 22, 28, 29, 30, 31, 34, 35, 36, 37, 38, 39, 40, 42, 43	Items 19, 35, 39, 43	2	M2 (184) = 1307.10, p<0.01	0.10	0.06	0.92	0.91
4	Delete Items 19, 35, 39, 43	18	Items 16, 17, 21, 22, 28, 29, 30, 31, 34, 36, 37, 38, 40, 42	Items 34, 37, 38, 40	1	M2 (99) = 677.17, p<0.001	0.11	0.05	0.91	0.89
5	Delete Items 34, 37, 38, 40	14	Items 16, 17, 21, 22, 28, 29, 30, 31	None	1	M2 (49) = 233.15, p<0.001	0.08	0.04	0.93	0.92
6	Delete Items 16, 22, 28, 30, 31	9	None	None	1	M2 (9) = 19.44, p=0.02	0.04	0.05	0.98	0.96

As the initial item bank of 49 items indicated existence of local dependence, a total of 143 item pairs had residual correlation above .20. Among those item pairs, three specific items, items 10, 19, and 43, were found to have significantly poor item fits. While all item pairs had acceptable item parameters, the PCA indicated seventeen of the locally dependent items to cross load on more than one dimension. Particularly, two items, 1 and 5, were found to cross load on more than two dimensions. Also, while most of the items cross loaded on mostly the first two dimensions, four items, namely items 1, 9, 24, and 45, were found to load on the fifth dimension with eigenvalue of 1.10 explaining 2.25% of the total variance. Based on the above statistics, the five items, 1, 5, 9, 24, and 45 were statistically flagged and reviewed for their contextual contributions.

The five items were carefully examined to determine how to manage cross loadings and local dependence without compromising the theoretical components of PCH and content validity. Items 1, 5, 9, 25, and 45 could be described as conceptually related to different items in the item bank. For example, item 1, "*My company breaks most of the promises made by during recruitment*" was found to match with item 2 "*My company breaks many of its promises to me for no fault of my own*", and thus deleted. Similarly, item 5 "*My company often lies to me*" could be described as similar to item 15 "*My company makes promises to employees, which I can rarely expect to actually happen*", and was thus deleted. Items redundant by content were initially developed and deliberately kept in the bank to tap into the constructs of interests. However, considering that there were other items which better captured similar content with lesser residual correlations, simple factor loadings, and similar item parameters, the items 1, 5, 9, 24, and 45 were removed from the item bank. This did not seem to affect the factor loadings

of the remaining items much, yet the number of dimensions extracted reduced by one. So, a total of four dimensions were extracted and the overall model fit was slightly improved according to the fit statistics. While the previous three items' (10, 19, and 43) individual fits improved, other four items (3, 4, 20, and 42) were found to have statistically poor item fit.

The same procedures were performed 5 additional times, resulting in a total of 6 iterations. In the initial five iterations, items which were locally dependent (Q_3 above 0.2), had factor loadings less than 0.3, or loaded to more than one dimension, were marked as poorly performing items. In these steps, given that items' discrimination parameter estimates were generally observed to be in acceptable range above 0.8, these parameter estimates were not used as screening criteria. Later, a thorough review of the content of screened items indicated repetition and contextual overlap between several items, and such repetitive screened items were eventually deleted. The item bank was reduced by a total of 34 items, resulting in an item bank of 15 items.

During the final iteration, no item was found to load on more than one dimension. However, four item pairs (items 16 and 17, 21 and 22, 30 and 31, and 38 and 42) were found to still have local dependence. Additionally, four items (16, 17, 22, and 28) were identified for their statistically poor item fits. Finally, items 30 and 31 were observed to have high discrimination 'a' parameter at 4.626 and 4.837. Considering that the item pairs were correlated to each other beyond the underlying principal dimension, such poor item fit and high discrimination parameters were expected. Reviewing the content for the above nine flagged items, a total of six items, namely items 17, 22, 28, 30, 31, and 38, were deleted from the item bank, resulting in an item bank of nine items.

It is important to note that, in the conducted iterations, although certain items were identified to have poor statistical properties, such as being locally dependent or having poor item-fits, these were not deleted if found to have important contextual contributions (Revicki et al., 2014; Zenisky, Hambleton, & Sireci, 2002; Wainer & Kiely, 1987; Tao, 2008). For example, item 21 "*My company does NOT care for its employees, but only for money*" was observed to have residual correlation with others in all the initial five iterations. Item 42, "*The values my supervisor communicates to the society are NOT consistent with employees' experiences at work*," was found to have residual correlations with two other items (40 and 41) and had poor item fit after the first iteration. Similarly, item 29 was identified as having residual correlation and therefore related with other items of the item bank after the fifth iteration. However, after an expert assessment and examination of the items' content, those items were determined to have important contextual contributions to CH, and were kept in the item bank without compromising the scale's content validity.

Final Corporate Hypocrisy Scale

Ultimately, the iterative item reduction process yielded a set of nine items that was fitted to a unidimensional solution and represented CH. The review of the final PCH scale suggested that the majority of the items (five) represented the theoretical domain of the perceived lack of morality. These were "*My company is UNFAIR to its employees*" (item 17), "*My company does NOT care for its employees, but only for money*" (item 21), "*My company PRETENDS to appear moral*" (item 25), "*My company engages in morally WRONG acts when it can get away with it*" (item 26), and "*My company's values often CHANGE when it comes to getting things done*" (item 29). Two items represented the

theoretical domain of double standards, such as "*My supervisor does NOT hold everyone at all levels equally accountable for their mistakes*" (item 36) and "*My supervisor does NOT practice what (s)he preaches*" (item 32). Finally, the two remaining items corresponded to the theoretical domains of psychological contract breach (item 11 "*My company's policies do NOT match the promises made to employees*") and value-behavior gap (item 42 "*The values my supervisor communicates to the society are NOT consistent with employees' experiences at work*"). Refer to Appendix J for the PCH scale, their inspirational items from which the scale had been adopted and adapted, and their scholarly research sources.

With these assessments of each item with theoretical domains, the next section discusses psychometric properties of the final PCH scale proposed by this study.

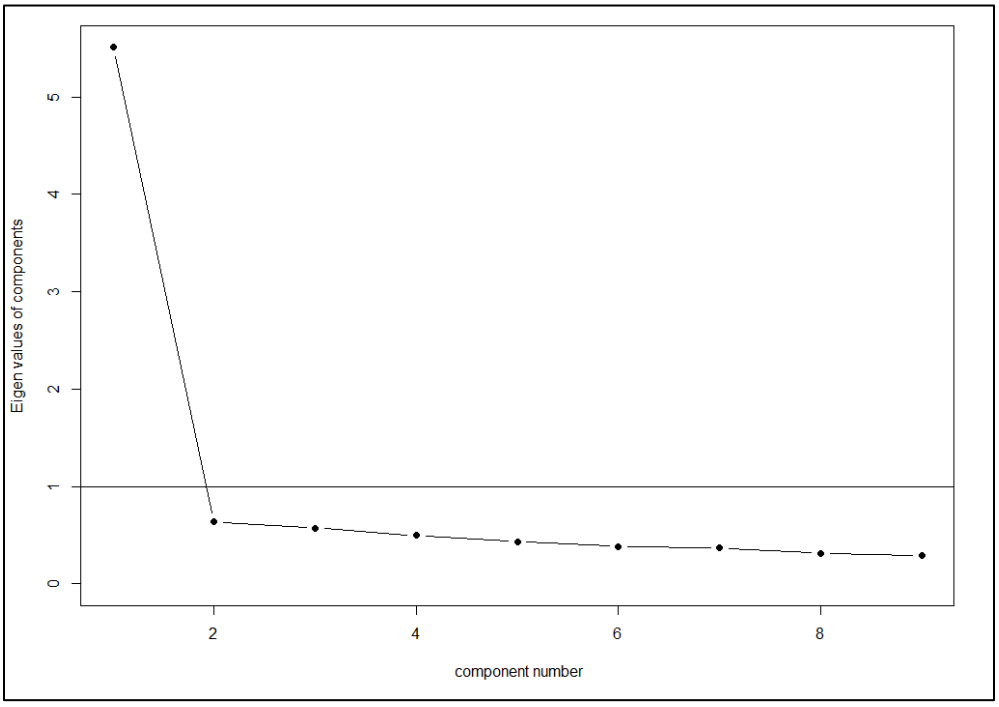
IRT Assumptions

The three critical assumptions of IRT models were tested and established in the final PCH scale. The assumption of unidimensionality was affirmed with the PCA extraction showing a single underlying construct of PCH with eigenvalue greater than 1 (Kaiser, 1960). The dimension had an eigenvalue of 5.50 and accounted for 63.24% of the total variance. All nine items of the PCH scale loaded on to this one dimension with loadings ranging from .72 to .84 (see Table 4.8). Also, the dominant dimension represented a large ratio (8.44) of eigenvalues with that of the second dimension (Hutten, 1980; Lumsden, 1961). Additionally, the scree-test confirmed a distinct single dimension to lie above the point of inflex as shown in Figure 4.4 (Costello & Osborne, 2005; DeVellis, 2003; Field, 2005).

Table 4.8. Factor Loadings for PCA for PCH scale

Items	Loading on Dimension 1	Variance explained by Dimension 1
My company's policies do NOT match the promises made to employees	0.77	63.24%
My company is UNFAIR to its employees	0.83	
My company does NOT care for its employees, but only for money	0.83	
My company PRETENDS to appear moral	0.84	
My company engages into morally WRONG acts when it can get away with it	0.82	
My company's values often CHANGE when it comes to getting things done	0.80	
My supervisor does NOT practice what (s)he preaches	0.72	
My supervisor does NOT hold everyone at all levels equally accountable for their mistakes	0.78	
The values my supervisor communicates to the society are NOT consistent with employees' experiences at work	0.76	

Figure 4.4. Scree Plot of the PCH Scale



The second assumption of local independence among scale items was established with the critical value (.2) of Q_3 statistics. Although four out of nine items were observed to have negative correlations (-.21, -.24, -.26, and -.34) with absolute values being beyond the critical value, such local dependencies were considered more as a reality (Tao, 2008). Yen (1984) described that, since observed scores are explicitly used for calculating both the expected and residual scores, the expected value of Q_3 statistics is not exactly zero but slightly negative. The Q_3 table for the PCH scale is shown in Appendix J.

Finally, the third IRT assumption of monotonicity was well established using the two sets of plots generated for each of the PCH scale items with the Mokken scale analysis (Mokken, 1971; Sijtsma and Molenaar, 2002). Reviewing the first set of plots of all nine items, the item-step-response functions were observed to increase monotonically like their rest scores, and thus the assumption of monotonicity was confirmed for the scale items (Van der Ark, 2007). For example, in item 3 from the PCH scale, three item-step-response functions were obtained comparing categories 1 vs. 2,3,4, categories 1,2 vs. 3,4, and categories 1,2,3 vs. 4 respectively. Reviewing these three functions graphically and comparing these functions with a participant's rest scores, an increase in scores was observed for all functions. A participant's probability of endorsing the last response category for item 3 increased from approximately 0 to .9, matching his/her increase in scores from the range 0-9 to the range 23-24 on rest of the 8 items from the scale.

Reviewing the second set of plots of mean item response function for the PCH scale, all 9 items were observed to grow monotonically. Thus, the PCH scale was considered to satisfy the assumption of monotonicity in IRT (Van der Ark, 2007). Participants, with increasing levels of PCH, endorsed items with increasing probabilities

of selecting the higher response categories. For example, the mean response function for the same item 3 from the PCH scale indicated that a participant's probability of endorsing the item increased matching his/her increase in scores from 0-9 to 23-24 for rest of the 8 items of the scale. Refer to Appendix J for item-step-response function plots and mean response function plots for the PCH scale.

Item Calibration and Model fit

For the PCH scale, participants' PCH was mapped on a scale of −3 to 3 standard deviation below and above the average PCH. Similar to the initial item bank calibration, participants with lower than average PCH were mapped on the negative range of the scale, and vice-versa. The overall fit of the PCH scale to the GRM was reported to be M_2 (9) = 19.44, p =.02. The RMSEA was evaluated as .04, a value lower than the cut-off of .08. Additionally, SRMR of .046, CFI of .99, and TLI of .99 indicated a good fit of the data to the model as shown in Table 4.9.

Table 4.9. Summary of Model Fit for the PCH scale

Fit index	Statistic	*df*	*p-value*
M2 statistic	19.44	9	.02
RMSEA	.04		
SRMR	.05		
CFI	.98		
TLI	.96		

At an item level, the S-X^2 statistic for the PCH scale ranged in between 19.85 and 41.77. All items were found to have a difference between the observed and expected observations, however none of those differences were found to be statistically significant except for one. Item 14, "*My company's policies do NOT match with the promises made to employees,*" was observed to have a significant difference between the model and data

at $p<.05$. However, the item was considered as making an important contextual contribution towards measuring PCH, and was thus kept in the final scale.

The discrimination parameter '*a*' for the PCH scale items ranged between 2.03 to 3.35, indicating that all nine items had acceptable discriminating power according to Baker's (2001) discrimination parameter thresholds. Item 26, "*My company engages in morally WRONG acts when it can get away with it*" was observed to have the highest '*a*' value among all items, while item 32, "*My supervisor does NOT practice what (s)he preaches,"* had the lowest '*a*' parameter. The threshold parameters '*b*' of the scale items ranged between -2.03 and .47 standard deviation below and above average PCH. Refer to Figure 4.5 for the item characteristic curves and to Table 4.10 for item parameter estimates and item fit statistics of the PCH scale items.

Figure 4.5. Item Characteristic Curves for the PCH scale items

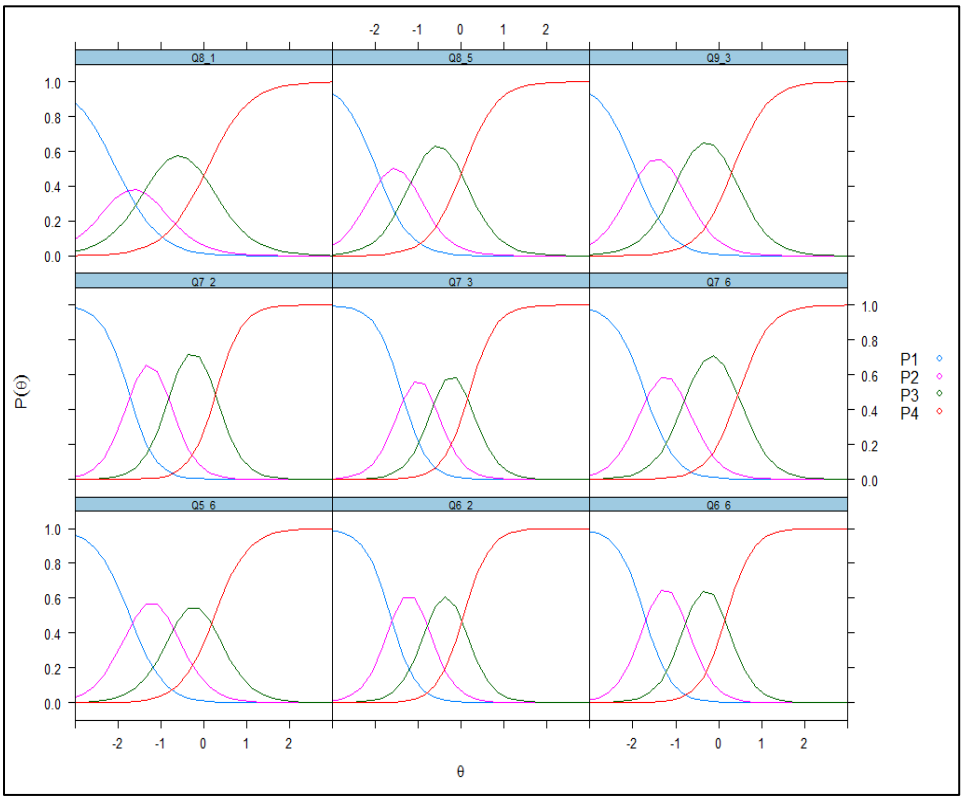


Table 4.10. Item Parameter Estimates and Item Fit Statistics for the PCH Scale

No.	Items	a	b1	b2	b3	s-x2	df	*p*
1	My company's policies do NOT match with the promises made to employees.	2.581	-1.733	-0.719	0.243	41.774	28	0.046*
2	My company is UNFAIR to its employees.	3.339	-1.654	-0.794	0.052	27.676	26	0.375
3	My company does NOT care for its employees, but money.	3.251	-1.726	-0.767	0.181	19.858	24	0.705
4	My company PRETENDS to appear moral.	3.347	-1.759	-0.818	0.284	31.017	23	0.122
5	My company engages in morally WRONG acts when it can get away with them.	3.358	-1.395	-0.625	0.191	31.959	27	0.234
6	My company's values often CHANGE when it comes to getting things done.	3.859	-1.723	-0.765	0.473	37.833	26	0.063
7	My supervisor does NOT practice what (s)he preaches.	2.033	-2.035	-1.237	0.063	33.423	31	0.350
8	My supervisor does NOT hold everyone at all levels equally accountable for their mistakes.	2.571	-1.981	-1.123	0.038	31.604	24	0.137
9	The values my supervisor communicates to the society are NOT consistent with employees' experiences at work.	2.465	-1.944	-0.921	0.346	26.230	27	0.506

*significant at $p<.05$

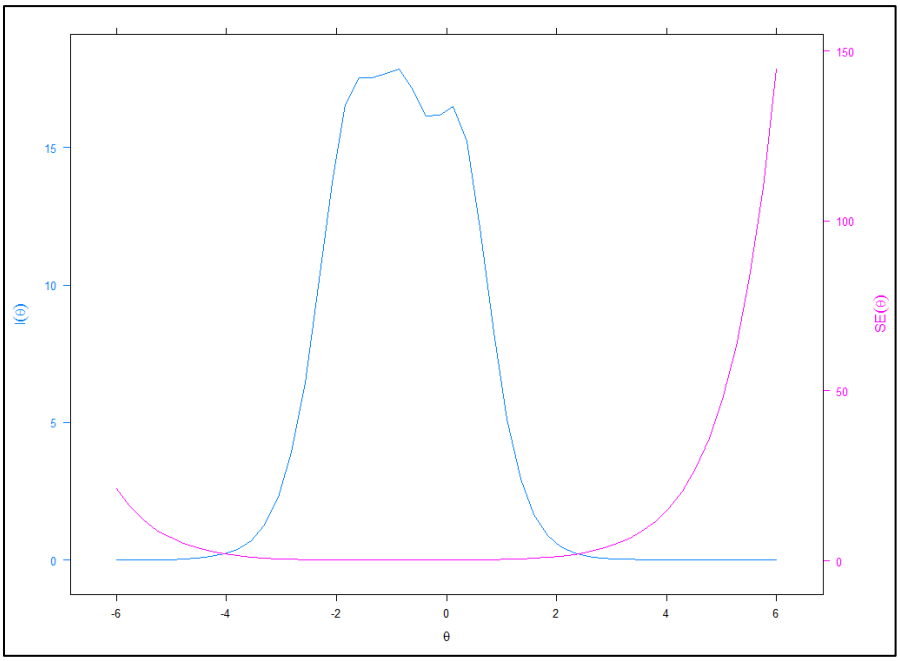
Reliability

Plots of item information functions (IIFs) for the PCH scale items were analyzed individually and each of the items represented a range of reliably measured PCH. Referring to the peak heights of these IIFs, item 26, "*My company engages in morally*

WRONG acts when it can get away with them" was found to be the most reliable item at approximately -.75 PCH. Given that information relates to the standard error of estimate (SEE) with which PCH is estimated and lower SEE indicates better item fit, one can review the SEE curves along with the IIFs to check for reliability. Refer to Appendix J for IIFs of the nine items.

The TIF for the final PCH scale measured the latent trait most reliably in the range of -3.25 standard deviation below and 1.75 standard deviation above average PCH. Although the TIF did not have a smooth flat peak, the overall shape was considerably consistent for the entire range. Using the same statistical relationship between TIF and SEE, the scale's reliability could also be confirmed. Referring to the SEE curve for the nine items, the curve was found to be flattest for the range of -3.25 standard deviation below and 1.75 standard deviation above average PCH. Comparing the reliability of the final PCH scale with that of the initial bank of 49 items, the most reliable item continues to represent the theoretical construct of perceived lack of morality. At the overall test level, the final PCH scale is most reliable for a slightly shorter range of PCH than that of the initial bank, as shown in Figure 4.6. From the classical test theory perspective, the PCH scale was analyzed to have a reliability of .93 Cronbach's alpha.

Figure 4.6. Test Information Function (TIF) for the PCH scale



Construct Validity

Validation of the scale in assessing PCH involved testing how the scale items related to other constructs and their established measures based on the theoretical understanding. For testing convergent validity of the PCH scale, it was hypothesized that PCH items would have a positive association or correlation with employees' turnover intentions. Testing for this relation involved assessing the degree and direction of association between the PCH scores generated from the nine items and the turnover intention scores. Pearson correlation analysis was performed between the scores of the two measures. The coefficient of the Pearson correlation showed significant association between the PCH overall bank scores and turnover intention scores ($r = .56$, $p < .01$). Thus, the PCH scale had demonstrated a strong association with employees' turnover intentions, establishing convergent validity.

For discriminant validity, the PCH scale was empirically tested with the attitude towards the company's (AaC) established measures. Using a CFA, a two-factor model was found to be statistically significant at CFI = .97, TLI = .96, RMSEA = .06, and SRMR = .04. Referring to the model fit indices, the PCH scale and the AaC scale could be said to measure two separate variables. The Pearson correlation showed a lower association between the PCH scale scores and AaC scores at .45 ($p < .01$). Thus, although the PCH scale was weakly correlated to the AaC scale, the scale items showed PCH to exist as a variable different from AaC, thus establishing the PCH scale's discriminant validity.

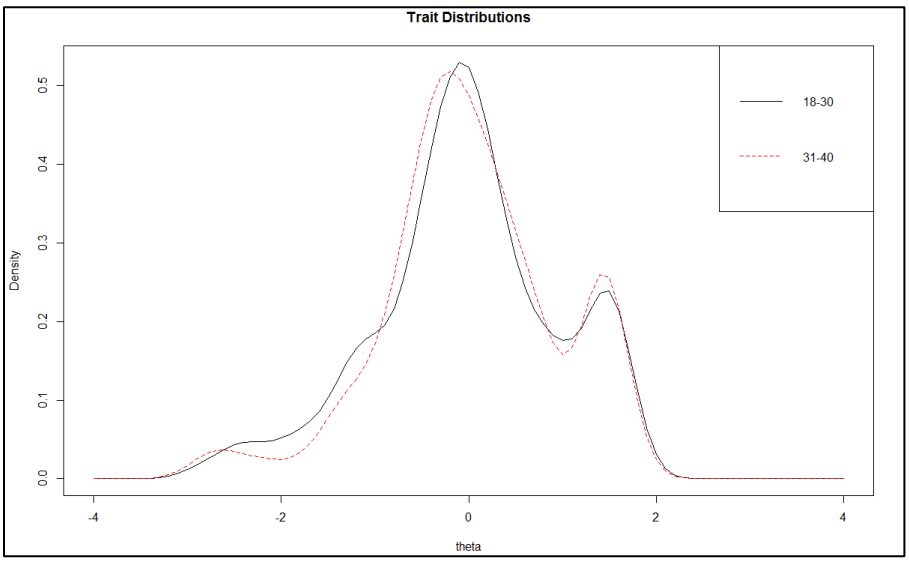
Test-fairness

Testing for the fairness of the PCH scale was important if people with different demographic characteristics differed on how they endorsed those items, holding the underlying dominant dimension constant. DIF was tested for participants' gender, age, and workplace, using the likelihood ratio (LR) $\chi 2$ test as the detection criterion (at α .05), and McFadden's pseudo-R^2 as the magnitude measure.

DIF analysis was conducted on a dataset (N = 515) on the nine-item PCH scale for DIF related to gender. Four participants chose to not indicate their gender identity in the survey and were thus not included in this analysis. The focal and the reference groups were defined as male (n = 137) and females (n = 378). The analysis got terminated in one iteration indicating that no items was identified for gender-related DIF. Both male and female participants were found to similarly endorse the scale items with none of the items being biased to either of the gender categories.

Next, checking for DIF conditions among all the 520 participants of different age groups, six different analyses indicated presence of biased items in the PCH scale. The first analysis, comparing the second (18-30) and third (31-40) age categories, flagged three DIF items. The younger group was the reference group whereas as the older group was considered as the focal group. Item 3, "*My company does NOT care for its employees, but only for money"*, item 4 "*My company PRETENDS to appear moral"*, and item 7, "*My supervisor does NOT practice what (s)he preaches*" from the PCH scale were indicated to display age-related DIF. Older participants (age group 31-40) on average had higher mean scores (.05) than their younger counterparts (.007) aged between 18-30 (Figure 4.7).

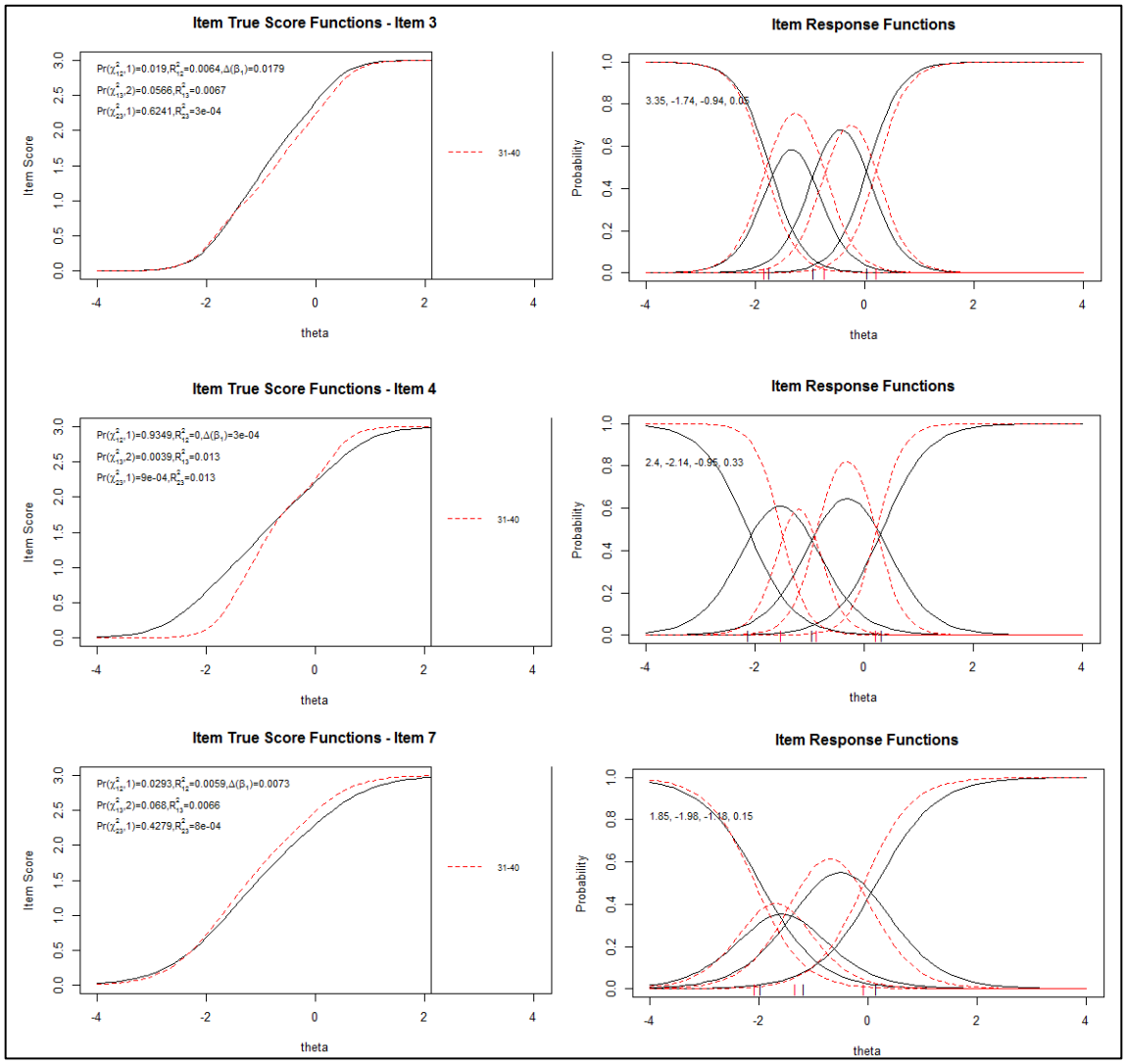
Figure 4.7. Trait distribution for age-DIF comparing analysis 1



Based on the item true score functions, the slope of item 3 for the older group was slightly lower than that for the younger group, indicating uniform DIF. The LR $\chi 2$ test for uniform DIF, comparing Model 1 and Model 2, was significant (p = .019), whereas the test for non-uniform DIF comparing Model 2 and Model 3 was not significant (p = .62).

Using Crane et al. (2007) thresholds of DIF magnitude, when pseudo-R^2 statistics can be negligible (< .035), moderate (< .07), or large (> .07), the small McFadden's pseudo-R^2 measures (R^2_{12} = .006, R^2_{13} = .006) for item 3 indicated negligible impact of DIF on scores. On the other hand, the slope of item 4 for the older group was substantially higher, indicating non-uniform DIF between the two groups. The LR $\chi 2$ test for uniform DIF was not significant (p = .93), whereas the 1-df test for testing non-uniform DIF comparing Model 2 and Model 3 was significant (p < .001). When weighted by the focal group PCH distribution the expected impact of DIF on scores became negligible (Crane et al., 2007), which was also indicated with the small McFadden's pseudo R^2 measures (R^2_{23} = .013, R^2_{13} = .013). Finally, the item 7 had slope for the older group similar to that of the other group, indicating a comparatively uniform DIF. The LR $\chi 2$ test for uniform DIF was significant (p = .02), whereas the 1-df test for testing non-uniform DIF was not significant (p = .42). The small McFadden's pseudo R^2 measures (R^2_{12} = .005, R^2_{13} = .006) indicated that, when weighted by the focal group PCH distribution, the expected impact of DIF on scores became negligible (Crane et al., 2007). The same were also revealed by the plots of the three items, juxtaposing the item response functions of the two groups (Figure 4.8).

Figure 4.8. Diagnostic plots of DIF items for age-DIF analysis 1



Based on the scale's characteristic curve (TCC), the three DIF items seemed to have very small impact on the overall scale (Figure 4.9). At the individual score level, scores of DIF-free dataset and data accounting for DIF were compared to observe the differences ranged roughly from −.02 to +.02. Accounting for age-DIF led to mostly lower scores for people belonging to older age group compared to mostly higher scores for participants belonging to the younger age group, at their lower levels of CH. At the higher levels of CH, accounting for age-DIF led to both higher and lower scores for both

groups of participants. Thus, at a comparatively lower level of CH, participants belonging to the age range of 18-30 had slight advantages over the other group as how they endorsed the scale items. Refer to Figure 4.10 for the individual-level DIF impact in the first age-DIF analysis.

Figure 4.9. TCC for age-DIF analysis 1

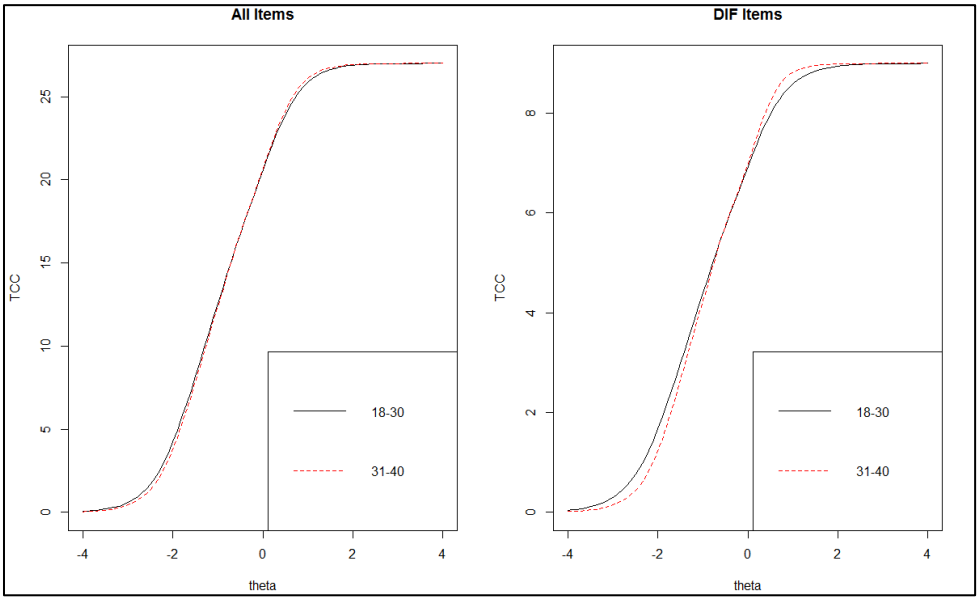
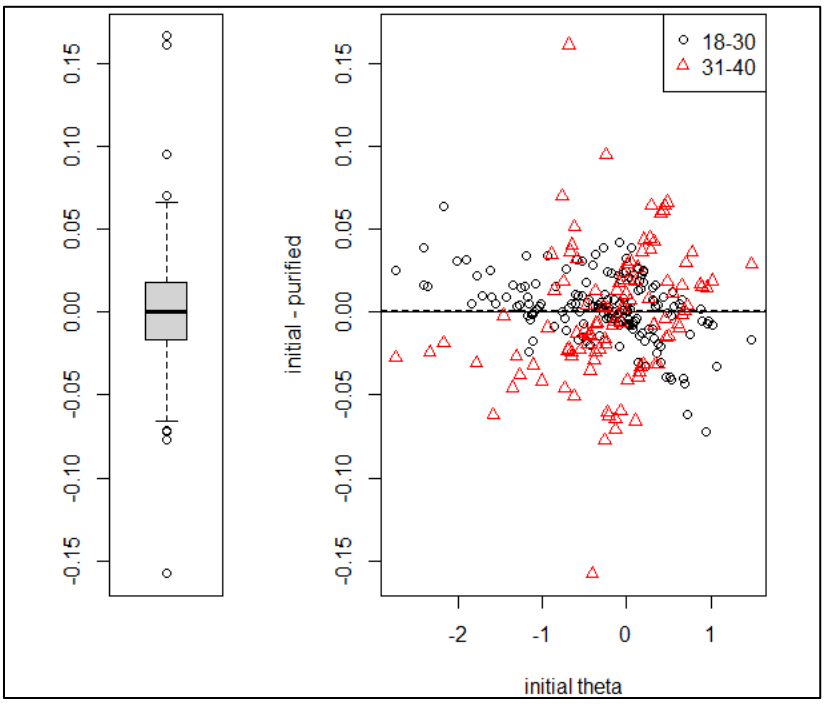


Figure 4.10. Individual-level DIF impact for age-DIF analysis 1



The second age-DIF analysis, comparing the age categories 41-50 and 51-60, showed item 5 from the PCH scale, "*My company engages into morally WRONG acts when it can get away with it*" to have DIF conditions. The younger group was the reference group whereas as the older group was considered as the focal group. Older people (age group 51-60) on average had lower mean scores (- .13) than their younger counterparts (.035) aged between 41-50 (see Figure 4.11). Based on the item true score functions, slope of the item for the older group was substantially higher than that for the younger group, indicating non-uniform DIF. The LR $\chi 2$ test for testing non-uniform DIF was found to be significant (p = .007). The small McFadden's pseudo-R^2 measures (R^2_{23} = .018, R^2_{13} = .02) indicated that, when weighted by the focal group PCH distribution, the expected impact of DIF on scores became negligible (Crane et al., 2007). The same was also revealed by the item response functions plots juxtaposing responses for the two groups as compared (Figure 4.12).

Figure 4.11. Trait distribution for age-DIF comparing analysis 2

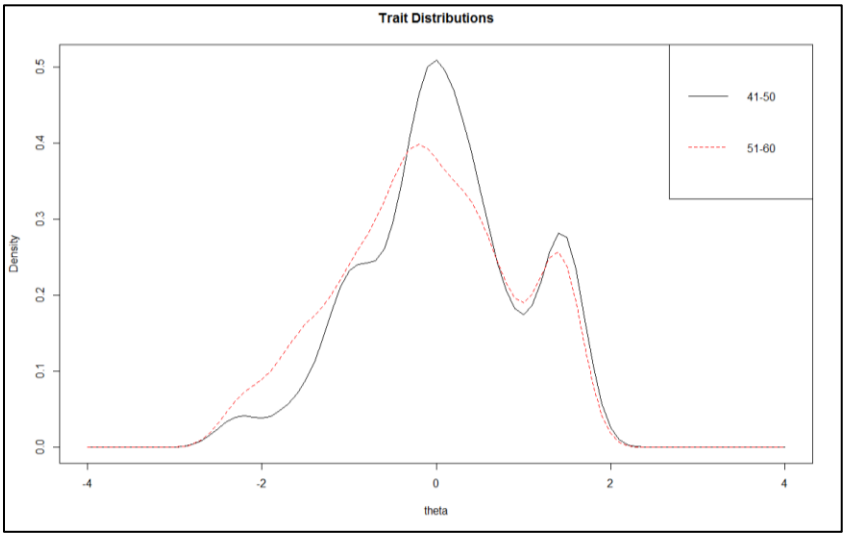
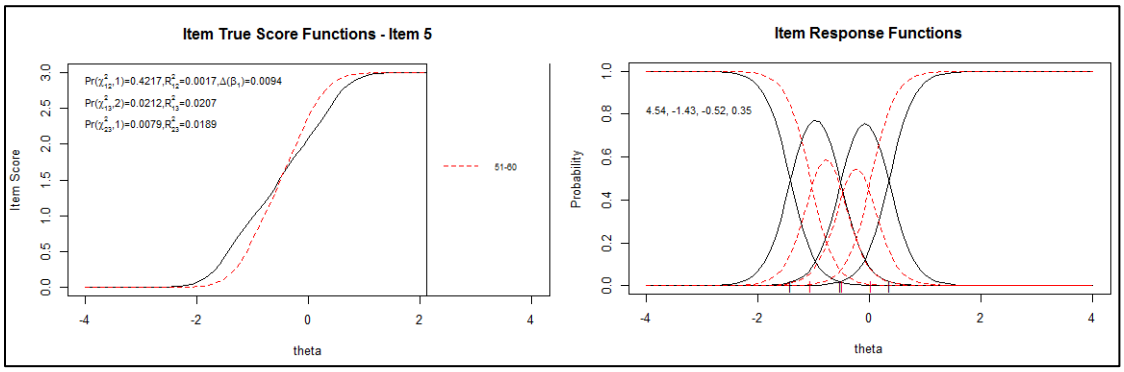


Figure 4.12. Diagnostic plots of DIF items for age-DIF analysis 2



Based on the TCC, the DIF item seemed to have an impact on the overall scale, as indicated in Figure 4.13. At the individual score level, scores of DIF-free dataset and data accounting for DIF were compared to observe the differences ranged roughly from −.015 to +.015, with the mean difference of about .075. Accounting for age-DIF led to mostly low scores for people belonging to age group of 51-60 at their lower levels of CH, as compared to mostly high scores for participants belonging to the younger age group. At the higher levels of CH, accounting for age-DIF led to mostly higher scores for the older group and lower scores for the younger group. Refer to Figure 4.14 for the individual-level DIF impact in the second age-DIF analysis.

Figure 4.13. TCC for age-DIF analysis 2

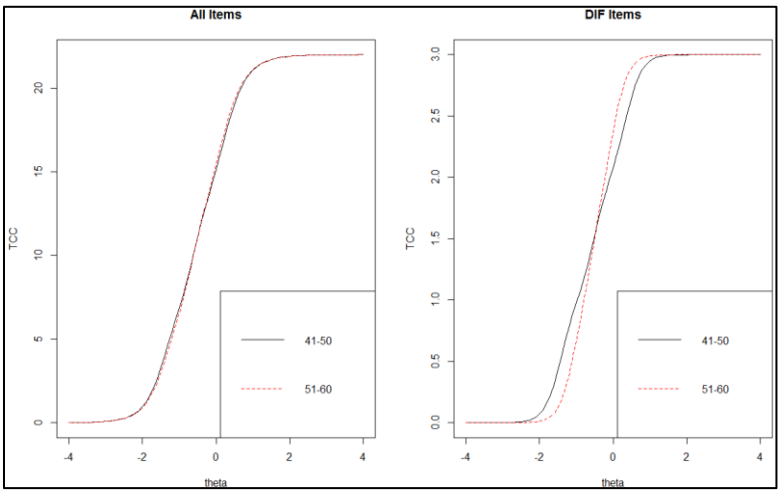
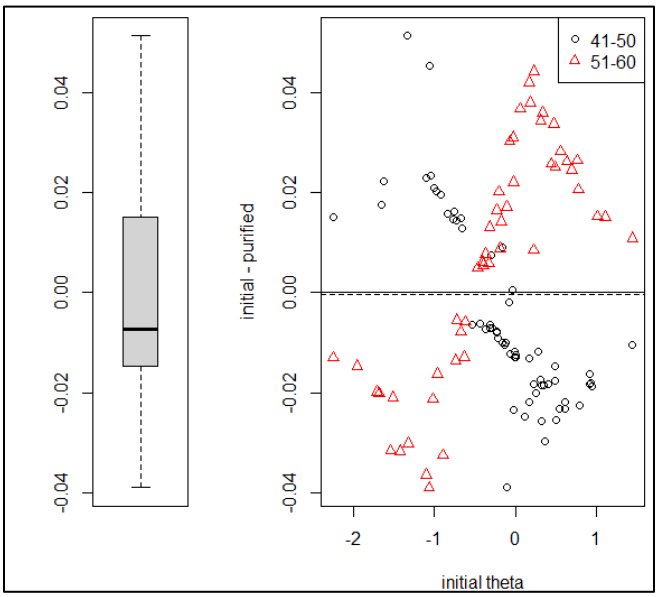


Figure 4.14. Individual-level DIF impact for age-DIF analysis 2



The third age-DIF analysis, comparing 18-30 with 41-50 age groups, showed that none of the items were biased to any of the compared age categories. The analysis got terminated in one iteration indicating that no items was identified for age related DIF. Participants from both the age groups were found to similarly endorse the scale items with none of the items being biased to participants from either of the groups.

The fourth age-DIF analysis, comparing age categories 18-30 and 51-60, indicated item 7 of the scale, "*My supervisor does NOT practice what (s)he preaches"* as a DIF item. The younger group was the reference group whereas as the older group was considered as the focal group. Older people (age group 51-60) on average had lower mean scores (- .13) than their younger counterparts (.007) aged between 18-30 (Figure 4.15). Based on the item true score functions, slope of the item for the older group was similar to that for the younger group, indicating uniform DIF. The LR $\chi 2$ test for uniform DIF, comparing Model 1 and Model 2, was significant (p = .007), whereas the test for indicating non-uniform DIF was non-significant (p = .97). The uniform component of DIF revealed by the LR χ 2 test can also be observed visually with the item response functions plots juxtaposing responses for the two groups (Figure 4.16). It is important to note that in this analysis, the DIF item only shows three out of four response categories to have been endorsed by participants. The small McFadden's pseudo-R^2 measures (R^2_{12} = .012, R^2_{13} = .012) indicated that, when weighted by the focal group PCH distribution, the expected impact of DIF on scores became negligible (Crane et al., 2007).

Figure 4.15. Trait distribution for age-DIF comparing analysis 4

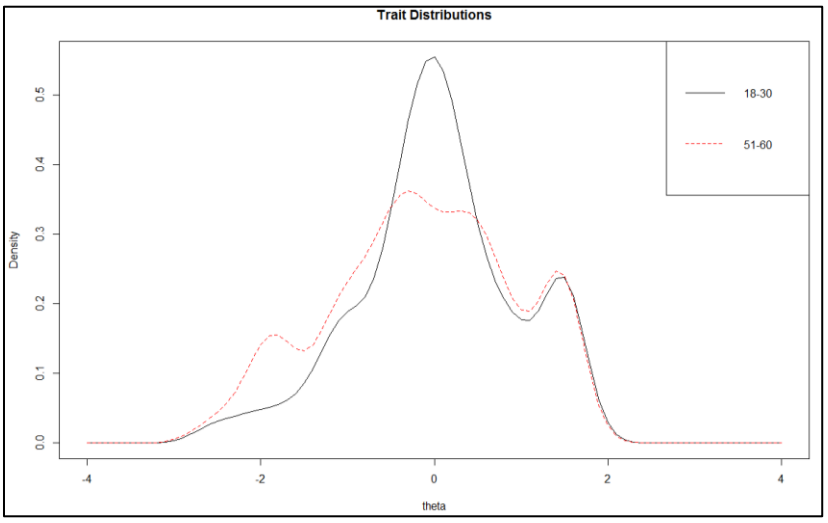
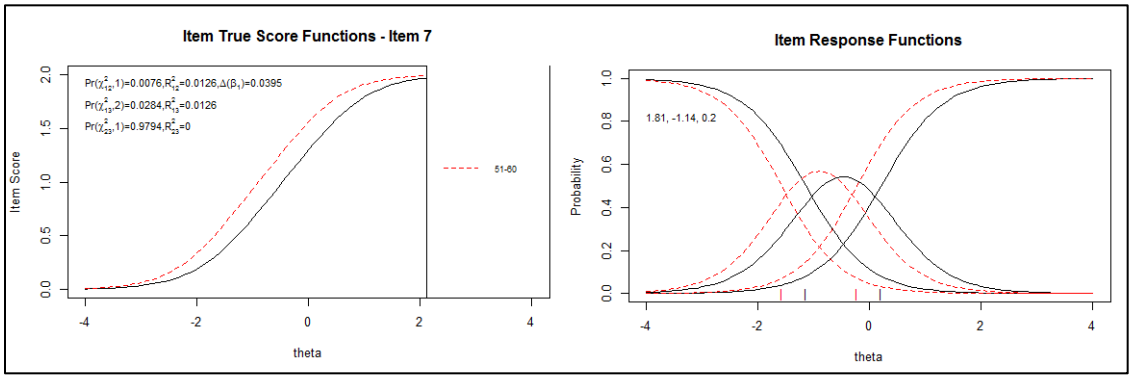


Figure 4.16. Diagnostic plots of DIF items for age-DIF analysis 4



Based on the TCC, the DIF item seemed to have an impact on the overall scale (Figure 4.17). The difference in the TCC implies that participants of age group 51-60 would score slightly lower PCH than the age group of 18-30, if age group–specific item parameter estimates were used for scoring. At the individual score level, scores of DIF-free dataset and data accounting for DIF were compared to observe the differences ranged roughly from −.005 to 0, with the mean difference of about -.004. Accounting for age-DIF led to mostly high scores for people belonging to age group of 51-60 at their lower levels of CH, as compared to mostly low scores for participants belonging to the younger age group. At the higher levels of PCH, accounting for age-DIF led to mostly higher scores for the older group and lower scores for the younger group. Refer to Figure 4.18 for individual-level DIF impact in the fourth age-DIF analysis.

Figure 4.17. TCC for age-DIF analysis 4

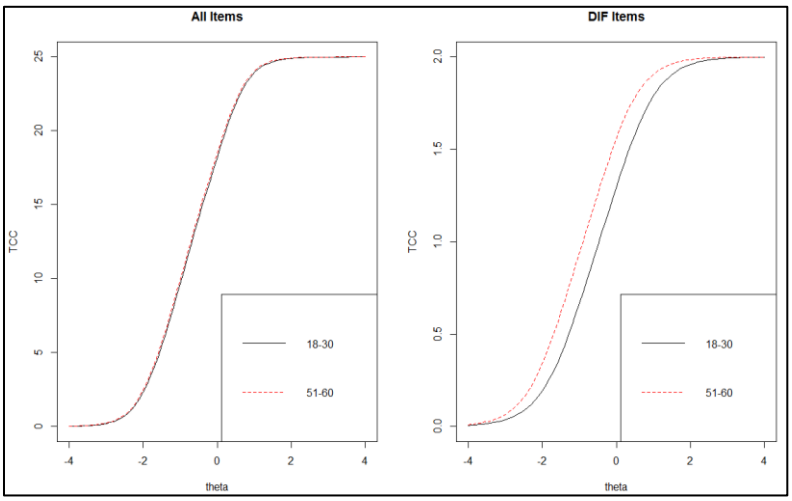
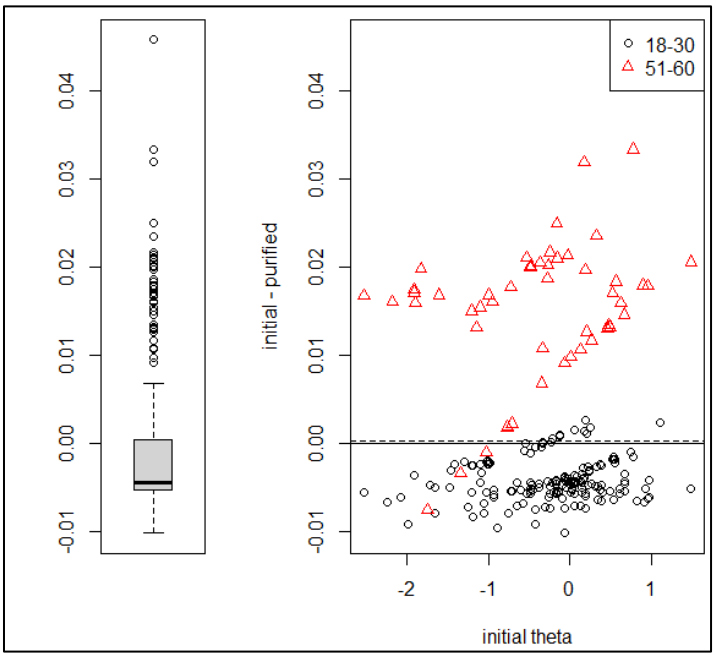


Figure 4.18. Individual-level DIF impact for age-DIF analysis 4



In the fifth age-DIF analysis, comparison of age group 31-40 with the 41-50 group showed that none of the items were biased to any of the compared age categories. The analysis got terminated in one iteration indicating that no items was identified for age related DIF. Participants from both the age groups were found to similarly endorse the scale items with none of the items being biased to participants from either of the groups.

Finally, the sixth age-DIF analysis comparing 31-40 with 51-60 age groups also showed no items to have DIF conditions. Thus, based on a total of six age-DIF analyses, four items in the PCH scale were flagged for DIF conditions based on participants' age ranges.

Lastly, checking for presence of DIF in the PCH scale for participants belonging to different workplaces showed item 9 of the PCH scale, "*The values my supervisor communicates to the society are NOT consistent with employees' experiences at work,*" to have DIF. The shop-floor group was the reference group whereas as corporate participants were considered to represent the focal group. There was broad overlap in the distributions, though participants from corporate workplace in general demonstrated lower scores (- .08) than participants from the other group (.034) representing shop-floor workplaces (see Figure 4.19). Based on the item true score functions, slope of the item for the corporate group was similar to that for the shop-floor group, indicating uniform DIF. The LR $\chi 2$ test for uniform DIF, comparing Model 1 and Model 2, was statistically significant (p = .005), whereas the test for indicating non-uniform DIF was non-significant (p = .36). The small McFadden's pseudo-R^2 measures (R^2_{12} = .005, R^2_{13} = .005) indicated that, when weighted by the focal group PCH distribution, the expected impact of DIF on scores became negligible (Crane et al., 2007). Refer to Figure 4.20 for the diagnostic plots of the DIF item.

Figure 4.19. Trait distribution for workplace-DIF analysis

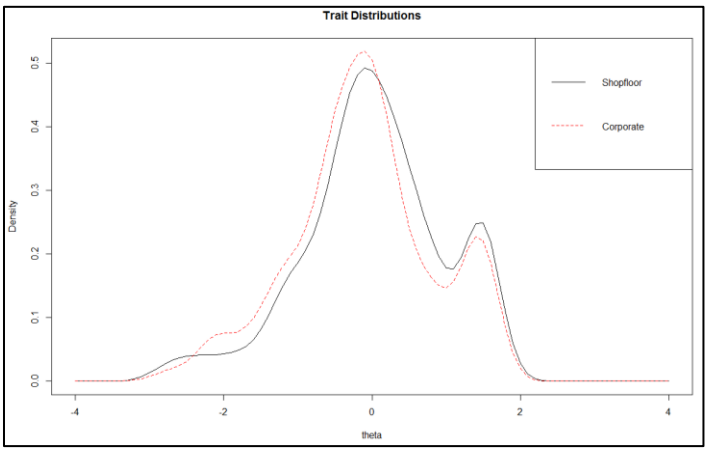
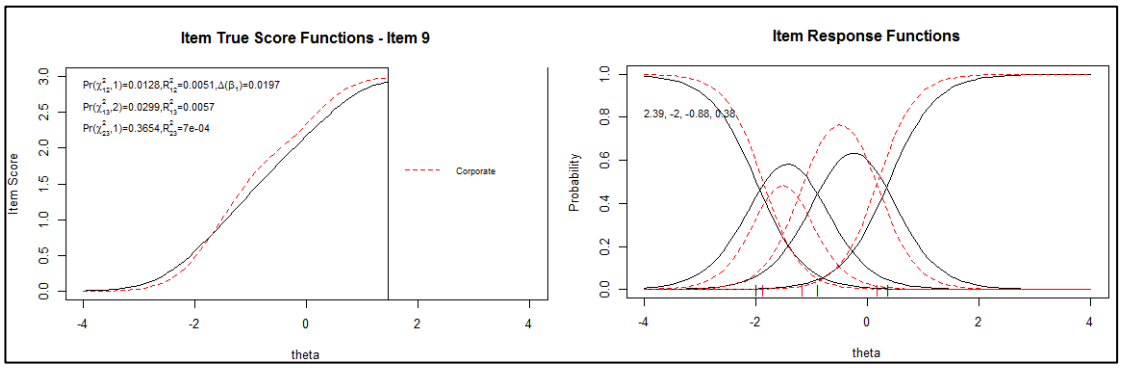


Figure 4.20. Diagnostic plots of DIF items for workplace-DIF analysis



Based on the TCC, the DIF item seemed to have small impact on the overall scale (Figure 4.21). At the individual score level, scores of DIF-free dataset and data accounting for DIF were compared to observe the differences ranged roughly from −.005 to 0, with the mean difference of about -.004. Accounting for workplace-DIF led to mostly high scores for people belonging to corporate group at their lower levels of PCH, as compared to mostly low scores for participants belonging to the shop-floor group. At the higher levels of PCH, accounting for workplace-DIF led to mostly high scores for the corporate group and low scores for the shop-floor group. Refer to Figure 4.22 for the individual-level DIF impact in the workplace-DIF analysis.

Figure 4.21. TCC for workplace-DIF analysis

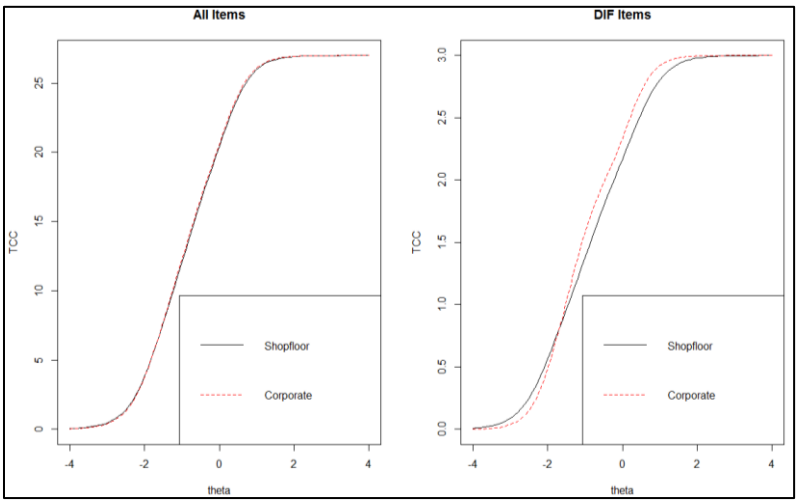
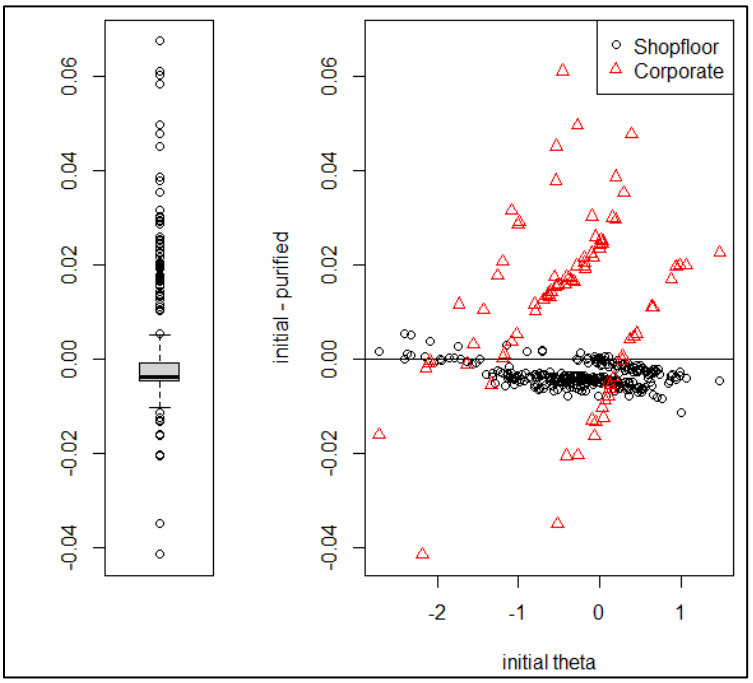


Figure 4.22. Individual-level DIF impact for workplace-DIF analysis



CHAPTER V: CONCLUSIONS

This chapter includes (a) summary of the study, (b) discussion of the important results, (c) contributions and implications, and (d) study limitations and future research suggestions.

Summary of the Study

US retail corporations continue to be an important segment driving the national economy (National Retail Federation [NRF], 2014). However, ongoing media reports often indicate that retail corporations assert their commitments to responsibility and good behaviors but act otherwise, creating discrepancies between their claims and actions (Chua, 2016; George-Parkin, 2017; Schmidt, 2017; Zaczkiewicz, 2016). Perceptions about corporations failing to deliver on their promises and acting otherwise, or CH, can be created in consumers', employees', and investors' minds as the sector engages in irresponsible and unethical behaviors (Goswami & Ha-Brookshire, 2016; Janney & Gove, 2011; Wagner et al., 2009).

Such perceptions not only jeopardize stakeholders' overall trust, loyalty, and general attitude towards those corporations but can also generate discomfort, psychological distance and alienation, turnover intentions, a lack of commitment, and job dissatisfaction, particularly among employees (Abraham, 2000; Arli, Grace, Palmer, & Pham, 2017; Greenbaum, Mawritz, & Piccolo, 2015; Kim, Hur, & Yeo, 2015; Philippe & Koehler, 2004; Shim & Yang, 2016; Simons, 2002). Additionally, such perceptions can be problematic for the corporations' reputations and even economic performances (Brunsson, 1993; Cour & Kromann, 2011; Hadadian, Navidi, Digehsara, & Sabet, 2016; Wagner et al., 2009).

Given that employees' attitudes, behaviors, and perceptions have important consequences on businesses' overall performances (Chambers et al., 1998; Lawler, 1992; Mathieu & Zajac, 1990; Meyer et al., 1997; Pfeffer, 1994), PCH among employees needs to be further investigated. While the importance of PCH among employees has been well established, a lack of proper and relevant scale to measure such perceptions was observed in the literature. A few instruments to measure related concepts, such as behavioral integrity, have been discussed in the organizational management literature. However, these instruments did not identify various constructs of hypocrisy and considered both platforms, organizational and managerial, of PCH among employees, suggesting a lack of clarity and consensus in the definition of PCH. Therefore, to help retail corporations clearly and effectively understand PCH among their employees, this study was designed to develop a PCH scale and provide a better framework for evaluating employees' PCH.

In addition, compared to consumers and other stakeholders, employees generally are more involved with corporations and might have more knowledge about corporations' breach of assertions, contradictory policies, and actions. Moreover, employees' terms with their employers, and expectations and obligations from their corporations, could be different than those of other stakeholders, thus making employees' PCH and possible experiences contributing to that PCH different than that of consumers (Bal, Cooman, & Mol, 2013). Literature suggests that PCH among employees can originate both from their leaders in particular or organization in general (Goswami & Ha-Brookshire, 2016). Therefore, the study sought to investigate the different underlying constructs and domains of employment experiences, and hypocrisy from organizational and managerial sources which are salient to PCH among employees. The theory of organizational culture (Allaire

& Firsirotu, 1984) and theories of action (Argyris & Schon, 1974) provided theoretical background for the study, and the following were proposed:

Proposition 1: Perceived lack of morality will be salient to PCH.

Proposition 2: Employees' psychological contract breach by their employers will be salient to PCH.

Proposition 3: Managers' double standards practice will contribute to PCH.

Proposition 4: Managers' value-behavior gap and intentional deception will be salient to PCH among employees.

To develop and preliminarily validate a PCH scale, IRT was used as the data collection and analysis paradigm for the research. The study was conducted in three stages: (a) item generation, (b) item bank development, and (c) psychometric evaluation. The first stage reflected a deductive approach of scale development that utilizes a typology, conceptual model, or a classification schema prior to psychometric evaluation. Using this approach, an understanding of employees' PCH was achieved by a thorough review of the literature and development of theoretical constructs of the PCH to be measured (Hinkin, 1995; Hutz, Bandeira, & Trentini, 2015). These constructs, their definitions, and their measurement items were then adopted and adapted from the literature to generate 145 items, tapping into previously available theoretical structures.

In the second stage, an item bank was developed with rigorous binning, winnowing, content expert validation, item revisions, and cognitive interviews. Using binning and winnowing, the large set of items was subject to an extensive review, finding identical items, grouping items of similar content, and deleting items considered

redundant, confusing, too narrow and context specific in nature, or mismatching with relevant constructs. A cleaned set of 74 items organized into four bins was formed and given to a qualitative research approach to review, assess and examine the potential set of items and their constructs to ensure that they well represented the structure of PCH (Revicki et al., 2014; Hinkin, 1995). First, individual interviews and a focus group were designed and a total of nine content expert participants were asked to determine whether the set of items reflected real experiences of retail industries, had accurate vocabulary and had content adequacy. Second, two psychometric expert participants were asked to review the set of items and indicate any mechanical, item design, response format, and literacy level errors. Third, cognitive interviews were designed in which a total of eight participants indicated their PCH about their employers using 49 items in an online survey, and they later participated in follow-up individual interviews. Participants were asked to describe the comprehensibility of the items and instructions in the interviews.

The final stage of psychometric evaluation employed a self-reporting online survey. A total of 49 core-content items measured on a 4-point Likert scale were presented to every participant for assessing the psychometric properties, validity, and reliability of the items. Participants were asked to indicate their PCH about employer corporations. In addition, participants were asked to also indicate their turnover intentions and attitude towards the corporations based on experiences described in those items. A total of 520 usable responses were collected through a national research firm, Qualtrics, for this stage of the study.

Discussion of Major Findings

A summary and discussion of the major findings of psychometric evaluation related to scale dimensional structure, scale reliability, and construct validity will be discussed in this section.

Scale Dimensional Structure

The PCH scale was conceptualized as constituted of four theoretical domains, namely perceived lack of morality, psychological contract breach, double standards, and value-behavior gap, based on the existing literature. These domains were proposed to reflect aspects of hypocrisy in general, applied in context to corporations in particular. Clarity regarding the internal structure of PCH being measured increased the thoroughness of the conceptual framework, aided in its translation into measurement items, and explained the rationale behind combining items into domains (Lohr, 2002). Results from the principal component analysis indicated a unidimensional structure underlying the PCH scale.

The unidimensional description of the PCH of employees in the study was derived from the theoretical and qualitative data from the first and second stages, and empirically confirmed by PCA during the scale evaluation. Also, special attention was given to this analysis because it forms one of the assumptions of IRT. The results showed that one single dominant dimension accounted for 63.24% variance in the survey responses, thus striking a balance between simplicity and completeness of the scale. In other words, it is participants' PCH which contributed the most in evaluation of different scores in the scale items. The final structure of the scale, though having one dimension, reflected

conceptually meaningful aspects of PCH and was comprised of all four theoretical domains proposed in the study.

Five items of the PCH scale represented the theoretical domain of the perceived lack of morality. These items aligned with the cultural system of the organization culture theory (Allaire & Firsirotu, 1984), in which corporations' conflicting ideologies and values influenced employees' perceptions about a lack of corporate morality, thus contributing to their PCH. Items such as "*My company PRETENDS to appear moral*" (item 25) and "*My company engages in morally WRONG acts when it can get away with them*" (item 26) align with literature that describes hypocrisy as a pretentious morality to conform to perceivers' standards of judgements. This indicated that participants believe their employer corporations to be hypocritical if they find their organizations to pretentiously adhere to higher standards of morality and compromise those for corporations' self-benefits.

Two other items of the PCH scale represented the theoretical domain of double standards, in which leaders with their biased personalities and inconsistent ideals could contribute to employees' PCH. Items "*My supervisor does NOT hold everyone at all levels equally accountable for their mistakes*" (item 36) and "*My supervisor does NOT practice what (s)he preaches*" (item 32) aligned with the defining features of Valdesolo and DeStono's (2007) description of hypocrisy. These items indicated that PCH was formed in participants as corporations, represented through their leaders, acted selectively different, favoring themselves or people of their preferences over other employees. That is, corporations will be perceived as hypocritical by exhibiting different standards for

transgressions, performances, benefits, and the like for different employees, favoring one employee over others or favoring themselves over employees.

Item 11, "*My company's policies do NOT match the promises made to employees*," represented the theoretical domain of psychological contract breach, in which inconsistencies between the terms of reciprocal exchange agreements for employees with their corporations and the sociocultural system of the corporations contribute to employees' PCH. Therefore, participants perceived their corporations to be hypocritical as they found corporate strategies, management policies, and other structural elements to be contradictory with the promises made to participants.

Finally, item 42, "*The values my supervisor communicates to the society are NOT consistent with employees' experiences at work*," showed the theoretical domain of value-behavior gap. This item aligned with Argyris and Schon's (1974) theories of actions, in which corporations' used theories contradicting those espoused in public and thus contributed to employees' PCH. Thus, participants thought their employer corporations to be hypocritical as they found their corporate leaders announcing higher ideologies on a broader platform to a bigger audience while compromising such values in a more private setup in everyday life. Therefore, all four propositions of this study were found to be theoretically supported in the PCH scale of nine items. The one-dimensional PCH scale indicated a parsimonious, simple, and interpretable instrument to explain employees' perceptions (Conway & Huffcutt, 2003; Costello & Osborn, 2005; Field, 2005).

Psychometric properties

A graded response model was fitted to the data for item calibration and to check for the scale's psychometric properties. The scale's discrimination parameter values

indicated that all nine items were able to distinguish between participants well based on their levels of PCH. This result concurred with the study's factorial structure in which the factor loading of the individual items was very high, implying that these items contributed to the estimation of PCH well.

Based on the threshold parameters of the overall scale, the instrument should perform well in estimating individuals' PCH in the approximate range of -2.03 to .47. This range indicated that the final scale seemed to capture lower levels of PCH well, such that people with average levels of PCH would mostly select the higher two response categories. For example, for item 32, the three threshold parameters for 4-point Likert scale were *b1*(-2.03), *b2*(-1.23), and *b3*(.06) indicating that participants with PCH level above -2.03 could select any of the higher three response categories, participants with PCH level above -1.23 could select any of the higher two response categories, and participants with PCH level above .06 would select the highest response category. Given that the scale items were mapped on −3 to 3 standard deviations below and above the average PCH, participants with an average level of PCH would be indicated as 0. Comparing this with the threshold parameters of item 32, a participant with an average level of PCH (0) would fall below *b3* and therefore would tentatively select the third response category for the item. In other words, for item 32 "*My supervisor does NOT practice what (s)he preaches*", a participant with average level PCH would likely choose to either "agree".

The ICCs showed that for all the items of the scale, all response categories were endorsed by some set of participants and no category was left out. All the category thresholds increased monotonically. Optimally functioning response categories were not

only an indication of good fit to the GRM at the item level, but also that the categories were understood as intended, thus supporting validity (Wolfe & Smith, 2007). Among all items, item 7, "*My supervisor does NOT practice what (s)he preaches*" had the second response category "disagree" selected by participants representing a narrow range of PCH approximately between -1.30 and -1.75. This indicates that for this item, only a few participants disagreed that they will not be disappointed with their supervisor for not practicing what (s)she preached. Although this category represented a very narrow range, it still uniquely represented that range of PCH and did not overlap with other response categories. Therefore, based on the ICC of this item, all four response categories were still considered to be essential for this scale.

The fit between model and data was analyzed using several fit indices such as M_2 statistics, RMSEA, SRMR, CFI and TLI. The M_2 results indicated that at a statistical significance level of p=.01, the model was found to fit the data well. There was a comparative difference observed between the model and the data as indicated by the M_2 statistic of 19.44. However, this difference was not statistically significant, indicating that the model replicated the observed data well. Similar conclusions could be made based on the other fit indices. The RMSEA assesses the error of approximation of a model and uses any test statistic based on residual covariances to check how well the model reproduces the observed covariances relative to the degrees of freedom (Browne & Cudeck, 1992). Thus, the computed value of .04 indicated that with 9 degrees of freedom, the M_2 statistic based on residual covariances could be reliably used to assess how well the GRM model replicated the data, since there was a lower degree of error of approximation. The value of .04 was considered lower and acceptable compared the

general cut-off of .08. Thus, if the RMSEA value would have been higher than .08, the study would have interpreted it as higher degrees of approximation involved in checking the fit between the model and data, and hence not acceptable. The SRMR is a fit index which evaluates the model-data fit based on the standardized differences between the model's predicted correlation and the data's observed correlation. Since for a good fit there are expected to be no differences between the model and data, a smaller SRMR would mean a good acceptable fit. Compared to the threshold of .08 for good fit (Hu & Bentler, 1999), the SRMR's description of the GRM model's fit to the data for the PCH scale was an indication of a good model fit. The other two indices, TLI and CFI, are incremental fit indices which assign values of 0 and 1 to the worst possible model and best possible model respectively and compute values for the current model in consideration (Schmitt, 2011). Higher value for the model being tested is preferred, with values above .95 indicating good fitting models. The TLI and CFI results of the GRM model for the PCH scale thus indicated an acceptable fit. Overall, based on all the fit indices, the GRM used to calibrate the PCH scale items seemed to be the right choice.

An analysis of the individual item fits showed that except for item 14 all items had good fit with the GRM. A lack of fit could indicate that the item was measuring a dimension other than PCH captured by the GRM, indicating possible multidimensionality (Kamudoni, 2014). However, given that some researchers question the choice of *p*-value for statistical significance as an arbitrary convention (Kaye, 1986), the item was not simply deleted. A thorough review of the item content indicated that this item was unique in capturing corporations' breach of their promises via corporate structural elements and contributed to employees' PCH. Therefore, the item was kept in the PCH scale.

The TIF indicated that the PCH scale was most informative for estimating PCH for a range from -3.25 to 1.75. The total information presented by the scale indicated that each of the nine items potentially contributed individual information to reduce uncertainties about participants' level of PCH independent of the other items in the scale. An opposing perspective to test information is that of the standard error of estimate (SEE), used to calculate accuracy of estimated PCH with respect to participants' PCH (De Ayala, 2009). The SEE curve showed lower values, as low as 0, for an approximate range of -3.75 to 2. This indicated of smaller degree of uncertainties about participants' PCH as measured by the nine items of the scale. Based on the TIF and corresponding SEE curves, the final PCH scale seemed to be reliable at the left end of the scale, indicating that the scale could estimate PCH more precisely for participants with lower levels of PCH than participants with higher levels of PCH.

The construct validity of the PCH scale was assessed through proposed convergent and discriminant relationships of PCH with other relevant variables. A correlational analysis was conducted between scores of the PCH scale and turnover intention scores for testing convergent validity. The results indicated a significant positive relationship between the two variables. This suggests that participants' perceptions regarding corporations being hypocritical positively influenced their intentions to quit those jobs and search for employment in different corporations. Findings were consistent with literature and further substantiated that perceptions of hypocrisy are mirrored in employees, increasing their turnover intentions (Greenberger et al., 1989; Kouzes & Posner, 1993; Philippe & Koehler, 2005).

Additional evidence of construct validity of the PCH scale was observed in relationships between PCH and employees' AaC. Results of a two-factor confirmatory factor analysis on a concatenated scale, representing items of both PCH and AaC scales, extracted employees' PCH and their AaC as two separate variables with an acceptable model fit. Additional correlational analysis indicated small but significant positive correlation between PCH scores and AaC scores. This suggests that participants' PCH and their AaC were two different variables and their PCH influenced their AaC, although such influence was smaller in magnitude. Findings were found to be consistent with literature (Kim, Hur & Yeo, 2015; Shim & Yang, 2016; Wagner et al., 2009), and thus established the PCH scale's discriminant validity.

Contributions and Implications

The study findings have several important contributions and implications. First and foremost, the study created a reliable and valid scale for employees' PCH, filling the critical gap in the literature. The study researchers called attention to the matter that employees' experiences with corporations' assertion-behavioral inconsistencies and disingenuousness could be different from those experienced by other stakeholders of corporations, particularly those of consumers. Therefore, the study developed and validated a scale focusing on experiences specifically relevant to employees in their work settings. Review of relevant literature indicated that the most cited corporate hypocrisy scale, developed by Wagner et al. (2009) for measuring consumers' perceptions, focused on assertion-behavioral differences and pretensions. Yet, their scale did not have items to capture employees' expectations of fair and equal treatment, appreciation for rendered services, corporate ethics and morality (PWC.com, 2011; Soloman, 2016). In this study,

these three concepts are some of the key experiences related to PCH. In addition, despite the other studies studying hypocrisy by inducing the concept among participants, they were limited to observing a mere presence or absence of hypocrisy and not actually measuring it. Therefore, such efforts could not measure employees' PCH as their beliefs or perceptions of others. The PCH scale developed in this research is completely new. Six out of nine items are adopted from others' research in literature, most of which tried to measure slightly different concepts, such as psychological breach, double standards, etc. This developed scale is believed to be the most comprehensive tool to measure employee PCH not only by incorporating organizational, psychological and philosophical literature related to hypocrisy but also by addressing missing key salient constructs from previous studies.

Furthermore, the study supports the usefulness of IRT in organizational research for a variety of applications. According to Foster, Min, and Zickar (2017), IRT provides the advantage of making scale items and their parameters invariant of the population and offers an independence between the scale and its items, thus making scale construction more meaningful for organization behavioral and psychological research. This study used IRT to conceptualize and score employees' perceptions, thus helping the applicability of IRT to advance. Additionally, this study follows the best practices recommended by IRT researchers, such as assessing all three assumptions and evaluating both item and model fits, whereas only a very small minority of research follows such ideal standards of IRT (Foster et al., 2017). The balanced application of qualitative and quantitative methods helps the study avoid over-reliance on statistical approaches while addressing every

friction that arose in the process. Therefore, the PCH scale developed in this study is deemed to be robust and maintains methodological and social objectivity (Fisher, 2000).

Second, the study findings shed light on employees' experiences and perceptions related to PCH from perspectives of the theory of the organization culture and theories of action. The theory of organization culture in literature has mostly concentrated on how it affects job satisfaction or commitment and not on employees' perceptions. Similarly, the theories of action had mostly been studied in the organizational literature regarding how dissonance can exist between espousals and enactments, and how managing such dissonance offer scopes of organizational learning. Yet, little to no studies with this theory focused on how such dissonance might generate PCH among employees. This study is one of the first that looked at employees' perceptions of hypocrisy generated by potential dissonances in organizations.

Such findings have implications for employers. In this increasingly complex corporate environment with millennials as a new generation of employees, employers are trying to maintain strong relationships and perceptions to attract more talented applicants and induce commitment (Bak, 2016; Business.com, 2017). Employees with PCH can use different social media tools to share their perceptions and opinions, which may eventually harm corporations' reputations. This might be particularly important for the retail sector which is already criticized for its high turnover rates, discriminatory employee hiring, lower compensations, lesser benefits, and fewer career growth opportunities, and is in general perceived as a 'bad' industry sector (Goswami & Ha-Brookshire, 2016; Williams & Connell, 2010). With the recent transitions in the retail sector, where more and more corporations are competing fast for market shares, maintaining employees with good

perceptions, commitment, and attitude towards the corporations can be crucial in corporations' success. With this new PCH scale, now employers may be able to assess and measure their employees' PCH to address potential problems that they may experience with employees.

Third, this study focuses on how hypocrisy is perceived by others and not on how people analyze themselves, thus filling a gap in the hypocrisy literature (Alicke, Gordon, & Rose, 2013; Barden, Rucker, & Petty, 2005; Jordan, Sommers, Bloom, & Rand, 2017). Studies in hypocrisy, particularly those in the social psychology field, mostly analyze hypocrisy from the framework of cognitive dissonance where one's own dissonance with the self-concept impacts changes in one's behavioral responses. However, people are more likely to judge others and their acts of disingenuousness than an individual acknowledging the same as a characteristic of the self (Hale & Pillow, 2015). This study is one of the few attempts in the hypocrisy literature which attempted to measure peoples' judgements of others' hypocrisy applied in the employer-employee setting.

Such judgments are often negative in nature, condemning the actor believed to be hypocritical. As a result, alienation, psychological barrier, hatred, and lack of trust could be created in the employer-employee setting (Greenbaum, Mawritz, & Piccolo, 2015; Hale & Pillow, 2016; Jordan et al., 2017). Therefore, the finding implies that employers must be aware of the fact that employees might have negative judgments on employers' hypocritical behavior, creating counterproductive workplace behavior.

Fourth, this study identified specific aspects of PCH beyond the narrow concept of behavioral inconsistencies, as mostly seen in organizational and marketing research. According to the study results, inconsistencies could exist beyond words and actions, and

could include inconsistencies in corporate standards or ideals with a bias towards a favored person. Corporations were perceived as hypocritical as participants believed the employer-corporations to exercise different standards for transgressions, performances, or benefits for different employees, and as they favored one employee over others or favored themselves over employees, i.e., had double-standards. Thus, this study extended the concept of double-standards, as a proxy for hypocrisy, from an individual acknowledging it as self-characteristic to hypocrisy perceived by others (Valdesolo & DeSteno, 2007), and indicated that corporations' double standards is a defining feature of employees' PCH. With these findings, the study suggests that by establishing and implementing consistent standards regardless of employer or employee status, employers might be able to avoid any potential PCH and create more favorable perceptions among employees.

Fifth, the study also indicated perceived lack of morality as another domain of PCH beyond behavioral inconsistencies. This was another critical finding for the literature because previously the lack of morality was not considered an important experience for PCH. In this study, participants' perceptions regarding their corporations being pretentious while endorsing moral values or contradicting higher values with ulterior motives were found to be contributing to PCH. Therefore, by aligning business plans and strategies to shift corporate focus onto their ethical practices, values, and morality, corporations might be able to control employees' PCH and improve their reputations. This might be particularly important with the boom cycle of moral leadership, where employees expect to find a deep sense of ethics, appreciation of core ideals and pursuit of a higher purpose in their leaders (Solomon, 2014).

Sixth, findings of the study suggested a positive strong association among participants' PCH and their turnover intentions. This means that as participants perceived their corporations to be hypocritical, they also had intentions to quit their employment and search for new job opportunities. Therefore, in the competitive business world where employees form one of the most valuable resources (Amabile & Kramer, 2011; Duncan, 2013), corporations might want to consider employees' PCH and control it to reduce its potential influence on their turnover intentions. This might be particularly important in the retail sector, which has the bad reputations of higher turnover rates and lower job commitments (Gustafson, 2014; Williams & Connell, 2010). Corporations can choose various management and communication strategies to control employees' PCH. Also, given that close to 40% of retail employees work in small corporations (NRF, 2014), this can be useful for smaller corporations which generally have limited resources but still want to create a niche in the market. Finally, with the millennials already entering the world of employment, understanding employees' perceptions, being able to measure their PCH, and integrating it along with other assessments to monitor employment satisfaction, might be particularly important for corporations to be able to "generationally manage" their workforce (Soloman, 2016, p. 1). This may help corporations as they try to reshape their workplace to naturally appeal to, recruit and retain the millennial generation.

Limitations and Scope of Future Research

The study has certain limitations related to external validity, test-retest reliability, and statistical conclusion validity. First, the study developed items, focusing on corporations only from the retail sector and considering their employees' experience. The initial phases of item bank development considered only retail employees. However,

employees of corporations representing other sectors, such as manufacturing and wholesale, can have experiences different than those of the retail sector employees, which were not considered in the study. Thus, generalizability of the results might be limited. Future research involving participants from all three sectors that understands and includes any different experiences in the scale can be beneficial before the study results can be generalized for all corporations.

Second, the external validity of the study was also restricted by the study sample representing only US employees. Since employees' PCH related to their corporate employers might be of global interest, similar studies with participants representing other nationalities and cultures might be needed before the results can be generalized. This is because peoples' perceptions and reactions to different experiences might differ across countries and cultures.

Third, although the study analyzed and reported the reliability of the PCH scale based on the information available, it did not measure a test-retest reliability. Such reliability obtained by administering the scale twice or more over a period of time and analyzing the correlation between the scores can help establish the stability of the scale, but is not measured by the study. Therefore, replication of the psychometric evaluation phase of the study can further substantiate evidence for the structure and psychometric properties of the employees' PCH scale.

Statistical conclusion validity means that the conclusions drawn from a study are substantiated based on adequate analysis of the data (Garcia-Perez, 2012). The study found items to have DIF conditions and bias towards groups of participants based on their age and workplaces. While the items were identified and flagged, such items were not

deleted in this study, thus forming the fourth limitation of the study. Such items will need to be deleted to ensure that the scale does not have any bias toward any groups and is invariant across different demography. Thus, future research involving iterative DIF analysis and getting rid of such items while maintaining statistically and contextually relevant items will be helpful in amplifying the psychometric properties and applicability of the scale.

Fifth, in the final scale of PCH, item 14 demonstrated statistically significant poor item-fit. This indicated that for this item, the model did not best replicate participants' responses and there were some statistical differences observed. Despite the limitation, this item was retained due to its content relevance to the scale, as well as other properties such as good discrimination parameters and high factor loadings. Conceptually, this item tapped into aspects of breach of promises made by corporations and how these contribute to employees' PCH, and no other item of the scale duplicated this content. Future research may ameliorate this limitation by testing iterations, replacing the item with a similar content item from the bank.

Sixth, the study collected data for psychometric evaluations using self-report measures, and data for all the observed variables were collected using a single survey instrument, at the same time. Thus, the study might have the limitation of common method variance (CMV), in which the single method bias may exist and the items may share variance beyond the true covariation among them (Campbell & Fiske, 1959). Such bias can affect correlations and other observed measures as well as psychometric properties. Therefore, future studies considering procedural techniques to reduce the

likelihood of CMV and statistical techniques to address such variance might be beneficial.

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APPENDIX A

INITIAL ITEM GENERATED

Initial Item Generated from Review of Literature

Concept	Source	Items	Action taken	Statistics
Perceived Lack of Morality	Moorman, Darnold, and Priesemuth, (2013)	1. This leader acts to benefit the greater good (represents Utilitarianism). 2. This leader treats people fairly (represents Justice). 3. This leader protects the rights of others (represents Rights-based). 4. This leader treats people with care and respect (represents Caring). 5. This leader serves to improve society (represents Social Contract). 6. This leader is honest (represents Virtue).	Bin. Reword "My corporation does NOT act to benefit the greater good" Bin. Reword "My corporation does NOT treat people fairly" Bin. Reword "My corporation does NOT protect the rights of others" Bin. Reword "My corporation does NOT treat people with care and respect" Bin. Reword "My corporation does NOT serve to improve the society" Bin. Reword "My corporation does dishonest"	No reported scale reliability. Measured on a 5-point scale anchored at 1=strongly disagree and 5=strongly agree.
Perceived Lack of Morality	Reidenbach and Robin (1990) [Beauchamp and Bowie (1983); DeGeorge (1986); Donaldson and Werhane (1983); Hoffman and Moore (1984)] (Selected items of morality scales by different philosophies)	A) Justice scale 7. Just/Unjust 8.Fair/Unfair 9. Does result/does not result in an equal distribution of good and bad C) Egoism Scales: 15. Self-Promoting/Not Self-Promoting 16. Selfish/Not Selfish 17. Prudent/Not Prudent 18. Under No Moral Obligation/Morally Obligated to Act Otherwise 19. Personally Satisfying/Not Personally Satisfying 20. In the Best Interests of the Company/Not in the Best Interests of the Company	Bin. Reword "My corporation is unjust" Bin. Reword "My corporation is unfair" Bin. Reword "My corporation does not believe in equal distribution of good and bad" Winnow. Inconsistent with construct definitions Review to Bin. Reworded later to be included in the bin "My corporation is selfish". Winnow. Confusing to understand. Bin. "My corporation has NO moral obligation" Bin. "My experience in my corporation is NOT personally satisfying" Bin. "My corporation does NOT believe in the best interests of others"	No reported reliability

		D) Utilitarian Scales: 21.Efficient/Inefficient 11. OK/Not OK If Actions can be Justified by Their Consequences 12. Compromises/Does Not Compromise an Important Rule by Which I Live 13. On Balance, tends to be Good/Bad 14. Produces the Greatest/Least Utility 15. Maximizes/Minimizes Benefits While Minimizes/Maximizes Harm 16. Leads to the Greatest/Least Good for the Greatest Number 17. Results in a Positive/Negative Cost-Benefit Ratio 18. Maximizes/Minimizes Pleasure 18. Self-Sacrificing/Not Self Sacrificing E) Deontology Scales: 18. Violates/Does Not Violate an Unwritten Contract 19. Violates/Does Not Violate My Ideas of Fairness 20. Duty Bound/Not Duty Bound to Act This Way 21. Morally Right/Not Morally Right 22. Obligated/Not Obligated to Act This Way 23. Violates/Does Not Violate an Unspoken Promise	Bin, "My corporation is inefficient" Winnow. Confusing to understand. Bin. "My corporation compromises an important value by which it operates" Bin. "My corporation tends to be bad" Winnow. Confusing to understand. Bin. "My corporation minimizes benefits while maximizes harm" Bin. "My corporation leads to the least good for the greatest number" Winnow. Inconsistent with the construct definition. Winnow. Inconsistent with the construct definition. Bin. "My corporation is not self-sacrificing" Bin. "My corporation violates an unwritten contract" Bin. "My corporation violates my ideas of fairness" Winnow. Confusing to understand. Bin. "My corporation is morally wrong" Winnow. Confusing to understand. Bin. "My corporation violates an unspoken promise"	
Perceived Lack of Morality	Reidenbach and Robin (1990) (Perceptions of ethical content)	a) Broad-based Moral equity 24. Fair/unfair 25. Just/unjust 26. Acceptable/unacceptable to my family 27. Morally/not morally right	Winnow. Redundant to above scale	Reliability .71 to .92 (under three different scenarios)

		b) Relativist 28. Traditionally acceptable/unacceptable. 29. Culturally acceptable/unacceptable. c) Social contract 30. Violates/does not violate an unspoken promise 31. Violates/does not violate an unwritten con tract		
Perceived Lack of Morality	Craig and Gustafson (1998) (Perceived leader integrity) (selected items)	32. Always gets even 33. Is evil 34. Lacks high morals. 35. IS vindictive 36. Would blackmail an employee if (s)he could get away with it 37. Would fire people just because (s)he doesn't like them if (s)he could get away with it. 38. Would steal from the organization 39. Would engage in sabotage against the organization.	Winnow. Colloquial to understand. Winnow. Inconsistent with morality and hypocrisy Bin. Winnow. Inconsistent with morality and hypocrisy Bin. Reword "My corporation would blackmail an employee if it could get away with it" Bin. Reword "My corporation would fire people just because it doesn't like them if it could get away with it. Winnow. Doesn't align with the organizational level of this construct, as proposed in this study. Winnow. Doesn't align with the organizational level of this construct, as proposed in this study	Reliability .96 Cronbach's alpha for the entire scale 4-point Likert scale. 1=not at all, 2= somewhat, 3= very much, 4=exactly.
Perceived Lack of Morality	Phillipe and Koehler (2005) (organizational hypocrisy) (selected items)	40. My organization's values are the same as my work values 41. There is cooperation between employees across different work groups 42. My organization's values change when it comes to getting things done 43. I feel uncomfortable with my organization's values 44. I believe my organization is an ethical business worthy of the public trust	Bin. Reword "My corporation's va;ues are NOT the same as my work values" Winnow. Inconsistent with morality and hypocrisy Bin. Winnow. This question ask about employees and not their perceptions. Bin. "My corporation is an ethical business, worth of the public trust"	Reliability >.70 Cronbach's alpha for the entire scale Measured on 7-point Likert scale

Psychological contract breach	Robinson (1996) (Psychological contract breach)	1) Survey 1: "Using the scale below, please indicate the extent to which you believe your employer will be obligated or owe you based on an implicit or explicit promise or understanding, the following: - promotion and advancement - high pay - pay based on current level of performance - training - long-term job security - career development - sufficient power and responsibility" Survey 2: "Using the scale below, please indicate the extent to which your employer has fulfilled the following obligations: - promotion and advancement - high pay - pay based on current level of performance - training - long-term job security - career development - sufficient power and responsibility"	Winnow. Confusing to understand. This deductive approach of calculating the breach as a difference of survey 1 and 2 doesn't align with the rest of the survey. Bin. Reworded to include negative tone, as below: Review to bin. Later winnowed for asking about too specific context. Review to bin. Later winnowed for asking about too specific context. Review to bin. Later winnowed for asking about too specific context. Review to bin. Later winnowed for asking about too specific context. Review to bin. Later winnowed for asking about too specific context. Review to bin. Later winnowed for asking about too specific context. Review to bin. Later winnowed for asking about too specific context. Review to bin. Later winnowed for asking about too specific context.	Reliability .78 Cronbach's alpha for the entire scale Five-point Likert scale anchored across "not at all fulfilled" 'to "very well fulfilled"
Psychological contract breach	Robinson and Morrison (2000)	2) Almost all the promises made by my employer during	Bin. Reword "Almost none the promises made by my corporation during	Reliability .92 Cronbach's alpha for the entire

	(Psychological contract breach)	recruitment have been kept so far. 3) I feel that my employer has come through in fulfilling the promises made to me when I was hired. 4) So far, my employer has done an excellent job of fulfilling its promises to me. 5) Employer/Company has done a good job of meeting its obligations to me. 6) I have not received everything promised to me in exchange for my contributions. 7) My employer has broken many of its promises to me even though I've upheld my side of the deal	recruitment have been kept so far. Bin. "I feel that my corporation has NOT come through in fulfilling the promises made to me when I was hired" Bin. " So far, my corporation has done a very bad job of fulfilling its promises to me." Winnow. Redundant to item 4 Bin Bin	scale. Five-point Likert scale anchored across "strongly disagree" to "strongly agree",
Psychological contract breach	Tekleab and Taylor (2003) (Psychological contract breach)	8) Company has done a good job of meeting its obligations to me. 9) Company has repeatedly failed to meet its obligations to me. 10) Company has fulfilled the most important obligations to me.	Winnow. Redundant to item 4 Bin. Bin. Reword "My corporation has NOT fulfilled the most important obligations to me"	Reliability Cronbach's alpha 0.92
Psychological contract breach	Chrobot-Mason (2003) (Psychological contract breach)	11) Section 1: Measured the extent to which one believes his/her employer will be obligated on the following based on an implicit or explicit promise: - support with personal problems - high pay based on performance - training - long-term job security - career development - sufficient power and responsibility" Section 2: "For each promise indicated, please respond to the following: - the extent to which you value each obligation/promise	Winnow. Confusing to understand. This deductive approach of calculating the breach as a difference of survey 1, 2, and 3 doesn't align with the rest of the survey. Also, redundant to item 1	No reported reliability

		- the extent to which you believe the promise has been fulfilled by your employer." Section 3: - "Has your employer ever failed to meet the obligations that you feel were promised to you".		
Psychological contract breach	Craig and Gustafson (1998) (Perceived leader integrity) (selected items)	12. Would lie to me. 13. Would use my performance appraisal to criticize me as a person. 14. Has it in for me. 15.Makes fun of my mistakes instead of coaching me as to how to do my job better. 16. Would deliberately exaggerate my mistakes to make me look bad when describing my performance to his/her superiors. 17. Avoids coaching me because (s)he wants me to fail. 18. Would deliberately distort what I say. 19. Would limit my training opportunities to prevent me from advancing. 20. Enjoys turning down my requests. 21. Would use my mistakes to attack me personally. 22. Would take credit for my ideas. 23. Would risk me to get back at someone else.	Bin Winnow. Asks about too specific context. Winnow. Colloquial language Winnow. Redundant to 21 Winnow. Asks about too specific context. Bin Bin Winnow. Asks about too specific context. Bin Bin Bin Bin	Reliability .96 Cronbach's alpha for the entire scale 4-point Likert scale. 1=not at all, 2= somewhat, 3= very much, 4=exactly.
Psychological contract breach	Phillipe and Koehler (2005) (organizational hypocrisy) (selected items)	26. It seems goals are changed at random 27. I trust that my organization has my best interests at heart 28. Employees in my work group provide me with the support I need to perform my job.	Bin. Reword "Goals in my corporation are changed at random" Bin. Reword "My corporation does NOT have my best interests at heart" Winnow. Inconsistent with the organizational level of the construct and focus on peer employees	Reliability >.70 Cronbach's alpha for the entire scale Measured on 7-point Likert scale

		32. The departments in my organization tend to look out for themselves 34. Management's decisions can be understood using my organization's vision. 35. Management decisions are turned into action 38. My actions clearly contribute to the purpose of my organization	Bin. Reword "My corporation tends to look out for itself" Bin. Reword "My corporation's decisions and its visions do NOT match." Winnow. Confusing to understand. Winnow. Inconsistent with the organizational level of the construct	
Double-standards	Dineen, Lewicki, and Tomlinson's (2006) (behavioral integrity)	1. I wish my supervisor would practice what he or she preaches more often. 2. My supervisor tells us to follow the rules but doesn't follow them himself or herself. 3. My supervisor asks me to do things he or she wouldn't do himself or herself. 4. My supervisor can get away with doing things I can't.	Bin. Bin. Bin. Bin.	Reliability .82-.86 Cronbach's alpha for the entire scale 5-point Likert scale
Double standards	Phillipe and Koehler (2005) (organizational hypocrisy) (selected items)	5. I believe that my organization is fair 6. There is an us versus them mentality between labor and management 7. Management applies the same standards for performance to all employees 8. Everyone at all levels is held accountable for their mistakes 9. I have enough authority to carry out my job responsibilities 10. The amount of work I am required to do interferes with the quality of my work 11. Better performing employees get better pay increases than average performers	Bin. Reword "My manager is unfair" Bin. Reword "There is an 'us' versus 'him/her' between employees and manager" Bin. Reword "My manager does not apply the same standards for performance to all employees" Reviewed to bin. Reworded to be included in the bin " My manager does NOT equally hold everyone at all levels accountable for their mistakes" Reviewed to bin. Reworded to be included in the bin, "My manager does not give me enough authority to carry out my job responsibilities" Bin. Reword "The amount of work my manager requires me to do, interferes with the quality of my work" Winnow. Confusing to understand.	Reliability >.70 Cronbach's alpha for the entire scale Measured on 7-point Likert scale

Double standards	Craig and Gustafson (1998) (Perceived leader integrity) (selected items)	12. Gives special favors to certain "pet" employees, but not to me. 13. Would allow me to be blamed for his/her mistake. 14. Would falsify records if it would help his/her work situation. 15. Would blame me for his/her own mistake. 16. Would treat me better if I belonged to a different ethnic group.	Bin. Bin with perceived contract breach Bin with perceived contract breach Bin with perceived contract breach Winnow. Too specific context	Reliability .96 Cronbach's alpha for the entire scale 4-point Likert scale. 1=not at all, 2= somewhat, 3= very much, 4=exactly.
Value-Behavior Gap	Simons and Parks (2000), and reported in Simons, Friedman, Liu, and Parks (2007) (Behavioral Integrity)	1. There is a match between my manager's words and actions. 2. My manager delivers on promises. 3. My manager practices what he/she preaches. 4. My manager does what he/she says he/she will do. 5. My manager conducts himself/herself by the same values he/she talks about. 6. My manager shows the same priorities that he/she describes. 7. When my manager promises something, I can be certain that it will happen. 8. If my manager says he/she is going to do something, he/she will.	Winnow. Instead item 25 kept Bin with psychological contract (promise keeping) Winnow. Redundant to item 16 Winnow. Instead item 25 kept Bin Bin Bin with psychological contract (promise keeping) Winnow. Redundant to item 4	Reliabilities in English (Cronbach's alpha .96), Spanish (Cronbach's alpha .94), and Dutch (Cronbach's alpha .90)
Value-Behavior Gap	2008- PBI-relationships with employee (Behavioral Integrity)	9. I can trust what managers say in my organization 10. Managers in my organization behave honestly and ethically when dealing with employees and clients or customers	Winnow. Although literature says trust to be closely related to PCH and used to measure the concept integrity, trust seems to be a different construct than CH. May be an effect of CH. Bin with perceived lack of morality.	Reliability .79 Cronbach's alpha for the entire scale Measured in 4-point scale as Strongly agree and Strongly disagree
Value-Behavior Gap	Wagner et al., (2009). (Corporate Hypocrisy)	In my opinion: 11. Power-Mart acts hypocritically.	Winnow. Confusing to understand. Do not want to ask directly what the study is trying to measure as the latent trait.	Reliability .90-.94 Cronbach's alpha for the entire scale (measured in three studies).7-

		12. What Power-Marts says and does are two different things. 13. Power-Mart pretends to be something it is not. 14. Power-Mart does exactly what it says. 15. Power-Mart keeps its promises. 16. Power-Mart puts its words into actions.	Winnow. Redundant to item 4 Bin Winnow. Redundant to item 1 Winnow. Redundant to item 2 Bin	point Likert scale. Anchored 1=disagree completely, 7 = agree completely
Value-Behavior Gap	Yesenia Martinez, 2016 (Cultural Integrity)	17. The values my hospital communicates to the community are consistent with employees' experiences at work. 18. How my hospital represents itself to the public is very different from what actually happens internally. 19. Hospital management does a good job of putting into practice the core values they espouse. 20. The real culture of our hospital is very different from how leadership portrays it to outside groups.	Bin. Reword as "the values my manager communicates to the community, are NOT consistent with employees' experiences at work" Bin. Reword as "how my manager represents himself/herself to the public is very different from what happens internally" Bin. Reword as "My manager does NOT do a good job of practicing the core values (s)he espouses" Winnow. Inconsistent with construct definition. This question focus on an organizational level, whereas the value-behavior gap is proposed at an individual level in this study.	Reliability .82 Cronbach's alpha for the entire scale Measured in 5-point as Strong Disagree and Strongly agree
Value-Behavior Gap	Craig and Gustafson (1998) (Perceived leader integrity) (selected items)	21. Would risk me to protect himself/herself in work matters 22. Deliberately makes employees angry at each other.	Winnow. Inconsistent with construct definition. Although perceived leader integrity is conceptually similar to managers' value-behavior gap, the item doesn't state any value to contradict with the stated behavior. Winnow. Inconsistent with construct definition. Although perceived leader integrity is conceptually similar to managers' value-behavior gap, the item doesn't state any value to contradict with the stated behavior.	Reliability .96 Cronbach's alpha for the entire scale 4-point likert scale. 1=not at all, 2= somewhat, 3= very much, 4=exactly

		23. Is a hypocrite.	Winnow. Confusing to understand. Do not want to ask directly what the study is trying to measure as the latent trait.	
		24. Deliberately fuels conflicts among employees.	Winnow. Inconsistent with construct definition. Although perceived leader integrity is conceptually similar to managers' value-behavior gap, the item doesn't state any value to contradict with the stated behavior.	
Value-Behavior Gap	Phillipe and Koehler (2005) (organizational hypocrisy) (selected items)	25. There is a difference between what my organization says and what it does. 26. The organization says things that I do not expect to happen. 27. Most of what management says can be ignored. 28. Sr. Management's behaviors show their commitment to the organization's values 29. My supervisor's day to day behavior shows his/her commitment to the values 30. In my organization, values are not as important as goals. 31. The organization's values are the same as the organization's actions 32. Rewards are used as a guide in management's decisions 33. The customer is used as a guide in management's decisions	Bin. Reword "There is a difference between what my manager says and what it does" Bin. Reword "My manager says things that I do not expect to happen" Winnow. Inconsistent with construct definition. The item doesn't suggest of value-behavior gap, as in why can managers' words can be ignored. Bin. Reword "My manager's behaviors show his/her commitment to the organization's values" Winnow. Redundant to item 28 Winnow. Inconsistent with construct definition. Doesn't suggest of conflict between values and goals, but just a difference in priority. Winnow. Redundant to item 25 Winnow. Inconsistent with construct definition. Although it suggests that manager decides based on how rewarding a thing can be, that doesn't suggest of conflicting with the value or his words. Winnow. Inconsistent with construct definition. Although it suggests that manager decides based on customers, that doesn't suggest of conflicting with the value or his words.	Reliability >.70 Cronbach's alpha for the entire scale Measured on 7-point Likert scale

		34. I use the organization's values when I make decisions	Bin with Perceived lack of morality. Reword to "My organization doesn't use its values when it makes decisions"	
Perceived deception	Newell, Goldsmith, and Banzhaf (1998); Grazioli and Jarvenpaa, (2000); Grazioli and Wang (2001)	Please evaluate the quality of information on the store. To what extent do you believe that the information provided by the store is: 35. Accurate/Misleading 36. Truthful/Deceptive 37. Factual/Distorted	Bin. Reword "My manager is misleading." Bin. Reword "My manager is deceptive" Winnow. Confusing to understand.	Reliability .92 Cronbach's alpha for the entire scale 7-point bipolar adjective scales used
Perceived deception	Chaouachi and Rached (2012)	38. This ad is not entirely truthful about its offerings. 41. This ad shows to individual what he wants to see and not the reality. 42. I think that the reality is different from what it is mentioned in the ad. 43. This ad misleads consumer about the actual performances of the product. 44. This ad harms consumer' interests. 45. This ad is contrary to the principles of fair competition. 46. This ad is dishonest. 47. This ad is trying to dupe the consumer.	Winnow. Confusing to understand. Can't be reworded to match the scope of the study Bin. Reword "My manager shows to employees what they want to see and NOT the reality" Winnow. Confusing to understand. Can't be reworded to match the scope of the study Bin. Reword "My manager misleads employees about the realities of the corporation" Winnow. Confusing to understand. Can't be reworded to match the scope of the study Winnow. Confusing to understand. Can't be reworded to match the scope of the study Bin. Reword "My manager is dishonest" Bin. Reword "My manager tries to dupe the employees"	Reliability .83 Cronbach's alpha for the entire scale 5 point Likert-type scale from "1 = strongly disagree" to "5 = strongly agree".

APPENDIX B

ITEM BANK

Item Bank Developed after Binning and Winnowing

Concept	Source	Items
Perceived Lack of Morality	Reidenbach and Robin (1990) [Beauchamp and Bowie (1983); DeGeorge (1986); Donaldson and Werhane (1983); Hoffman and Moore (1984)] (selected items)	1. My company is UNJUST 2. My company is UNFAIR 3. My company does NOT believe in equal distribution of good and bad 4. My company is SELFISH 5. My company has NO moral obligation 6. My experience in my company is NOT personally satisfying 7. My company does NOT believe in the best interests of others 8. My company is INEFFICIENT 9. My company COMPROMISES an important value by which it operates 10. My company tends to be BAD 11. My company minimizes benefits while maximizes HARM 12. My company leads to the LEAST GOOD for the greatest number 13. My company is not SELF-SACRIFICING 14. My company VIOLATES an unwritten contract 15. My company VIOLATES my ideas of fairness 16. My company is morally WRONG 17. My company violates an unspoken promise
	Craig and Gustafson (1998) (Perceived leader integrity) (selected items)	18. My company LACKS high morals. 19. My company would BLACKMAIL an employee if it could get away with it. 20. My company would FIRE people just because it doesn't like them if it could get away with it
	Phillipe and Koehler (2005) (organizational hypocrisy) (selected items)	21. My company's values are NOT the same as my work value 22. My company's VALUES CHANGE when it comes to getting things done 23. My company is an UNETHICAL business, not worth of the public trust.
	2008- PBI- relationships with employee (Behavioral Integrity)	24. My company does NOT behave honestly and ethically when dealing with employees
Psychological contract breach	Robinson and Morrison (2000) (Psychological contract breach)	1. Almost NONE the promises made by my company during recruitment have been kept so far. 2. I feel that my company has NOT come through in fulfilling the promises made to me when I was hired.

		3. So far, my company has done a very BAD job of fulfilling its promises to me. 4. I have NOT received everything promised to me by my company in exchange for my contributions. 5. My company has BROKEN many of its promises to me even though I've upheld my side of the deal
	Tekleab and Taylor (2003) (Psychological contract breach)	6. My company has repeatedly FAILED to meet its obligations to me. 7. My company has NOT fulfilled the most important obligations to me.
	Craig and Gustafson (1998) (Perceived leader integrity) (selected items)	8. My company would LIE to me. 9. My company AVOIDS coaching me because (s)he wants me to fail. 10. My company would deliberately DISTORT what I say. 11. My company enjoys TURNING DOWN my requests. 12. My company would use my mistakes to ATTACK me personally. 13. My company would TAKE CREDIT for my ideas. 14. My company would RISK me to get back at someone else. 15. Would allow me to be BLAMED for his/her mistake. 16. Would FALSIFY records if it would help his/her work situation. 17. Would BLAME me for his/her own mistake
	Phillipe and Koehler (2005) (organizational hypocrisy) (selected items)	18. Goals in my company are changed at RANDOM. 19. My company does NOT have my best interests at heart. 20. My company tends to look out for ITSELF. 21. My company's decisions and its visions do NOT match.
	Simons & Parks (2000) [reported in Simons, Friedman, Liu, & Parks (2007)] (Behavioral Integrity)	22. My manager does NOT deliver on promises. 23. When my manager promises something, I can NEVER be certain that it will happen.
Double-standards	Dineen, Lewicki, and Tomlinson's (2006) (behavioral integrity)	1. My manager would often NOT practice what he or she preaches. 2. My manager tells us to follow the rules but does NOT follow them himself or herself. 3. My manager asks me to do things he or she would NOT do himself or herself. 4. My manager can GET AWAY with doing things I can't.
	Phillipe and Koehler (2005) (organizational hypocrisy) (selected items)	5. My manager is UNFAIR. 6. There is an 'us' VERSUS 'him/her' between employees and manager.

		7. My manager does NOT apply the same standards for performance to all employees. 8. My manager does NOT hold everyone equally at all levels accountable for their mistakes 9. My manager does NOT give me enough authority to carry out my job responsibilities 10. The amount of work my manager requires me to do, INTERFERES with the quality of my work
	Craig and Gustafson (1998) (Perceived leader integrity) (selected items)	11. My manager gives special favors to certain "pet" employees, but NOT to me.
Value-Behavior Gap	Simons and Parks (2000) [reported in Simons, Friedman, Liu, and Parks (2007)] (Behavioral Integrity)	1. My manager does NOT conduct herself/himself by the same values (s)he talks about. 2. My manager does NOT show the same priorities that (s)he describes.
	Wagner et al., (2009). (Corporate Hypocrisy)	3. My manager PRETENDS to be something (s)he is not. 4. My manager does NOT put his/her words into actions.
	Yesenia Martinez, 2016 (Cultural Integrity)	5. The values my manager communicates to the community, are NOT consistent with employees' experiences at work. 6. How my manager represents himself/herself to the public is very DIFFERENT from what happens internally. 7. My manager does NOT do a good job of practicing the core values (s)he espouses.
	Phillipe and Koehler (2005) (organizational hypocrisy) (selected items)	8. There is a DIFFERENCE between what my manager says and what it does. 9. My manager says things that I do NOT expect to happen. 10. My manager's behaviors do NOT show his/her commitment to the organization's values
	Newell, Goldsmith, and Banzhaf (1998); Grazioli and Jarvenpaa, (2000); Grazioli and Wang, (2001)	11. My manager is MISLEADING. 12. My manager is DECEPTIVE
	Chaouachi and Rached (2012)	13. My manager shows to employees what they want to see and NOT the reality. 14. My manager MISLEADS employees about the realities of the corporation. 15. My manager is DISHONEST. 16. My manager tries to DUPE the employees.

APPENDIX C

IRB APPROVAL FOR CONTENT EXPERT VALIDATION, RECRUITMENT SCRIPT, CONSENT FORM, QUESTIONS/PROMPTS, PARTICIPANT CHARACTERISTICS, SUMMARY OF COMMENTS

IRB Approval

Institutional Review Board
University of Missouri-Columbia

190 Galena Hall; Dc074.00
Columbia, MO 65212
573-882-3181
irb@missouri.edu

March 15, 2017

Principal Investigator: Saheli Goswami
Department: Textile and Apparel Mgmt

Your Exempt Application to project entitled DOUBLE FACES: DEVELOP SCALE FOR CORPORATE HYPOCRISY AMONG EMPLOYEES OF THE U.S. RETAIL INDUSTRY was reviewed and approved by the MU Institutional Review Board according to the terms and conditions described below:

IRB Project Number	2008118
IRB Review Number	224771
Initial Application Approval Date	March 15, 2017
IRB Expiration Date	March 15, 2018
Level of Review	Exempt
Project Status	Active - Open to Enrollment
Exempt Categories	45 CFR 46.101b(2)
Risk Level	Minimal Risk
Internal Funding	Personal funds

The principal investigator (PI) is responsible for all aspects and conduct of this study. The PI must comply with the following conditions of the approval:

1. No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date.
2. All unanticipated problems and deviations must be reported to the IRB within 5 business days.
3. All changes must be IRB approved prior to implementation unless they are intended to reduce immediate risk.
4. All recruitment materials and methods must be approved by the IRB prior to being used.
5. The Annual Exempt Form must be submitted to the IRB for review and approval at least 30 days prior to the project expiration date. If the study is complete, the Completion/Withdrawal Form may be submitted in lieu of the Annual Exempt Form
6. Maintain all research records for a period of seven years from the project completion date.
7. Utilize all approved research documents located within the attached files section of eCompliance. These documents are highlighted green.

If you are offering subject payments and would like more information about research participant payments, please click here to view the MU Business Policy and Procedure:

If you have any questions, please contact the IRB at 573-882-3181 or irb@missouri.edu.

Thank you,
MU Institutional Review Board

Participant Recruitment Email

Dear “name”,

I am emailing you to request for your participation in a focus group (personal interview) for my research about Corporate Hypocrisy (CH). In the focus group (personal interview), you will be asked to review certain theoretical findings about employees’ experiences, and discuss as what do you think about those regarding corporate hypocrisy. The session is estimated to continue for approximately an hour. The results will be used for generating a more concise and relevant pool of questions to measure retail employees’ experience of CH. Participation in this study is completely voluntary. You will be compensated at $20 for participating in this focus group (personal interview).

If you wish to participate, please email me so that I can email you a consent form and schedule a time for the focus group (personal interview).

Thank you,
Saheli Goswami

Consent Form

Description and Explanation of Procedures:
The primary goal of this research is to develop a viable scale to measure retail employees' perceptions about their employers' hypocrisy. In this focus group (personal interview), I will present you questions related to some unique experiences when employees may think of their companies as hypocrites. You will be asked to review these experiences and discuss as what do you think about those regarding corporate hypocrisy. The session is estimated to continue for approximately an hour. The results will be used for generating a more concise and relevant pool of questions to measure retail employees' experience of corporate hypocrisy. Participation in this study is completely voluntary.

Confidentiality:
Discussions from this focus group (personal interview) will be recorded, saved confidentially in a password-protected system. Electronic files will be saved with numeric codes and no personal identifiers. You may deny for being audio-recorded during the focus group session. Throughout the session, you may choose to not share your opinion, answer any question(s), and you may stop participating any time.

Risks:
There are no potential risks associated with participating in this study.

Compensation:
You will be offered a $20 Starbucks gift card.

Consent:
☐ By checking this box, you confirm your age as 18 years or above, and that you consent to participate in this research study.

For more information about the study or to withdraw from the study, please contact:
Saheli Goswami – saheligoswami@mail.missouri.edu

If you have any questions regarding your rights as a participant of this research, please contact the University of Missouri Campus IRB at 573-882-9585.

Interview Questions for Content Expert Validation

(Prompts for semi-structured individual interviews and focus group)

Topic: Our topic is Corporate Hypocrisy. I found 4 unique situations important for employees to think of their companies as hypocrites. We will review each situation to understand what do you think about those regarding corporate hypocrisy. The results will be used for generating a more concise and relevant pool of questions to measure retail employees' experience of CH.

Guidelines for focus group: There are no right or wrong answers, only differing points of view. You don't need to necessarily agree or disagree with each other. I will be audio recording this session.

A. If employees believe that their managers' words and actions do not match, they may believe the company to be hypocrite.

    1. What do you think about it?
    2. How would such experience make you think of your company as hypocritical?
    3. Do you have any such experience to share as an example?
    4. What do you think of the questions listed under this category? As you read them, do they give you a picture of value-behavior inconsistency?
    5. Which questions do you think are more relevant than the others?
    6. Do you find any of these questions as repetitive? Please describe.
    7. If you would want to get rid of some questions, which of these would be your choice?

B. If employees believe that their managers are having double-standards in how he/she favors himself/herself over employees, they may believe the company to be hypocrite.

    1. What do you think about it?
    2. How would such experience make you think of your company as hypocritical?
    3. Do you have any such experience to share as an example?
    4. What do you think of the questions listed under this category? As you read them, do they give you a picture of a manager's double-standards?
    5. Which questions do you think are more relevant than the others?
    6. Do you find any of these questions as repetitive? Please describe.
    7. If you would want to get rid of some questions, which of these would be your choice?

C. If employees believe that their companies have not maintained the promises made, they may believe the company to be hypocrite.

1. What do you think about it?
2. How would such experience make you think of your company as hypocritical?
3. Do you have any such experience to share as an example?
4. What do you think of the questions listed under this category? As you read them, do they give you a picture of promises being broken?
5. Which questions do you think are more relevant than the others?
6. Do you find any of these questions as repetitive? Please describe.
7. If you would want to get rid of some questions, which of these would be your choice?

D. If employees believe that their companies do not have a moral character, they may believe the company to be hypocrite.

1. What do you think about it?
2. How would such experience make you think of your company as hypocritical?
3. Do you have any such experience to share as an example? What do you think of the questions listed under this category? As you read them, do they give you a picture of questionable morality?
4. Which questions do you think are more relevant than the others?
5. Do you find any of these questions as repetitive? Please describe.
6. If you would want to get rid of some questions, which of these would be your choice?

E. Please describe of any other situations which we have not discussed but might make you think of your company as hypocritical.
F. How is this new situation different that any of the above situations?
G. Have I missed anything?

Content Experts Characteristics

Participant	Gender	Age	Ethnicity	Occupation	Years of experience	Retail industry
P1	Female	27	Caucasian	Sales associate	3.5	Clothing and clothing accessories
P2	Female	26	Caucasian	Sales associate & assistant manager	5	Clothing and clothing accessories
P3	Female	57	Caucasian	Divisional manager	34	Clothing and clothing accessories
P4	Male	22	African American	Sales associate	3.5	Sporting goods, hobby, book, and music stores
P5	Male	21	African American	Sales associate	2	Food and beverage
P6	Male	22	Hispanic	Sales associate	2	Food and beverage
P7	Male	22	African American	Sales associate	2.5	Sporting goods, hobby, book, and music stores
P8	Female	35	Persian	Retail planner	4	Health and personal care
P9	Female	38	African American	Store manager	6	Clothing and clothing accessories

Comments and Suggestions made by content expert

Concept	Items	Comments
Perceived Lack of Morality	1. My company is UNJUST	okay
	2. My company is UNFAIR	okay
	3. My company does NOT believe in equal distribution of good and bad	confusing, broad. Delete.
	4. My company is SELFISH	okay
	5. My company has NO moral obligation	remove obligation; just morals
	6. My experience in my company is NOT personally satisfying	okay
	7. My company does NOT believe in the best interests of others	change 'others' to employees
	8. My company is INEFFICIENT	okay
	9. My company COMPROMISES an important value by which it operates	simplify this item. 'compromises important values'
	10. My company tends to be BAD	okay
	11. My company minimizes benefits while maximizes HARM	rephrase. 'prioritizes company's benefits over employees' benefits'
	12. My company leads to the LEAST GOOD for the greatest number	very confusing. Delete.
	13. My company is not SELF-SACRIFICING	business cannot be self-sacrificing. Delete.
	14. My company VIOLATES an unwritten contract	repetitive to item 17
	15. My company VIOLATES my ideas of fairness	redundant to item 2
	16. My company is morally WRONG	okay
	17. My company violates an unspoken promise	okay
	18. My company LACKS high morals.	repetitive to item 5
	19. My company would BLACKMAIL an employee if it could get away with it.	okay
	20. My company would FIRE people just because it doesn't like them if it could get away with it	rephrase. 'people on unjust grounds if it could get away with it'
	21. My company’s values are NOT the same as my work value	okay
	22. My company’s VALUES CHANGE when it comes to getting things done	okay
	23. My company is an UNETHICAL business, not worth of the public trust.	repetitive to item 24
	24. My company does NOT behave honestly and ethically when dealing with employees	okay

Psychological contract breach	1. Almost NONE the promises made by my company during recruitment have been kept so far.	okay
	2. I feel that my company has NOT come through in fulfilling the promises made to me when I was hired.	keep the above and delete this
	3. So far, my company has done a very BAD job of fulfilling its promises to me.	this item is also similar to the above two. Delete this
	4. I have NOT received everything promised to me by my company in exchange for my contributions.	This is similar to item 5. Combine both or delete this.
	5. My company has BROKEN many of its promises to me even though I've upheld my side of the deal	rephrase. May be '..me for no fault of mine own.
	6. My company has repeatedly FAILED to meet its obligations to me.	okay
	7. My company has NOT fulfilled the most important obligations to me.	‘its most important'
	8. My company would LIE to me.	okay
	9. My company AVOIDS coaching me because (s)he wants me to fail.	it' instead of (s)he
	10. My company would deliberately DISTORT what I say.	Needs to be explained. May be add 'if it benefits the company'
	11. My company enjoys TURNING DOWN my requests.	Rephrase. 'My company demonstrates NO compassion to care about its employees and don't care about employees'
	12. My company would use my mistakes to ATTACK me personally.	okay
	13. My company would TAKE CREDIT for my ideas.	okay
	14. My company would RISK me to get back at someone else.	confusing. Delete
	15. Would allow me to be BLAMED for his/her mistake.	repetitive to 12 and 13. Delete
	16. Would FALSIFY records if it would help his/her work situation.	similar to item 10 in this section
	17. Would BLAME me for his/her own mistake	repetitive to 12 and 13. Delete
	18. Goals in my company are changed at RANDOM.	add 'without communication' to show the contrast
	19. My company does NOT have my best interests at heart.	okay

	20. My company tends to look out for ITSELF.	okay
	21. My company's decisions and its visions do NOT match.	change 'visions' to 'values'
	22. My manager does NOT deliver on promises.	repetitive to item 1 of this section. Delete
	23. When my manager promises something, I can NEVER be certain that it will happen.	okay
Double-standards	1. My manager would often NOT practice what he or she preaches.	okay
	2. My manager tells us to follow the rules but does NOT follow them himself or herself.	this is repetitive to item 1 of this section. Delete
	3. My manager asks me to do things he or she would NOT do himself or herself.	same as item 1, delete
	4. My manager can GET AWAY with doing things I can't.	okay
	5. My manager is UNFAIR.	very broad. Delete
	6. There is an 'us' VERSUS 'him/her' between employees and manager.	okay
	7. My manager does NOT apply the same standards for performance to all employees.	okay
	8. My manager does NOT hold everyone equally at all levels accountable for their mistakes	okay
	9. My manager does NOT give me enough authority to carry out my job responsibilities	okay
	10. The amount of work my manager requires me to do, INTERFERES with the quality of my work	okay
	11. My manager gives special favors to certain "pet" employees, but NOT to me.	may want to rephrase 'pet' with 'favorable'
Value-Behavior Gap	1. My manager does NOT conduct herself/himself by the same values (s)he talks about.	okay
	2. My manager does NOT show the same priorities that (s)he describes.	same as item 1, delete
	3. My manager PRETENDS to be something (s)he is not.	change 'something' to 'someone'

	4. My manager does NOT put his/her words into actions.	same as item 1, delete
	5. The values my manager communicates to the community, are NOT consistent with employees' experiences at work.	change 'community' to 'society'
	6. How my manager represents himself/herself to the public is very DIFFERENT from what happens internally.	okay
	7. My manager does NOT do a good job of practicing the core values (s)he espouses.	same as item 1, delete
	8. There is a DIFFERENCE between what my manager says and what it does.	similar to previous items, but may be kept
	9. My manager says things that I do NOT expect to happen.	Confusing. Delete
	10. My manager's behaviors do NOT show his/her commitment to the organization's values	okay
	11. My manager is MISLEADING.	Flesh out. Do you mean 'in communications'?
	12. My manager is DECEPTIVE	okay
	13. My manager shows to employees what they want to see and NOT the reality.	okay
	14. My manager MISLEADS employees about the realities of the corporation.	okay
	15. My manager is DISHONEST.	dishonest diverges from the picture, Delete
	16. My manager tries to DUPE the employees.	repetitive, delete

APPENDIX D

SUMMARY OF COMMENTS FROM PSYCHOMETRIC EXPERTS

Summary of Comments from Psychometric Experts

Instructions		Comments
Answer the items based on your experiences. (1: strongly disagree, 2: disagree, 3: agree, 4: strongly agree)		Write very clear instructions that include the response scale, and try to have them appear at the top of every page/screen. What will be participants' frame of reference? Need proper introduction and instructions.
Concepts	**Items**	**Comments**
Perceived Lack of Morality	1. My company is UNJUST	
	2. My company is UNFAIR	
	3. My company is SELFISH	
	4. My company has NO morals	
	5. My experience in my company is NOT personally satisfying	
	6. My company does NOT believe in the best interests of employees	
	7. My company is INEFFICIENT	
	8. My company COMPROMISES its important values.	
	9. My company tends to be BAD	May be too vague? One respondent could interpret "bad" to mean unorganized while another could interpret it to mean that the company is a criminal network.
	10. My company PRIORITIZES its benefits over employees' benefits	
	11. My company is morally WRONG	Same as above. "Morally wrong" is pretty subjective. Though these are probably both OK for the item bank – I just wouldn't be surprised if the "wrong/bad" items turn out to be psychometrically weak.
	12. My company VIOLATES an unspoken promise	What is this getting at? Something like "My company violates unspoken rules"? "Unspoken promise" is unclear/awkward (and also sounds like the title of a country album or maybe a romance novel)
	13. My company would BLACKMAIL an employee if it could get away with it.	
	14. My company would FIRE people on unjust grounds if it could get away with it	

	15. My company's values are NOT the same as my work value	
	16. My company's VALUES CHANGE when it comes to getting things done	
	17. My company does NOT behave honestly and ethically when dealing with employees	This is double-barreled as honesty and ethics are not exactly same concept
Psychological contract breach	1. Almost NONE of the promises made by my company during recruitment have been kept so far.	
	2. My company has BROKEN many of its promises to me for no fault of my own.	
	3. My company has repeatedly FAILED to meet its obligations to me.	
	4. My company has NOT fulfilled its most important obligations to me.	
	5. My company would LIE to me.	
	6. My company AVOIDS coaching me because it wants me to fail.	
	7. My company would deliberately DISTORT what I say, if it would benefit the company.	
	8. My company has NO compassion for its employees.	
	9. My company would use my mistakes to ATTACK me personally.	
	10. My company would TAKE CREDIT for my ideas.	
	11. Goals in my company are changed at RANDOM without communication.	
	12. My company does NOT have my best interests at heart.	
	13. My company tends to look out for ITSELF.	
	14. My company's decisions and its values do NOT match.	
	15. When my company promises something, I can NEVER be certain that it will happen.	Avoid absolutes like never/always, because such items are really difficult to endorse for some people. E.g., if it only occurs 0.1% of the time, that's still not technically "NEVER". You can replace "never" here with something like "rarely".

Double-standards	1. My manager would often NOT practice what he or she preaches. 2. My manager can GET AWAY with doing things I can't. 3. There is an 'us' VERSUS 'him/her' between employees and manager. 4. My manager does NOT apply the same standards for performance to all employees. 5. My manager does NOT hold everyone at all levels equally accountable for their mistakes 6. My manager does NOT give me enough authority to carry out my job responsibilities	Some items end in periods, others don't. Be consistent in the item style.
	7. The amount of work my manager requires me to do INTERFERES with the quality of my work 8. My manager gives special favors to certain "pet" employees, but NOT to me.	
Value-Behavior Gap	1. My manager does NOT conduct herself/himself according to the same values (s)he talks about. 2. My manager PRETENDS to be someone (s)he is not. 3. The values my manager communicates to the society are NOT consistent with employees' experiences at work. 4. How my manager represents himself/herself to the public is very DIFFERENT from what happens internally. 5. There is a DIFFERENCE between what my manager says and what (s)he does. 6. My manager's behaviors do NOT show his/her commitment to the organization's values 7. My manager is deliberately MISLEADING in her/his communication. 8. My manager is DECEPTIVE 9. My manager shows employees what they want to see INSTEAD of the reality of the situation. 10. My manager MISLEADS employees about the realities of the corporation.	Unclear phrasing – what are "the realities" of a corporation. What about "the real motives of the corporation" or something similar?

APPENDIX E

IRB APPROVAL FOR COGNITIVE INTERVIEW, RECRUITMENT SCRIPT, CONSENT FORM, QUESTIONS, PARTICIPANT CHARACTERISTICS, SUMMARY OF COMMENTS

IRB Approval

Institutional Review Board
University of Missouri-Columbia

190 Galena Hall; Dc074.00
Columbia, MO 65212
573-882-3181
irb@missouri.edu

March 16, 2017

Principal Investigator: Saheli Goswami
Department: Textile and Apparel Mgmt

Your Exempt Application to project entitled DOUBLE FACES: DEVELOP SCALE FOR CORPORATE HYPOCRISY AMONG EMPLOYEES OF THE U.S. RETAIL INDUSTRY was reviewed and approved by the MU Institutional Review Board according to the terms and conditions described below:

IRB Project Number	2008119
IRB Review Number	224775
Initial Application Approval Date	March 16, 2017
IRB Expiration Date	March 16, 2018
Level of Review	Exempt
Project Status	Active - Open to Enrollment
Exempt Categories	45 CFR 46.101b(2)
Risk Level	Minimal Risk
Internal Funding	Personal funds

The principal investigator (PI) is responsible for all aspects and conduct of this study. The PI must comply with the following conditions of the approval:

1. No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date.
2. All unanticipated problems and deviations must be reported to the IRB within 5 business days.
3. All changes must be IRB approved prior to implementation unless they are intended to reduce immediate risk.
4. All recruitment materials and methods must be approved by the IRB prior to being used.
5. The Annual Exempt Form must be submitted to the IRB for review and approval at least 30 days prior to the project expiration date. If the study is complete, the Completion/Withdrawal Form may be submitted in lieu of the Annual Exempt Form
6. Maintain all research records for a period of seven years from the project completion date.
7. Utilize all approved research documents located within the attached files section of eCompliance. These documents are highlighted green.

If you are offering subject payments and would like more information about research participant payments, please click here to view the MU Business Policy and Procedure:

http://bppm.missouri.edu/chapter2/2_250.html

If you have any questions, please contact the IRB at 573-882-3181 or irb@missouri.edu.

Thank you,
MU Institutional Review Board

Participant recruitment email

Dear “name”,

I am emailing you to request for your participation in an interview session for my research about Corporate Hypocrisy. In the interview, first you will be asked to review and answer some survey questions related to retail employees’ experiences. Following which, the researcher will ask you questions as what do you think about the survey design. The session is estimated to continue for approximately an hour. The results will be used for generating a more concise and relevant pool of questions to measure retail employees’ experience of corporate hypocrisy. Participation in this study is completely voluntary. You will be compensated at $15 for participating in this interview.
If you wish to participate please email me so I can email you a consent form & schedule a time for the interview.

Thank you,

Saheli Goswami

Consent Form

Description and Explanation of Procedures:
The primary goal of this research is to develop a viable scale to measure retail employees' perceptions about their employers' hypocrisy. In this interview, I will present to you some survey questions measuring employees' work experiences. First, you will be asked to review and answer these survey questions. Later, you will discuss with the interviewer as what do you think about the survey design. The session is estimated to continue for approximately an hour. The results will be used for generating a more concise and relevant pool of questions to measure retail employees' experience of corporate hypocrisy. Participation in this study is completely voluntary.

Confidentiality:
Discussions from this interview will be recorded, saved confidentially in a password-protected system. Electronic files will be saved with numeric codes and no personal identifiers. You may deny for being audio-recorded during the interview session. Throughout the session, you may choose to not answer any question(s) and you may stop participating any time.

Risks:
There are no potential risks associated with participating in this study.

Compensation:
You will be offered a $15 Starbucks gift card.

Consent:
☐ By checking this box, you confirm your age as 18 years or above, and that you consent to participate in this research study.

For more information about the study or to withdraw from the study, please contact: Saheli Goswami – saheligoswami@mail.missouri.edu, or Dr. Jung Ha-Brookshire at habrookshirej@missouri.edu.

If you have any questions regarding your rights as a participant of this research, please contact the University of Missouri Campus IRB at 573-882-9585.

Interview Questions for Cognitive Interviews

Guidelines: You have received a survey asking about your experiences with your retail companies and managers. Please read and complete the entire survey. Once completed, you will participate in an interview to share your thoughts about the overall survey or any specific question. I will be audio recording this session. The results from this interview will be used for generating a more concise and relevant pool of questions to measure retail employees' experience.

A. Managers' words and actions mismatch.
    1. What do you think about the survey-instructions? Were they clear enough?
    2. What do you think about the questions in this section?
    3. Will you describe any question to be confusing or difficult to understand? Why?
    4. Can you list any question which you thought to be leading or hinting you to choose a specific answer?
    5. How concise would you describe these questions to be?
    6. Were there any question whose response choices were confusing?
    7. Will you change any of the response choices for these questions?
    8. Can you list any question which you thought to be repetitive? Describe why you think they are repetitive.
    9. If you would want to get rid of some questions, which of these would be your choice?

B. Managers are having double-standards in how he/she favors himself/herself over employees.
    1. What do you think about the survey-instructions? Were they clear enough?
    2. What do you think about the questions in this section?
    3. Will you describe any question to be confusing or difficult to understand? Why?
    4. Can you list any question which you thought to be leading or hinting you to choose a specific answer?
    5. How concise would you describe these questions to be?
    6. Were there any question whose response choices were confusing?
    7. Will you change any of the response choices for these questions?
    8. Can you list any question which you thought to be repetitive? Describe why you think they are repetitive.
    9. If you would want to get rid of some questions, which of these would be your choice?

C. Companies have not maintained the promises made.
    1. What do you think about the survey-instructions? Were they clear enough?
    2. What do you think about the questions in this section?
    3. Will you describe any question to be confusing or difficult to understand? Why?
    4. Can you list any question which you thought to be leading or hinting you to choose a specific answer?
    5. How concise would you describe these questions to be?
    6. Were there any question whose response choices were confusing?
    7. Will you change any of the response choices for these questions?
    8. Can you list any question which you thought to be repetitive? Describe why you think they are repetitive.
    9. If you would want to get rid of some questions, which of these would be your choice?

D. Companies do not have a moral character.
    1. What do you think about the survey-instructions? Were they clear enough?
    2. What do you think about the questions in this section?
    3. Will you describe any question to be confusing or difficult to understand? Why?
    4. Can you list any question which you thought to be leading or hinting you to choose a specific answer?
    5. How concise would you describe these questions to be?
    6. Were there any question whose response choices were confusing?
    7. Will you change any of the response choices for these questions?
    8. Can you list any question which you thought to be repetitive? Describe why you think they are repetitive.
    9. If you would want to get rid of some questions, which of these would be your choice?

Cognitive interview participants' characteristics

Participant	Gender	Age	Ethnicity	Occupation	Years of experience	Retail industry
P1	Female	24	Caucasian	Guest service manager	2	Clothing and clothing accessories
P2	Female	25	Caucasian	Sales associate	3	Sporting goods, hobby, book, and music stores
P3	Female	26	Caucasian	Marketing and social media associate	2	Clothing and clothing accessories
P4	Female	21	African American	Sales associate	2.5	Clothing and clothing accessories
P5	Male	24	Caucasian	Assistant manager	1.5	Clothing and clothing accessories
P6	Male	21	African American	Sales associate	2	Sporting goods, hobby, book, and music stores
P7	Female	22	Caucasian	Sales associate	2.5	Clothing and clothing accessories
P8	Female	24	Caucasian	Sales associate	3	Clothing and clothing accessories

Comments and suggestions made by cognitive interview participants

Instructions	Comments
In this study, you will be asked to answer a few questions based on your current or past experience as an employee in your retail company. Please read the questions carefully and indicate your response choice based on your experience.	Okay
Please read the questions carefully and indicate your response choice based on your experience.	Place the psychological contract breach before morality as PCB questions seem to be good introductory questions. Although none of the lack of morality questions seem to be leading participants to choose certain answers, PCB seems to be logical at the beginning.

Concept	Items	Comments
Perceived Lack of Morality	1. My company is UNJUST 2. My company is UNFAIR 3. My company is SELFISH 4. My company has NO morals 5. My experience in my company is NOT personally satisfying 6. My company does NOT believe in the best interests of employees 7. My company is INEFFICIENT 8. My company COMPROMISES its important values. 9. My company PRIORITIZES its benefits over employees' benefits 10. My company is morally WRONG 11. My company would BLACKMAIL an employee if it could get away with it. 12. My company would FIRE people on unjust grounds if it could get away with it 13. My company's values are NOT the same as my work value 14. My company's VALUES CHANGE when it comes to getting things done 15. My company does NOT behave honestly and ethically when dealing with employees	The questions seem to ask about employees' real-life experiences. While some people might not have experienced every item's construct in their real lives, one can relate to them hypothetically. Rephrase the questions asking participants' responses, if they would have experienced those conditions as described in the items. Begin with 'I will think companies to be hypocrite, if....". Hypocrite might be too direct to be asked. So, rephrase with a proper neutral but relevant substitute.

Psychological contract breach	1. Almost NONE of the promises made by my company during recruitment have been kept so far. 2. My company has BROKEN many of its promises to me for no fault of my own. 3. My company has repeatedly FAILED to meet its obligations to me. 4. My company has NOT fulfilled its most important obligations to me. 5. My company would LIE to me. 6. My company AVOIDS coaching me because it wants me to fail. 7. My company would deliberately DISTORT what I say, if it would benefit the company. 8. My company has NO compassion for its employees. 9. My company would use my mistakes to ATTACK me personally. 10. My company would TAKE CREDIT for my ideas. 11. Goals in my company are changed at RANDOM without communication. 12. My company does NOT have my best interests at heart. 13. My company tends to look out for ITSELF. 14. My company's decisions and its values do NOT match. 15. When my company promises something, I can RARELY be certain that it will happen.	The questions seem to ask about employees' real-life experiences. While some people might not have experienced every item's construct in their real lives, one can relate to them hypothetically. Rephrase the questions asking participants' responses, if they would have experienced those conditions as described in the items. Begin with 'I will think companies to be hypocrite, if....". Hypocrite might be too direct to be asked. So, rephrase with a proper neutral but relevant substitute.
Double-standards	1. My supervisor would often NOT practice what he or she preaches. 2. My supervisor can GET AWAY with doing things I can't. 3. There is an 'us' VERSUS 'him/her' between employees and supervisor. 4. My supervisor does NOT apply the same standards for performance to all employees. 5. My supervisor does NOT hold everyone at all levels equally accountable for their mistakes 6. My supervisor does NOT give me enough authority to carry out my job responsibilities	The questions seem to ask about employees' real-life experiences. While some people might not have experienced every item's construct in their real lives, one can relate to them hypothetically. Rephrase the questions asking participants' responses, if they would have experienced those conditions as described in the items. Begin with 'I will think companies to be

	7. The amount of work my supervisor requires me to do INTERFERES with the quality of my work 8. My supervisor gives special favors to certain "pet" employees, but NOT to me.	hypocrite, if....". Hypocrite might be too direct to be asked. So, rephrase with a proper neutral but relevant substitute.
Value-Behavior Gap	1. My supervisor does NOT conduct herself/himself according to the same values (s)he talks about. 2. My supervisor PRETENDS to be someone (s)he is not. 3. The values my supervisor communicates to the society are NOT consistent with employees' experiences at work. 4. How my supervisor represents himself/herself to the public is very DIFFERENT from what happens internally. 5. There is a DIFFERENCE between what my supervisor says and what (s)he does. 6. My supervisor's behaviors do NOT show his/her commitment to the company's values 7. My supervisor is deliberately MISLEADING in her/his communication. 8. My supervisor is DECEPTIVE 9. My supervisor shows employees what they want to see INSTEAD of the reality of the situation. 10. My supervisor MISLEADS employees about the real motives of the company.	The questions seem to ask about employees' real-life experiences. While some people might not have experienced every item's construct in their real lives, one can relate to them hypothetically. Rephrase the questions asking participants' responses, if they would have experienced those conditions as described in the items. Begin with 'I will think companies to be hypocrite, if....". Hypocrite might be too direct to be asked. So, rephrase with a proper neutral but relevant substitute.

APPENDIX F

BUSINESS SERVICES APPROVAL OF CONTRACT BETWEEN QUALTRICS AND THE RESEARCHER

Business Services Approval

QUALTRICS panels

PANEL QUOTE

QUALTRICS, LLC

2250 N. University Pkwy, #48 Provo, UT 84604
Phone: 801.374.6682 | Fax: 866.562.9828
juliah@qualtrics.com

Date: 07-Apr-2017

expires after 30 days

JOB	PAYMENT TERMS
Qual1877-1023Fashion	**Net 30** days of receiving invoice

QTY	DESCRIPTION	UNIT PRICE	LINE TOTAL
500	**Targeting**: --- US Residents 18+ -Employees from Retail brick-&-mortar stores AND related corporate offices -Employees from e-Retail stores (such as amazon and others) and related corporate offices -Employees working in NAICS codes 441110 - 453998, and 454111. -Can range from store-level to executive-level working in corporate offices -At least 1 year of job experience in the company **LOI** (Length of Interview/Survey): 15 Minutes or less.	$5.00	$2,500.00

Business Services Approval (Continued)

	IR (Qualifying Rate) 50%		
		TOTAL:	USD $2,500.00

Quotation prepared by: Julia Hlavacik | juliah@qualtrics.com | 801-709-2164 |

This is a quotation on the goods named, subject to the conditions noted below. Prices shown do not include sales tax, HST, VAT or other taxes that may apply. Applicable taxes will be presented on the invoice.

To accept this quotation, please sign here:

Project Responsibilities

- Unless prior arrangements are made with Qualtrics, University of Missouri-Columbia must have an account and license with Qualtrics research suite.
- University of Missouri-Columbia will provide the survey methodology, survey design, and qualifying question syntax to Qualtrics, unless other arrangements are made with Qualtrics.
- Qualtrics will be responsible for sending University of Missouri-Columbia's survey out through its panel partners to the targeted respondents, inviting respondents to complete the online survey in return for incentives/cash honorarium.
- Qualtrics will be responsible for reviewing quotas and screeners, adding redirects, and approving the survey prior to launching to targeted respondents.
- For surveys targeting international sample, the survey must be designed and programmed in the native language of the countries being targeted.
- Unless prior arrangements are made with Qualtrics, University of Missouri-Columbia will be responsible for building the survey; Qualtrics will be responsible for hosting the survey.
- Unless prior arrangements are made with Qualtrics, University of Missouri-Columbia will be responsible for all data analysis and other data interpretation/presentation work.
- University of Missouri-Columbia is not permitted to collect any panel member's personal information such as, but not limited to, name, email address, physical address, phone number, etc. without written notice, prior approval, and consent from Qualtrics and its panel partners.

Business Services Approval (Continued)

- Project minimum $500 on all projects.
- In the event the expected amount of responses is not collected from a panel project, the amount prepaid for the uncollected responses will not be refunded, but will be applied towards future Qualtrics panels/ projects/ licenses.
- All respondents quoted are assumed to be from the United States of America, unless stated otherwise in this quote.
- If a project is assigned to a Qualtrics project manager on a Friday, University of Missouri-Columbia understands that due to Qualtrics' panel partner constraints and the required setup time, it is likely that data collection will not begin until the following Monday. University of Missouri-Columbia is aware that if a survey is not live by **6pm EST** on a Friday, data collection will most likely begin the following Monday.
- University of Missouri-Columbia understands that after a project manager is assigned, it can take up to **24 hours** for data collection to begin.
- Unless specified to the Qualtrics project manager before data collection begins, we will be recording terminate responses as well as survey completions toward the number of responses allowed in University of Missouri-Columbia Qualtrics software license. Please note that these terminates will not count against the total good completes (n) requested for this project. ***Please let your project manager know before running the project if you do not want to record terminate responses against the University of Missouri-Columbia Qualtrics software license agreement.***
- Any criteria such as, but not limited to, minimum time spent in survey, attention filters, etc. which University of Missouri-Columbia intends to use to judge the validity of qualifying completes must be approved by Qualtrics prior to launch.
- If the incidence rate drops below the specified range or University of Missouri-Columbia changes specified targeting, additional charges may apply.
- By signing this document, University of Missouri-Columbia is providing permission for a Qualtrics project manager as well as account manager to access University of Missouri-Columbia's account for the duration of this project for reasons expressly related to the project itself.

To accept the conditions noted above, please sign here: 

THANK YOU FOR YOUR BUSINESS!

APPENDIX G

IRB APPROVAL FOR ONLINE SURVEY, RECRUITMENT SCRIPT, CONSENT FORM, QUALTRICS SURVEY INSTRUMENT

IRB Approval

Institutional Review Board
University of Missouri-Columbia

190 Galena Hall; Dc074.00
Columbia, MO 65212
573-882-3181
irb@missouri.edu

April 25, 2017

Principal Investigator: Saheli Goswami
Department: Textile and Apparel Mgmt

Your Exempt Application to project entitled Scale for Corporate Hypocrisy was reviewed and approved by the MU Institutional Review Board according to the terms and conditions described below:

IRB Project Number	2008369
IRB Review Number	225820
Initial Application Approval Date	April 25, 2017
IRB Expiration Date	April 25, 2018
Level of Review	Exempt
Project Status	Active - Open to Enrollment
Exempt Categories	45 CFR 46.101b(2)
Risk Level	Minimal Risk
Internal Funding	Personal funds

The principal investigator (PI) is responsible for all aspects and conduct of this study. The PI must comply with the following conditions of the approval:

1. No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date.
2. All unanticipated problems and deviations must be reported to the IRB within 5 business days.
3. All changes must be IRB approved prior to implementation unless they are intended to reduce immediate risk.
4. All recruitment materials and methods must be approved by the IRB prior to being used.
5. The Annual Exempt Form must be submitted to the IRB for review and approval at least 30 days prior to the project expiration date. If the study is complete, the Completion/Withdrawal Form may be submitted in lieu of the Annual Exempt Form
6. Maintain all research records for a period of seven years from the project completion date.
7. Utilize all approved research documents located within the attached files section of eCompliance. These documents are highlighted green.

If you are offering subject payments and would like more information about research participant payments, please click here to view the MU Business Policy and Procedure:

http://bppm.missouri.edu/chapter2/2_250.html

If you have any questions, please contact the IRB at 573-882-3181 or irb@missouri.edu.

Thank you,
MU Institutional Review Board

Recruitment Script

The primary goal of this research is to investigate about retail employees' perceptions of their employer companies, especially when such companies do not act on their assertions. Your participation will help today's retail companies with better understanding of their employees' experiences and expectations.

If you are 18 years old or older, and have at least a year of work experience in your retail company, you are encouraged to participate. The survey will take approximately 15 minutes to complete. Participation in this study is completely voluntary. You will be compensated at $5 for participating in this survey. If you wish to participate, please click on the below link to deploy the consent form and the survey.

https://missouri.qualtrics.com/jfe/form/SV_cXTqiyND3oojitf

For more information about the study, please contact Saheli Goswami at saheligoswami@mail.missouri.edu

Survey Instrument

Retail Research - Qualtrics Participants

Q1 SURVEY CONSENT FORM

The primary goal of this research is to investigate about employees' perceptions of their employer companies, especially when such companies do not act on their assertions. Your participation will help today's retail companies with better understanding of their employees' experiences and expectations.
Participation in this study is completely voluntary.

Confidentiality: Data for the survey will be saved anonymously. Electronic files will be saved with no personal identifiers. Throughout the survey, you may choose to not answer any question(s) and you may stop participating any time.

Risks: There are no potential risks associated with participating in this study.

For more information about the study or to withdraw from the study, please contact: Saheli Goswami – saheligoswami@mail.missouri.edu, or Dr. Jung Ha-Brookshire at habrookshirej@missouri.edu. If you have any questions regarding your rights as a participant of this research, please contact the University of Missouri Campus IRB at 573-882-9585.

Consent:

❍ By checking this, you confirm your age as 18 years or above, and that you consent to participate in this research study.

Q1 Please select all the sectors relevant to your work experience.
- ❑ Retail
- ❑ Manufacturing
- ❑ Wholesale

Q2 How many years of work experience do you have in a retail company?
- ❍ Less than a year
- ❍ A year or more

Q28 What best describes your current work location?
- ❍ Retail brick & mortar stores
- ❍ Retail corporate offices
- ❍ E-retail companies focusing in retail operations
- ❍ None of the above

Q29 What industry do you currently work in?
- ❍ Furniture and home furnishings
- ❍ Electronics and appliances
- ❍ Building materials, garden equipment and supplies
- ❍ Food and beverage
- ❍ Health and personal care
- ❍ Gasoline
- ❍ Clothing and clothing accessories
- ❍ Sporting goods, hobby, book and music
- ❍ General merchandise
- ❍ Miscellaneous (florists, office supplies, stationery, gift stores, pet supplies, arts)
- ❍ None of the above

EOS Sorry, but you are not eligible for this study. Thanks for participating.

Q3) In this study, you will be asked to answer a few questions based on only your BAD experience as an employee in your retail company. As you take this survey, please read the questions carefully, recall your such BAD experiences, and indicate your response choices.

Q4 Please read the questions carefully and indicate your response choices. I would be disappointed, if:

	Strongly Disagree	Disagree	Agree	Strongly Agree
My company BREAKS most of the promises made during recruitment.	❍	❍	❍	❍
My company breaks many of its promises to me for NO fault of my own.	❍	❍	❍	❍
My company mostly FAILS to meet its obligations to me.	❍	❍	❍	❍
My company often does NOT fulfill its most important obligations to me.	❍	❍	❍	❍
My company often LIES to me.	❍	❍	❍	❍
My company does NOT acknowledge employees as humans.	❍	❍	❍	❍
My company often THROWS ME UNDER THE BUS for its own benefits.	❍	❍	❍	❍
My company has NO compassion for its employees.	❍	❍	❍	❍

Q5 Please read the questions carefully and indicate your response choices. I would be disappointed, if:

	Strongly Disagree	Disagree	Agree	Strongly Agree
My company uses my mistakes to INDIVIDUALIZE me.	❍	❍	❍	❍
My company TAKES CREDIT for my ideas.	❍	❍	❍	❍
My company RANDOMLY changes its goals without communicating this to employees.	❍	❍	❍	❍
My company does NOT have employees' best interests at heart.	❍	❍	❍	❍
My company tends to look out only for ITSELF.	❍	❍	❍	❍
My company's policies do NOT match the promises made to employees.	❍	❍	❍	❍
My company makes promises to employees, which I can RARELY expect to actually happen.	❍	❍	❍	❍

Q6 Please read the questions carefully and indicate your response choices. I would be disappointed, if:

	Strongly Disagree	Disagree	Agree	Strongly Agree
My company is UNJUST to its employees.	❍	❍	❍	❍
My company is UNFAIR to its employees.	❍	❍	❍	❍
My company is SELFISH.	❍	❍	❍	❍
My company has almost NO moral principles.	❍	❍	❍	❍
My experience in my company is often NOT personally satisfying.	❍	❍	❍	❍
My company does NOT care for its employees, but only for money.	❍	❍	❍	❍
My company is INEFFICIENT in enacting its own set principles.	❍	❍	❍	❍
My company often COMPROMISES its important values as shared in public.	❍	❍	❍	❍

Q36 Attention Filter Question: For this study, the researcher wants to make sure respondents are paying attention as they answer our questions. Please type or paste the word “survey” in the text box below.

Q7 Please read the questions carefully and indicate your response choices. I would be disappointed, if:

	Strongly Disagree	Disagree	Agree	Strongly Agree
My company PRIORITIZES its benefits over employees' benefits.	❍	❍	❍	❍
My company PRETENDS to appear moral.	❍	❍	❍	❍
My company engages in morally WRONG acts when it can get away with them.	❍	❍	❍	❍
My company FIRES people on unjust grounds when it can get away with it.	❍	❍	❍	❍
My company's moral values are NOT the same as my moral values.	❍	❍	❍	❍
My company's values often CHANGE when it comes to getting things done.	❍	❍	❍	❍
My company does NOT behave honestly when dealing with employees.	❍	❍	❍	❍
My company does NOT behave ethically when dealing with employees.	❍	❍	❍	❍

Q8 Please read the questions carefully and indicate your response choices. I would be disappointed, if:

	Strongly Disagree	Disagree	Agree	Strongly Agree
My supervisor does NOT practice what (s)he preaches.	❍	❍	❍	❍
My supervisor GETS AWAY with doing things I can't.	❍	❍	❍	❍
There is an 'us' VERSUS 'him/her' between employees and supervisor.	❍	❍	❍	❍
My supervisor does NOT apply the same standards for performance to all employees.	❍	❍	❍	❍
My supervisor does NOT hold everyone at all levels equally accountable for their mistakes.	❍	❍	❍	❍
My supervisor does NOT give me enough authority to carry out my job responsibilities, but penalizes me for lack of performance.	❍	❍	❍	❍

The amount of work my supervisor requires me to do CONFLICTS with the quality of work (s)he expects.	❍	❍	❍	❍
My supervisor FAVORS employees based on her/his personal preferences rather than employees' abilities.	❍	❍	❍	❍

Q9 Please read the questions carefully and indicate your response choices. I would be disappointed, if:

	Strongly Disagree	Disagree	Agree	Strongly Agree
My supervisor does NOT conduct herself/himself according to the same values (s)he talks about.	❍	❍	❍	❍
My supervisor PRETENDS to be someone (s)he is not.	❍	❍	❍	❍
The values my supervisor communicates to the society are NOT consistent with employees' experiences at work.	❍	❍	❍	❍
The way my supervisor represents himself/herself to the public is very DIFFERENT from what happens internally.	❍	❍	❍	❍
There is a DIFFERENCE between what my supervisor says and what (s)he does.	❍	❍	❍	❍

Q37 Attention Filter Question: For this study, the researcher wants to make sure respondents are paying attention as they answer our questions. Please type or paste the word “research” in the text box below.

Q14 Please read the questions carefully and indicate your response choices. I would be disappointed, if:

	Strongly Disagree	Disagree	Agree	Strongly Agree
My supervisor's behaviors do NOT reflect the company's values.	❍	❍	❍	❍
My supervisor MISLEADS employees with her/his communication and conflicting actions.	❍	❍	❍	❍
My supervisor is DECEPTIVE.	❍	❍	❍	❍
My supervisor shows employees what they want to see INSTEAD of the reality of the situation.	❍	❍	❍	❍
My supervisor MISLEADS employees about the real motives of the company.	❍	❍	❍	❍

Q15 Thank you for answering the above questions. Please read the below questions carefully and indicate your response choices. If I am to be in a company as described in above questions, I would:

	Strongly Disagree	Disagree	Agree	Strongly Agree
NOT look forward to another day at the company.	❍	❍	❍	❍
Often consider QUITTING that job.	❍	❍	❍	❍
Actively look for a different job in a DIFFERENT company.	❍	❍	❍	❍

Q16 Thank you for answering the above questions. Please read the below questions carefully and indicate your response choices. If I am to be in a company as described in above questions, my feelings towards that company would be:

	1	2	3	4
Favorable:Unfavorable	❍	❍	❍	❍
Good:Bad	❍	❍	❍	❍
Pleasant:Unpleasant	❍	❍	❍	❍
Positive:Negative	❍	❍	❍	❍

Q24 The researcher would like to know a little bit about you. Please answer the following questions.

Which of the following best describes your age in years?

❍ 18-20
❍ 21-30
❍ 31-40
❍ 41-50
❍ 51-60
❍ 61 and Over

Q28 Please indicate your gender identity.
- ❍ Male
- ❍ Female
- ❍ Prefer not to disclose

Q30 Please indicate your marital status.
- ❍ Single, never married
- ❍ In a relationship
- ❍ Married
- ❍ Divorced/Widowed

Q26 Please indicate the highest level of education you have completed.
- ❍ Some high school education
- ❍ High school degree
- ❍ Some college education
- ❍ College degree
- ❍ Some graduate education
- ❍ Graduate degree
- ❍ Other

Q22 Please indicate your current retail employment status.
- ❍ Part-time employed (1-39 hours per week)
- ❍ Full-time employed (40 or more hours per week)
- ❍ Not employed
- ❍ Retired

Q34 Please indicate the option that best describes your work place.
- ❍ Retail shop floor
- ❍ Retail corporate office (on-site or off-site)

Q35 Please indicate the option that best describes your work industry.
- ❍ Motor vehicle and parts
- ❍ Furniture and Home Furnishings
- ❍ Electronics and Appliances
- ❍ Building Materials, Garden Equipment and Supplies
- ❍ Food and Beverage
- ❍ Health and Personal Care
- ❍ Gasoline
- ❍ Clothing and Clothing Accessories
- ❍ Sporting Goods, Hobby, Book, and Music
- ❍ General Merchandise
- ❍ Miscellaneous

Q32 Please indicate your ethnicity.

- ❍ Caucasian
- ❍ Hispanic
- ❍ African-American
- ❍ Asian
- ❍ Other

Q20 Please indicate your annual household income.

- ❍ Less than $ 20,000
- ❍ $20,000 - $34,999
- ❍ $35,000 - $49,999
- ❍ $50,000 - $74,999
- ❍ $75,000 - $99,999
- ❍ $100,000 or above

APPENDIX H

MEASURES FOR CONSTRUCT VALIDITY

Measures for Construct Validity (Convergent and Discriminant Validity)

Type of validity	Variable	Source	Scale	Statistics
Convergent validity	Turnover intentions	Alniacik et al. (2013)	1. I am probably going to be working for another company in a year 2. I am planning on looking for a different job in a different company within the next 12 months 3. I am actively looking for a job with another company 4. I often think of quitting my current job	Reliability 0.92 5-point Likert scale. 1=completely disagree, 5=completely agree
Discriminant validity	Attitude towards corporation	Wagner et al (2009)	In general, my feelings toward my company are… 1) Unfavorable/Favorable 2) Bad/Good 3) Unpleasant/Pleasant 4) Positive/Negative	Reliability 0.94. Measured on a 7-point Likert scale.

APPENDIX I

Q_3 STATISTICS TABLE, ITEM INFORMATION FUNCTIONS, AND MOKKEN SCALE ANALYSIS PLOTS OF INITIAL ITEM BANK

Q_3 Statistics to Confirm Local Independence for the Initial Item Bank

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Q1	1								
Q2	0.501	1.000							
Q3	0.422	0.682	1.000						
Q4	0.342	0.583	0.732	1.000					
Q5	0.324	0.577	0.605	0.629	1.000				
Q6	0.289	0.513	0.524	0.577	0.700	1.000			
Q7	0.316	0.559	0.570	0.614	0.726	0.694	1.000		
Q8	0.291	0.510	0.548	0.613	0.717	0.774	0.736	1.000	
Q9	0.135	-0.016	0.013	0.047	-0.056	-0.112	-0.003	-0.093	1.000
Q10	0.065	0.080	0.123	0.029	0.047	0.041	0.074	0.018	0.254
Q11	0.014	0.085	0.056	0.077	0.059	0.087	0.068	0.065	0.156
Q12	-0.057	0.082	0.153	0.184	0.109	0.178	0.126	0.241	0.162
Q13	0.031	0.154	0.137	0.212	0.216	0.277	0.215	0.327	0.135
Q14	0.057	0.246	0.216	0.252	0.311	0.269	0.283	0.332	0.147
Q15	0.041	0.154	0.164	0.151	0.194	0.183	0.206	0.215	0.125
Q16	0.094	0.054	0.081	0.018	-0.066	-0.040	-0.028	-0.065	0.097
Q17	-0.018	0.037	0.095	0.052	-0.039	0.013	-0.008	-0.001	0.075
Q18	-0.042	-0.106	-0.084	-0.091	-0.181	-0.107	-0.141	-0.081	0.040
Q19	-0.052	-0.028	-0.007	-0.043	-0.080	-0.026	-0.056	-0.008	-0.014
Q20	-0.008	0.074	0.085	0.112	0.022	0.094	0.044	0.145	0.020
Q21	-0.017	0.056	0.049	0.042	0.024	0.118	0.069	0.096	0.009
Q22	-0.017	0.029	0.040	0.046	0.009	0.014	0.058	0.030	0.044
Q23	0.045	0.022	0.111	0.035	0.048	0.096	0.014	0.076	0.001
Q24	-0.013	-0.104	-0.107	-0.090	-0.176	-0.150	-0.181	-0.109	0.193
Q25	-0.023	-0.067	-0.029	-0.067	-0.072	-0.072	-0.069	-0.057	0.022
Q26	-0.061	-0.143	-0.108	-0.137	-0.105	-0.123	-0.076	-0.141	-0.038
Q27	-0.051	-0.146	-0.150	-0.131	-0.056	-0.144	-0.121	-0.186	-0.062
Q28	-0.052	-0.038	-0.025	-0.031	-0.065	-0.007	-0.048	0.008	-0.007
Q29	-0.056	-0.035	-0.172	-0.096	-0.094	-0.070	-0.053	-0.071	-0.010
Q30	0.002	-0.036	-0.074	0.003	0.033	-0.038	0.019	0.033	-0.141
Q31	-0.066	-0.017	-0.020	0.007	0.032	-0.052	0.001	-0.060	-0.124
Q32	0.002	-0.159	-0.094	-0.103	-0.160	-0.106	-0.111	-0.168	0.070
Q33	-0.131	-0.122	-0.159	-0.157	-0.149	-0.124	-0.128	-0.167	-0.019

Q_3 Statistics to Confirm Local Independence for the Initial Item Bank (Continued)

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Q34	-0.070	-0.109	-0.133	-0.144	-0.136	-0.201	-0.158	-0.171	-0.001	-0.029
Q35	-0.149	-0.127	-0.198	-0.128	-0.167	-0.189	-0.191	-0.166	-0.054	-0.158
Q36	-0.104	-0.117	-0.213	-0.171	-0.145	-0.125	-0.142	-0.166	-0.072	-0.122
Q37	-0.062	-0.125	-0.171	-0.194	-0.115	-0.170	-0.096	-0.210	-0.091	-0.041
Q38	-0.132	-0.163	-0.169	-0.213	-0.147	-0.147	-0.160	-0.161	-0.067	-0.079
Q39	-0.102	-0.151	-0.179	-0.176	-0.154	-0.185	-0.157	-0.216	-0.068	-0.084
Q40	-0.032	-0.161	-0.151	-0.135	-0.164	-0.202	-0.187	-0.175	0.027	-0.131
Q41	-0.083	-0.177	-0.173	-0.166	-0.127	-0.154	-0.162	-0.169	-0.132	-0.106
Q42	-0.171	-0.211	-0.166	-0.174	-0.167	-0.198	-0.199	-0.205	-0.111	-0.182
Q43	-0.107	-0.134	-0.200	-0.209	-0.098	-0.103	-0.140	-0.136	-0.121	-0.158
Q44	-0.164	-0.148	-0.154	-0.191	-0.197	-0.142	-0.167	-0.194	-0.159	-0.147
Q45	-0.028	-0.125	-0.151	-0.129	-0.163	-0.178	-0.158	-0.173	-0.014	-0.190
Q46	-0.078	-0.136	-0.137	-0.154	-0.123	-0.155	-0.150	-0.192	-0.064	-0.138
Q47	-0.091	-0.198	-0.144	-0.133	-0.120	-0.128	-0.082	-0.164	-0.051	-0.137
Q48	-0.116	-0.182	-0.171	-0.134	-0.186	-0.099	-0.129	-0.180	-0.070	-0.182
Q49	-0.149	-0.157	-0.208	-0.245	-0.175	-0.088	-0.194	-0.248	-0.143	-0.152

Q_3 Statistics to Confirm Local Independence for the Initial Item Bank (Continued)

	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
Q1										
Q2										
Q3										
Q4										
Q5										
Q6										
Q7										
Q8										
Q9										
Q10										
Q11	1.000									
Q12	0.339	1.000								
Q13	0.247	0.593	1.000							
Q14	0.275	0.403	0.441	1.000						
Q15	0.171	0.344	0.396	0.535	1.000					
Q16	0.010	0.059	-0.080	0.009	0.013	1.000				
Q17	-0.030	0.108	0.003	0.058	0.025	0.462	1.000			
Q18	0.038	0.136	0.165	-0.060	-0.044	0.139	0.303	1.000		
Q19	0.002	0.048	0.052	-0.015	-0.011	0.195	0.339	0.388	1.000	
Q20	-0.011	0.108	0.116	0.104	0.114	0.049	0.089	0.109	0.117	1.000
Q21	-0.048	0.225	0.306	0.056	0.057	0.007	0.075	0.354	0.104	0.335
Q22	0.011	0.025	0.050	0.084	0.133	0.063	0.057	0.100	0.137	0.365
Q23	0.028	0.132	0.064	0.082	0.162	0.117	0.081	0.073	0.136	0.278
Q24	0.014	0.054	0.010	-0.082	-0.046	0.087	0.011	0.015	-0.111	-0.031
Q25	-0.007	-0.021	-0.044	-0.043	-0.056	-0.049	-0.047	0.024	0.051	0.017
Q26	-0.036	-0.154	-0.176	-0.097	-0.112	-0.076	0.017	-0.067	0.128	-0.102
Q27	0.010	-0.108	-0.104	-0.078	-0.124	-0.044	-0.020	-0.111	0.037	-0.183
Q28	0.025	0.052	0.006	-0.075	0.015	0.000	-0.124	0.133	0.042	0.221
Q29	-0.030	-0.095	-0.010	-0.109	-0.059	-0.072	-0.126	0.091	-0.049	0.046
Q30	-0.130	-0.116	-0.136	-0.028	-0.111	-0.099	-0.054	-0.087	0.000	-0.199
Q31	-0.186	-0.208	-0.252	-0.125	-0.020	-0.069	-0.005	-0.158	0.068	-0.162
Q32	-0.022	-0.015	-0.104	-0.151	-0.096	0.125	-0.056	-0.099	-0.194	-0.038
Q33	-0.045	-0.079	-0.077	-0.160	-0.116	-0.096	-0.119	-0.089	-0.235	-0.080

Q_3 Statistics to Confirm Local Independence for the Initial Item Bank (Continued)

	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
Q34	-0.102	-0.103	-0.111	-0.083	-0.086	-0.147	-0.182	-0.191	-0.162	-0.055
Q35	-0.066	-0.100	-0.164	-0.206	-0.142	-0.125	-0.200	-0.133	-0.219	-0.035
Q36	-0.059	-0.159	-0.115	-0.162	-0.104	-0.116	-0.141	-0.100	-0.196	-0.078
Q37	-0.175	-0.250	-0.217	-0.187	-0.128	-0.112	-0.090	-0.166	-0.073	-0.220
Q38	-0.119	-0.151	-0.112	-0.196	-0.039	-0.129	-0.164	-0.111	-0.204	-0.121
Q39	-0.150	-0.213	-0.158	-0.233	-0.131	-0.145	-0.161	-0.149	-0.210	-0.119
Q40	-0.007	-0.117	-0.217	-0.164	-0.205	0.069	-0.102	-0.075	-0.164	-0.151
Q41	-0.085	-0.117	-0.192	-0.244	-0.168	-0.103	-0.169	-0.060	-0.122	-0.158
Q42	-0.160	-0.146	-0.119	-0.147	-0.120	-0.094	-0.144	-0.106	-0.140	-0.098
Q43	-0.102	-0.135	-0.098	-0.156	-0.122	-0.112	-0.194	-0.113	-0.234	-0.121
Q44	-0.167	-0.159	-0.205	-0.130	-0.088	-0.038	-0.140	-0.128	-0.158	-0.150
Q45	-0.122	-0.176	-0.234	-0.201	-0.157	0.034	-0.140	-0.138	-0.098	-0.096
Q46	-0.081	-0.242	-0.276	-0.154	-0.202	-0.140	-0.105	-0.185	-0.181	-0.238
Q47	-0.164	-0.225	-0.266	-0.166	-0.220	-0.096	-0.106	-0.187	-0.072	-0.247
Q48	-0.139	-0.214	-0.218	-0.233	-0.177	-0.141	-0.138	-0.188	-0.146	-0.126
Q49	-0.158	-0.268	-0.188	-0.200	-0.192	-0.131	-0.183	-0.146	-0.073	-0.250

Q_3 Statistics to Confirm Local Independence for the Initial Item Bank (Continued)

	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
Q1										
Q2										
Q3										
Q4										
Q5										
Q6										
Q7										
Q8										
Q9										
Q10										
Q11										
Q12										
Q13										
Q14										
Q15										
Q16										
Q17										
Q18										
Q19										
Q20										
Q21	1.000									
Q22	0.263	1.000								
Q23	0.283	0.435	1.000							
Q24	0.050	-0.023	0.013	1.000						
Q25	-0.005	-0.031	0.078	0.214	1.000					
Q26	-0.179	-0.126	-0.035	-0.040	0.172	1.000				
Q27	-0.191	-0.119	-0.094	-0.098	-0.031	0.339	1.000			
Q28	0.174	0.029	0.137	0.105	0.058	-0.038	0.019	1.000		
Q29	0.100	-0.026	0.042	0.030	0.083	0.034	0.050	0.260	1.000	
Q30	-0.199	-0.108	-0.196	-0.067	0.063	0.157	0.199	-0.101	0.109	1.000
Q31	-0.170	-0.066	-0.124	-0.015	0.020	0.183	0.188	-0.070	0.019	0.421
Q32	-0.042	-0.086	-0.103	0.077	-0.088	-0.095	-0.112	-0.038	-0.156	-0.148
Q33	-0.069	-0.120	-0.167	0.072	-0.082	-0.137	-0.047	0.013	0.086	-0.100

Q_3 Statistics to Confirm Local Independence for the Initial Item Bank (Continued)

	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
Q34	-0.182	-0.109	-0.173	-0.028	-0.094	-0.030	-0.053	-0.101	-0.064	-0.103
Q35	-0.162	-0.101	-0.193	-0.077	-0.200	-0.043	-0.044	-0.039	-0.071	-0.024
Q36	-0.070	-0.054	-0.173	-0.116	-0.180	-0.154	-0.058	-0.054	-0.078	-0.058
Q37	-0.210	-0.171	-0.145	-0.037	-0.103	-0.032	0.057	-0.187	-0.080	0.039
Q38	-0.087	-0.196	0.020	0.009	-0.037	-0.050	-0.042	-0.014	0.053	-0.083
Q39	-0.162	-0.068	-0.195	-0.039	-0.074	-0.122	-0.021	-0.129	-0.148	-0.092
Q40	-0.200	-0.219	-0.192	0.104	-0.003	-0.019	-0.063	-0.061	-0.058	-0.049
Q41	-0.184	-0.189	-0.256	-0.047	-0.063	-0.042	-0.070	-0.084	-0.066	-0.054
Q42	-0.132	-0.114	-0.114	-0.092	-0.081	-0.064	-0.053	-0.050	-0.065	-0.129
Q43	-0.095	-0.183	-0.108	-0.133	-0.146	-0.134	-0.089	-0.072	0.006	-0.120
Q44	-0.141	-0.158	-0.175	-0.119	-0.138	-0.123	-0.087	-0.112	-0.102	-0.117
Q45	-0.140	-0.087	-0.091	0.139	0.020	-0.053	-0.074	-0.019	-0.034	-0.091
Q46	-0.249	-0.167	-0.212	-0.037	-0.148	0.002	0.023	-0.175	-0.168	-0.047
Q47	-0.287	-0.182	-0.204	-0.095	-0.169	0.089	0.060	-0.282	-0.230	-0.023
Q48	-0.170	-0.127	-0.119	-0.072	-0.127	-0.030	0.026	-0.131	-0.144	-0.099
Q49	-0.201	-0.135	-0.191	-0.099	-0.090	0.074	0.111	-0.136	-0.036	-0.068

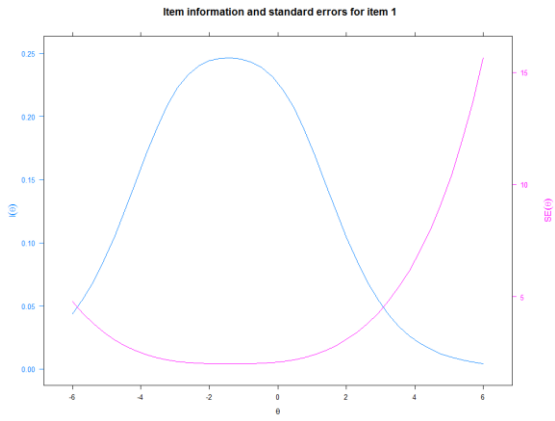
Q_3 Statistics to Confirm Local Independence for the Initial Item Bank (Continued)

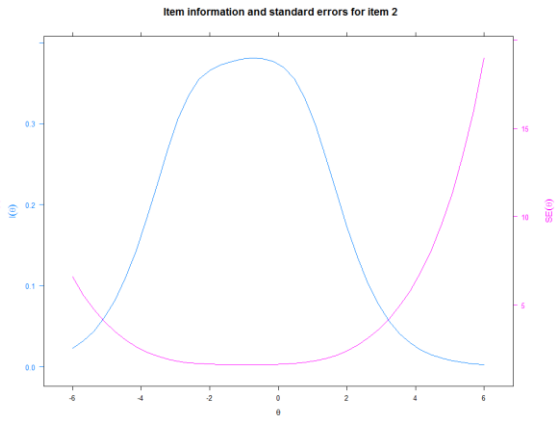
	Q31	Q32	Q33	Q34	Q35	Q36	Q37	Q38	Q39	Q40
Q31	1.000									
Q32	-0.082	1.000								
Q33	-0.105	0.288	1.000							
Q34	-0.066	0.143	0.263	1.000						
Q35	-0.040	0.197	0.248	0.329	1.000					
Q36	-0.096	0.150	0.215	0.212	0.566	1.000				
Q37	0.075	0.054	0.135	0.182	0.137	0.170	1.000			
Q38	-0.045	0.058	0.150	0.102	0.198	0.155	0.420	1.000		
Q39	-0.071	0.086	0.134	0.186	0.416	0.381	0.271	0.212	1.000	
Q40	-0.034	0.270	0.053	0.109	0.118	0.060	0.044	0.116	0.082	1.000
Q41	-0.022	0.081	0.090	0.148	0.108	0.142	0.102	0.105	0.120	0.356
Q42	-0.106	0.022	0.020	0.170	0.090	0.082	0.097	0.200	0.154	0.220
Q43	-0.134	0.045	0.174	0.131	0.131	0.089	0.086	0.250	0.159	0.260
Q44	-0.134	0.119	0.056	0.066	0.180	0.181	0.147	0.163	0.239	0.244
Q45	0.027	0.189	0.012	-0.034	0.042	0.020	0.027	0.042	0.131	0.277
Q46	-0.026	0.046	0.091	0.097	0.130	0.178	0.103	0.060	0.203	0.133
Q47	0.014	0.119	0.079	0.095	0.121	0.154	0.196	0.093	0.167	0.178
Q48	-0.044	0.177	0.076	0.081	0.165	0.218	0.140	0.048	0.218	0.074
Q49	0.037	-0.006	0.051	0.023	0.054	0.130	0.118	0.097	0.204	0.065

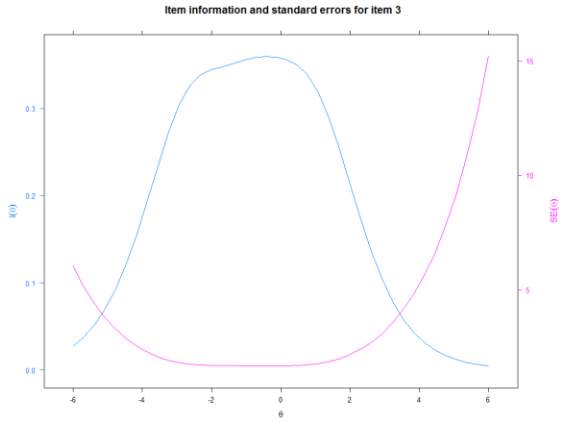
Q_3 Statistics to Confirm Local Independence for the Initial Item Bank (Continued)

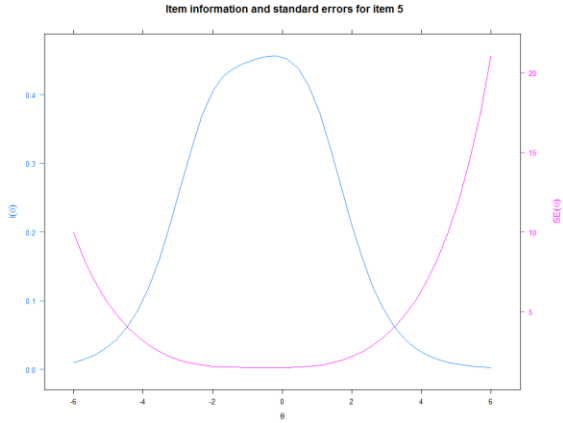
	Q41	Q42	Q43	Q44	Q45	Q46	Q47	Q48	Q49
Q31									
Q32									
Q33									
Q34									
Q35									
Q36									
Q37									
Q38									
Q39									
Q40									
Q41	1.000								
Q42	0.349	1.000							
Q43	0.305	0.386	1.000						
Q44	0.305	0.404	0.412	1.000					
Q45	0.164	0.195	0.149	0.230	1.000				
Q46	0.181	0.258	0.207	0.296	0.327	1.000			
Q47	0.192	0.209	0.248	0.304	0.279	0.609	1.000		
Q48	0.216	0.205	0.212	0.318	0.352	0.399	0.499	1.000	
Q49	0.192	0.223	0.224	0.290	0.300	0.499	0.489	0.482	1.000

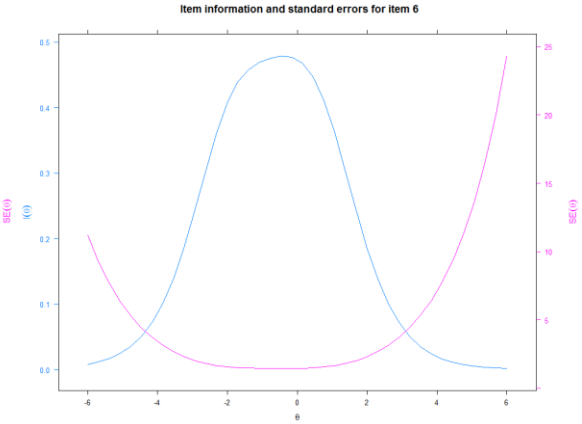
Item Information Functions for Initial Item Bank



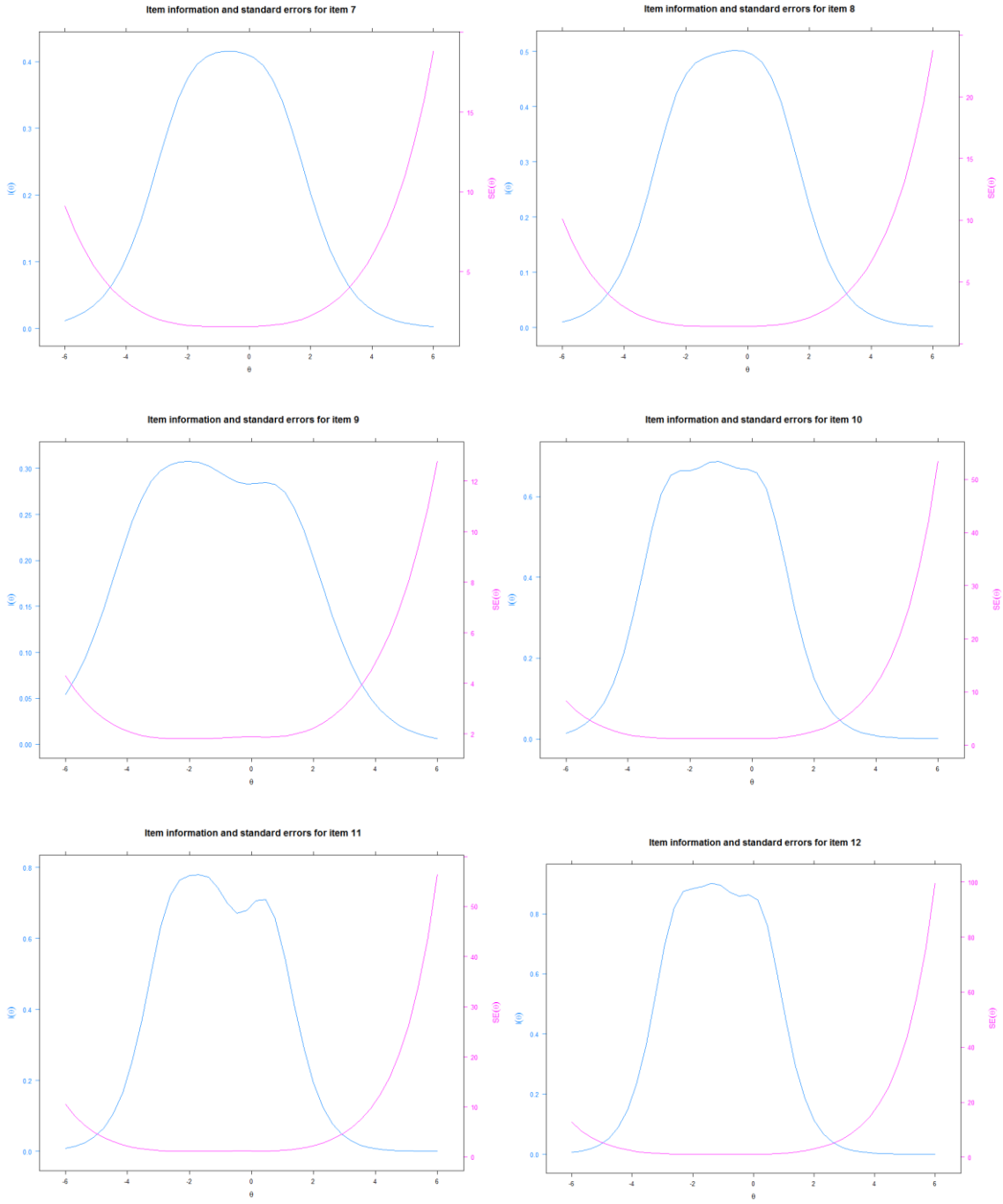




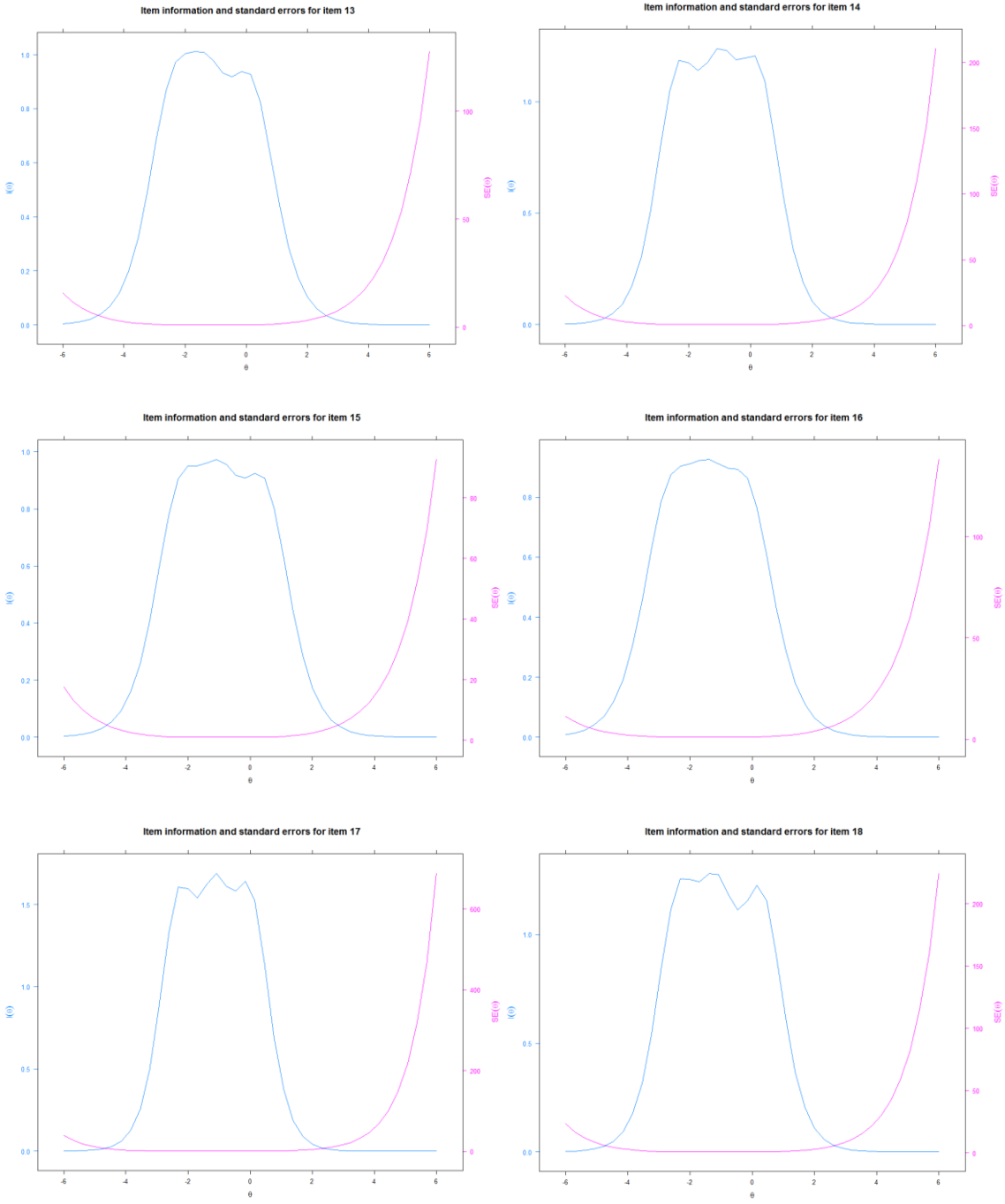




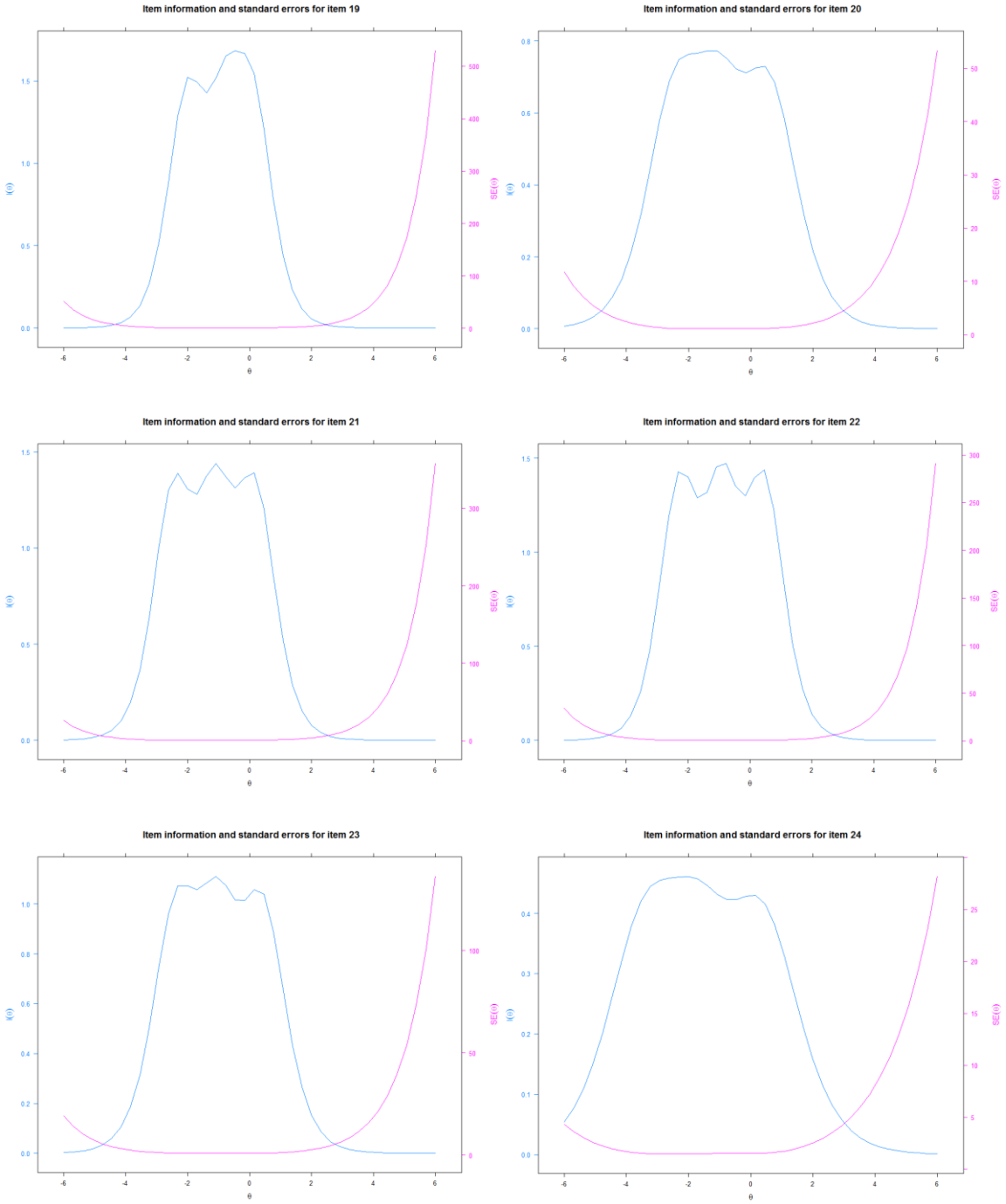
Item Information Functions for Initial Item Bank (Continued)



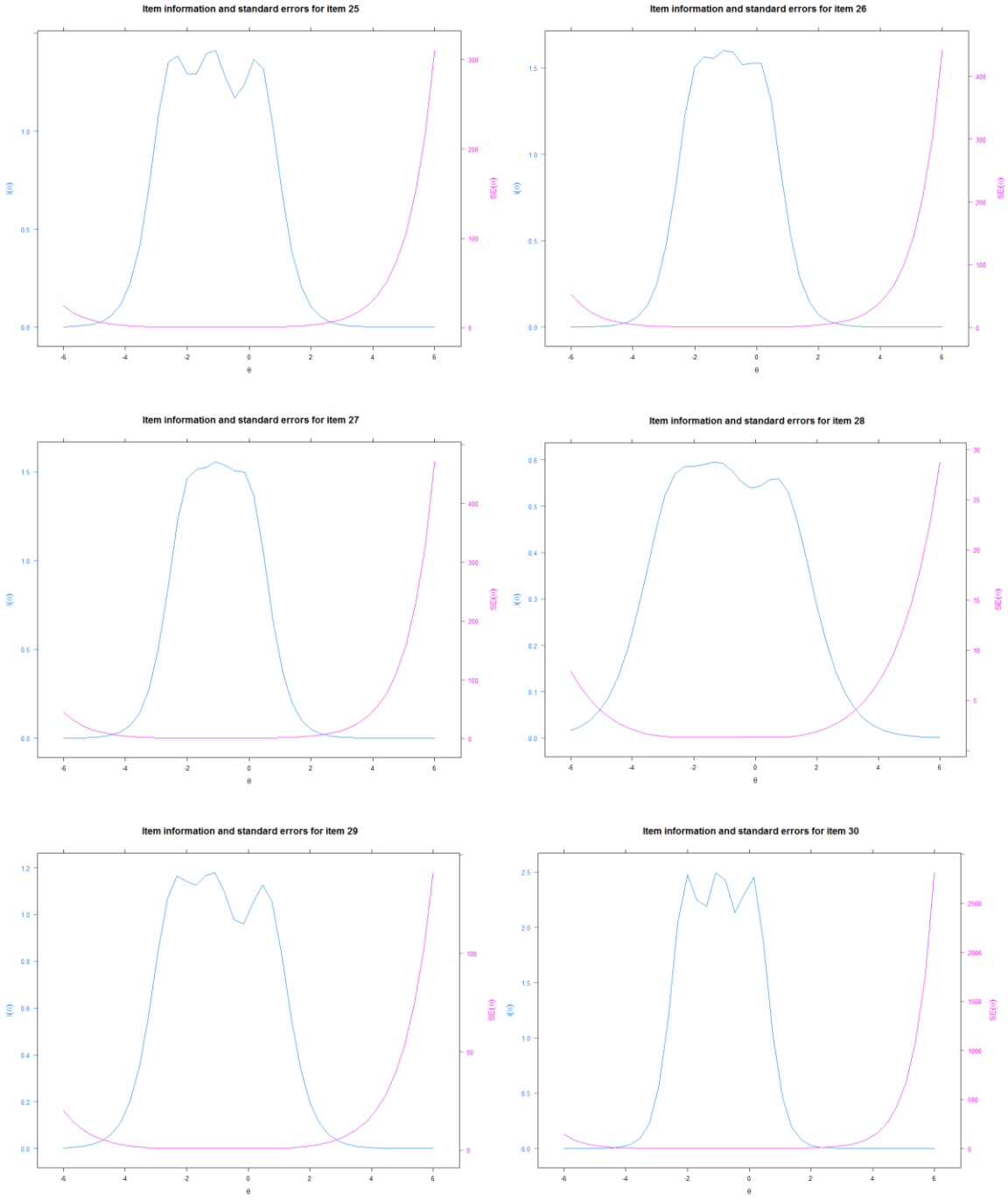
Item Information Functions for Initial Item Bank (Continued)



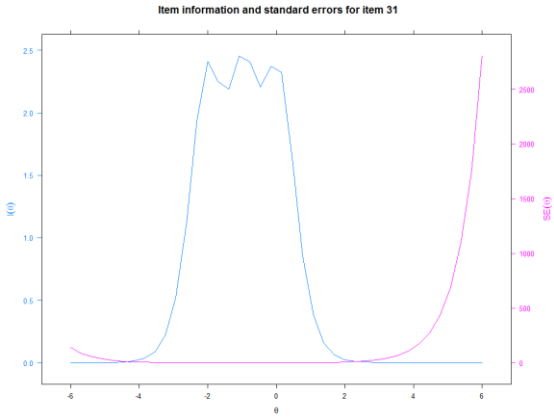
Item Information Functions for Initial Item Bank (Continued)

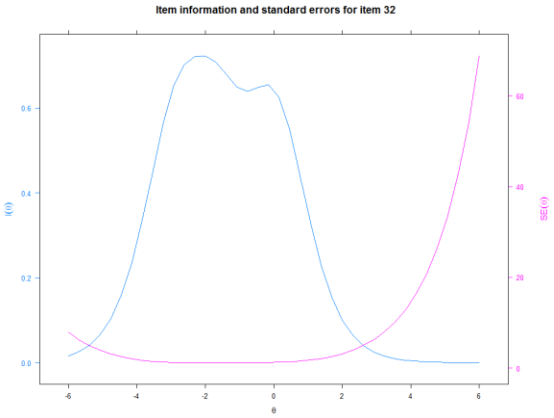


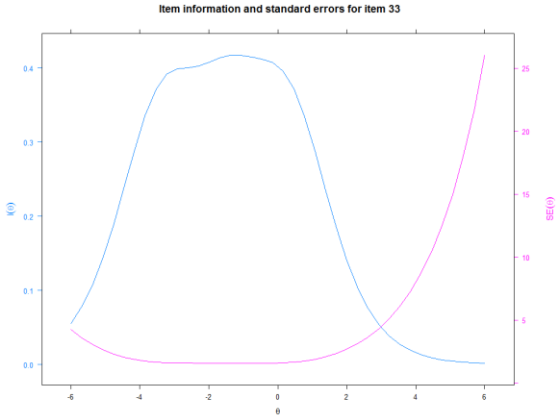
Item Information Functions for Initial Item Bank (Continued)

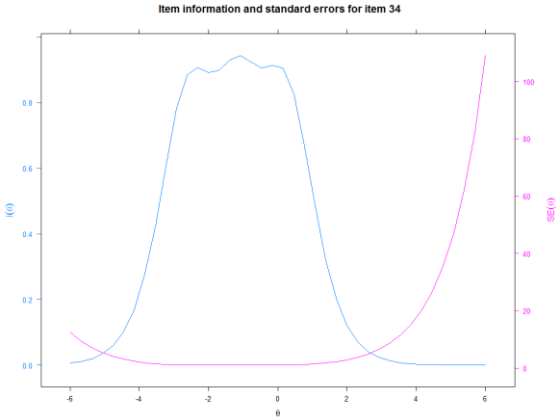


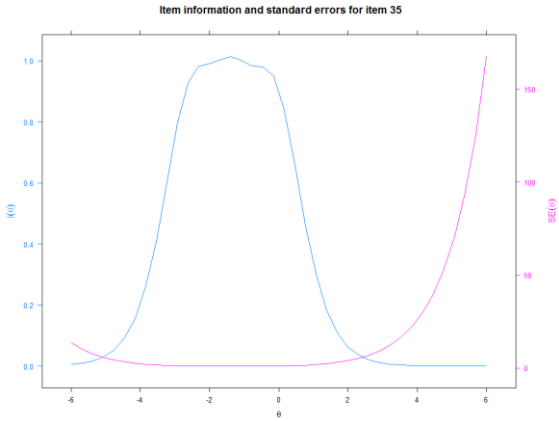
Item Information Functions for Initial Item Bank (Continued)

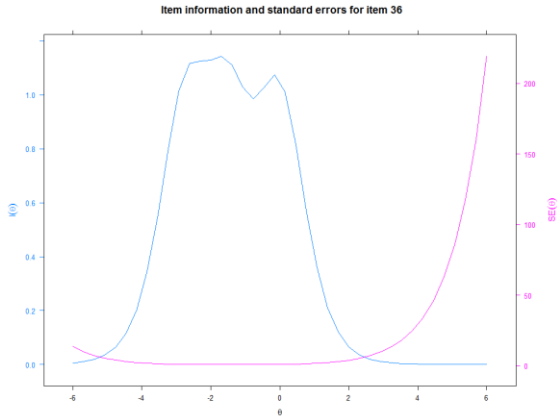




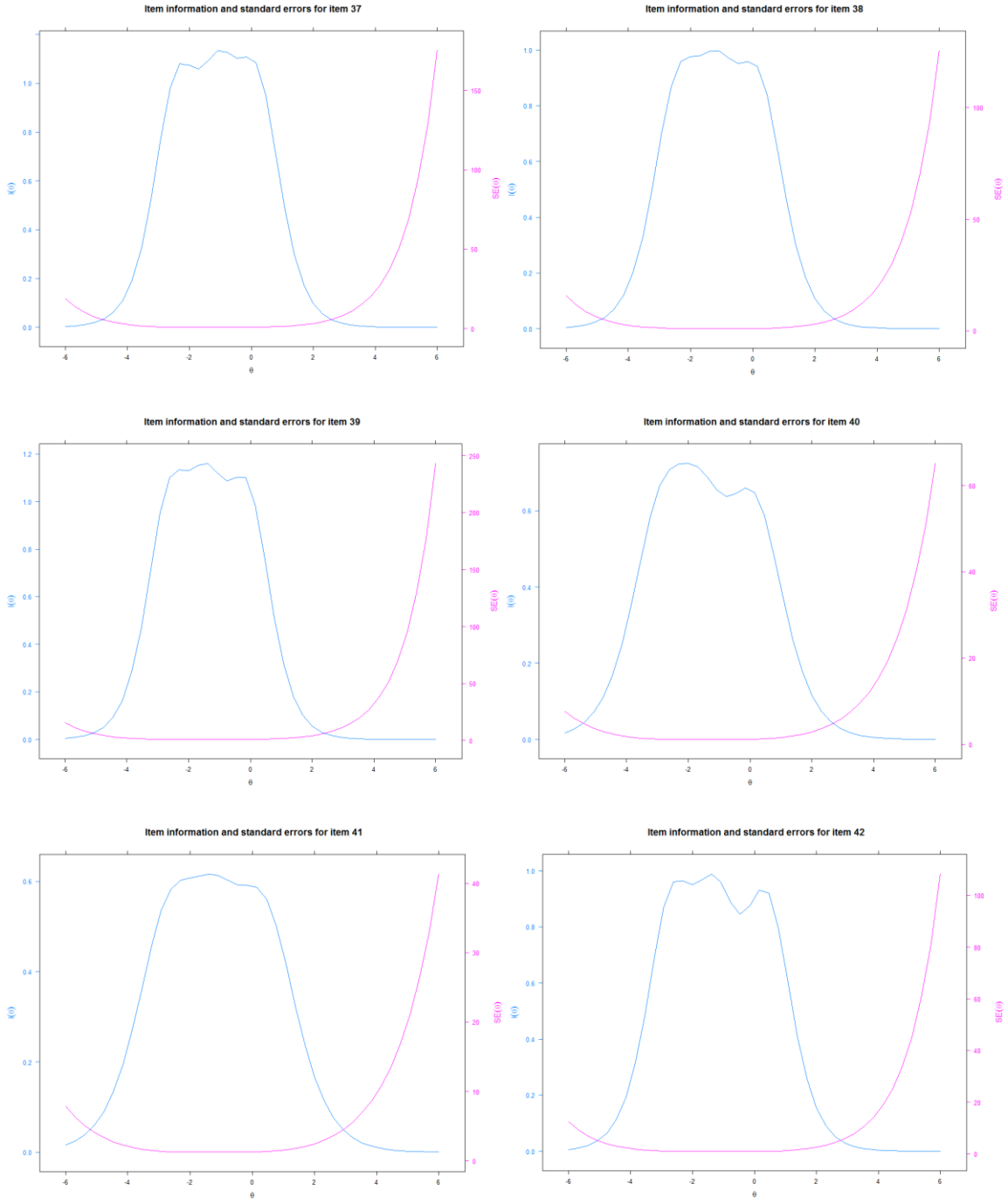




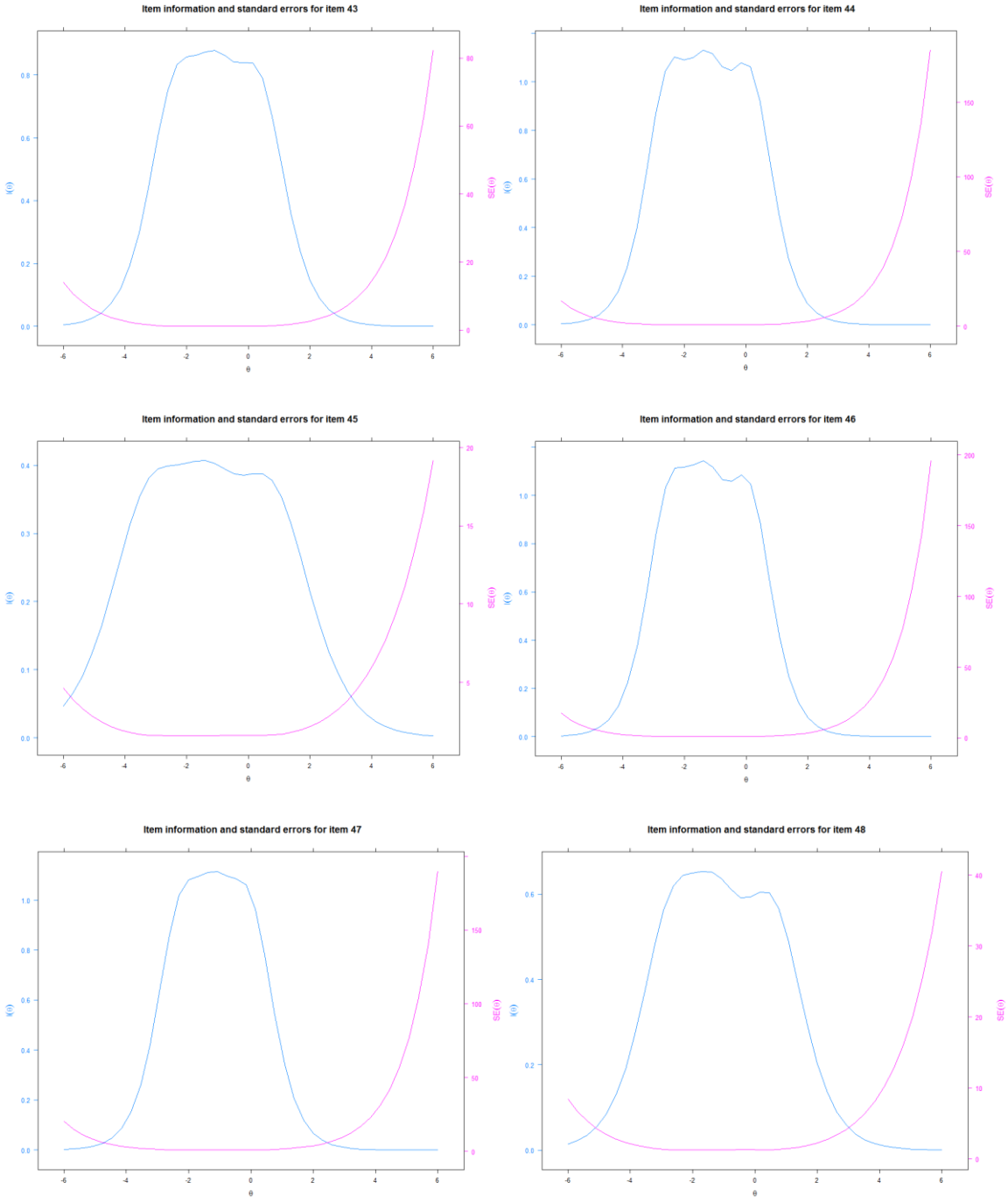




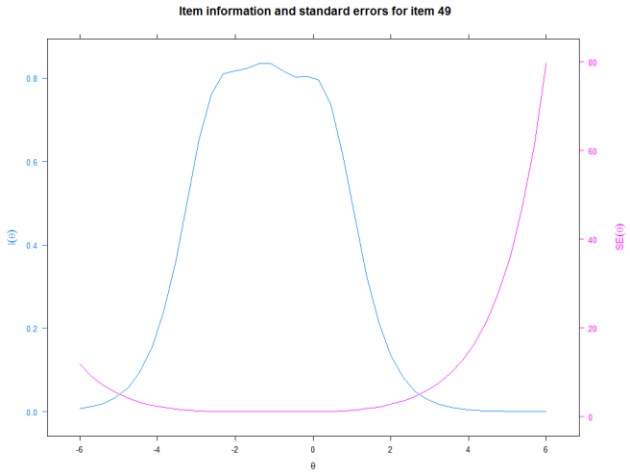
Item Information Functions for Initial Item Bank (Continued)



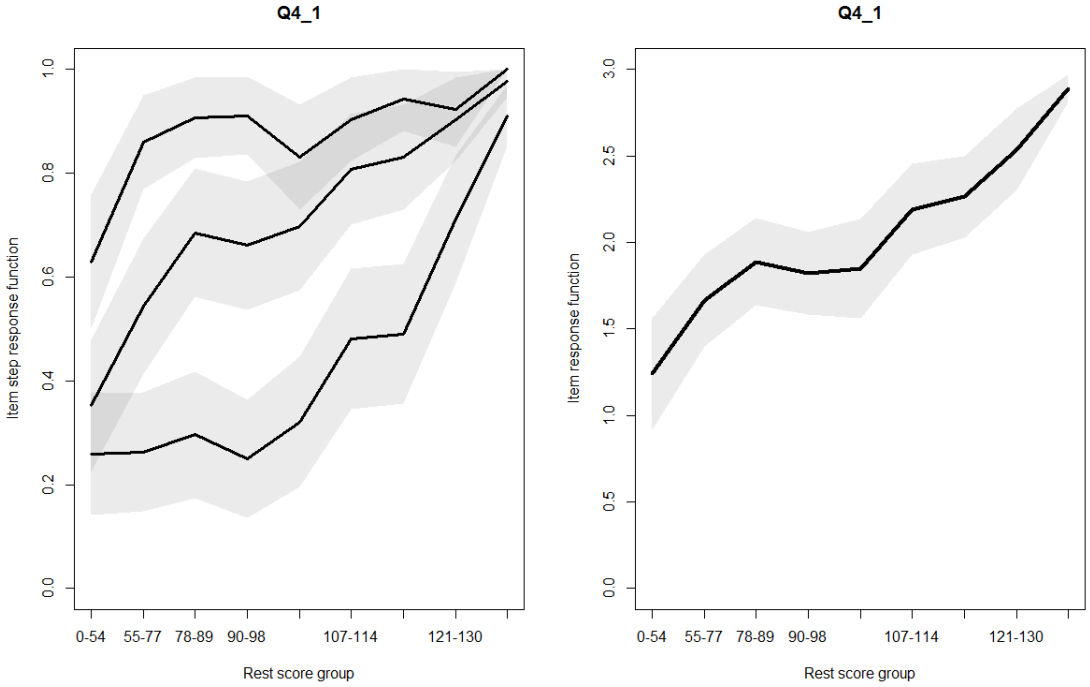
Item Information Functions for Initial Item Bank (Continued)

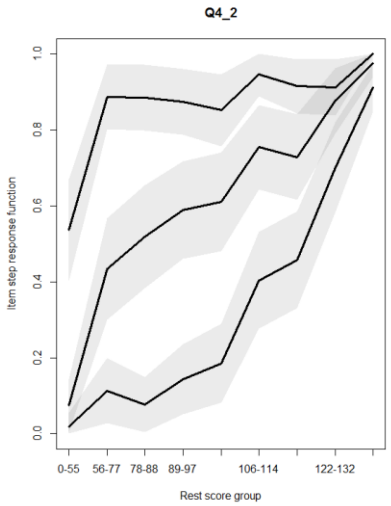


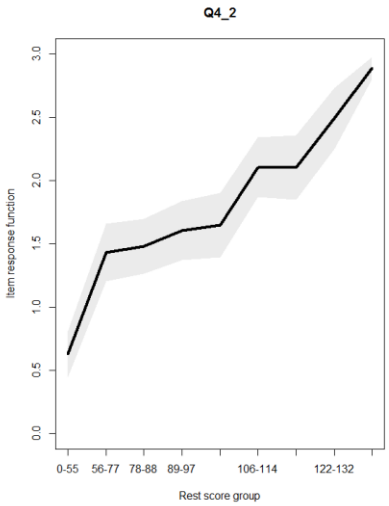
Item Information Functions for Initial Item Bank (Continued)

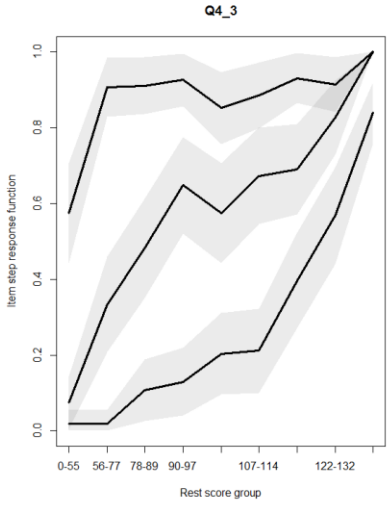


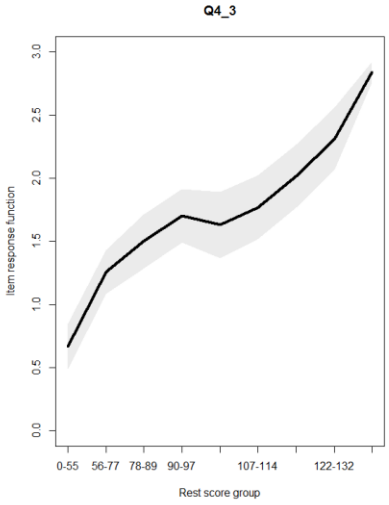
Mokken Scale Analysis for Initial Item Bank

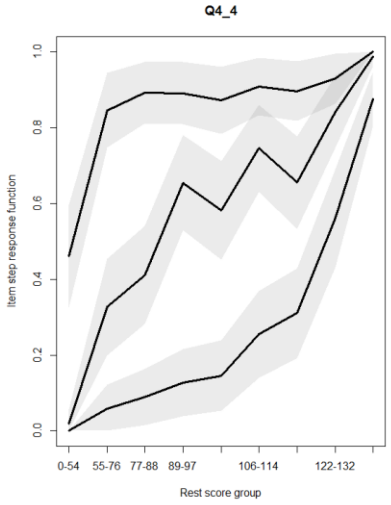


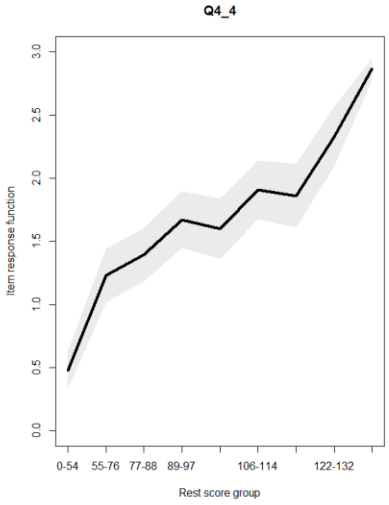

Q4_2
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-55
56-77
78-88
89-97
106-114
122-132
Rest score group

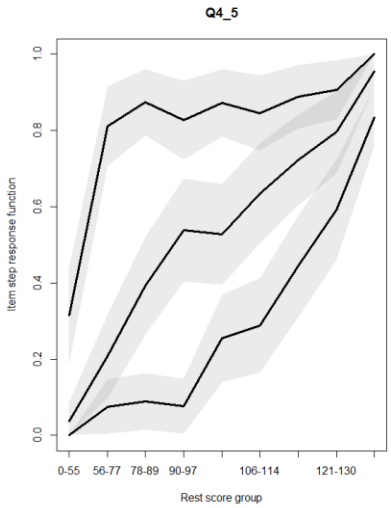

Q4_2
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-55
56-77
78-88
89-97
106-114
122-132
Rest score group

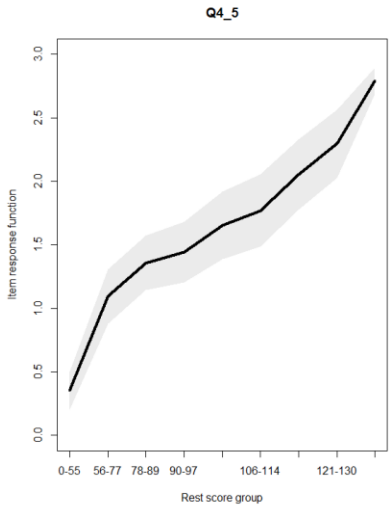

Q4_3
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-55
56-77
78-89
90-97
107-114
122-132
Rest score group

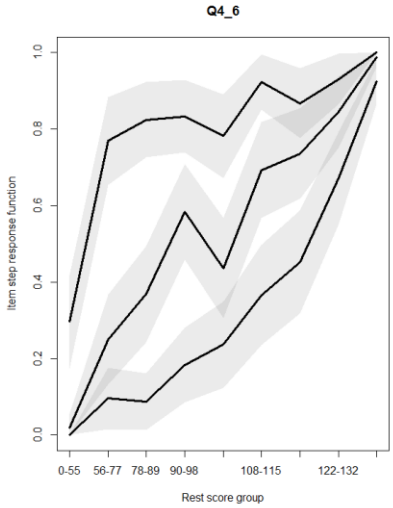

Q4_3
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-55
56-77
78-89
90-97
107-114
122-132
Rest score group

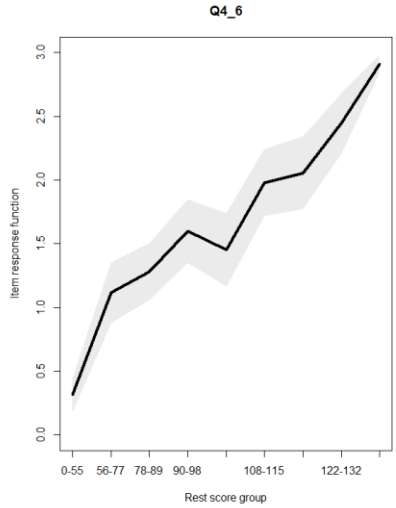

Q4_4
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-54
55-76
77-88
89-97
106-114
122-132
Rest score group

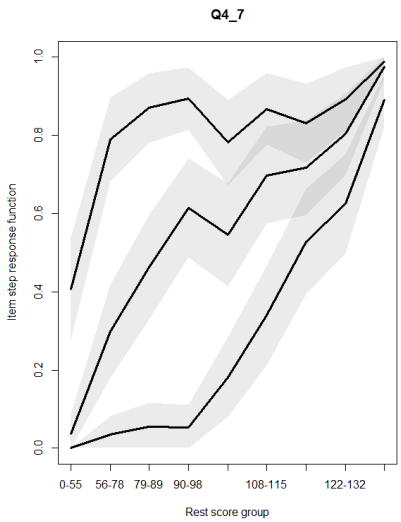

Q4_4
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-54
55-76
77-88
89-97
106-114
122-132
Rest score group

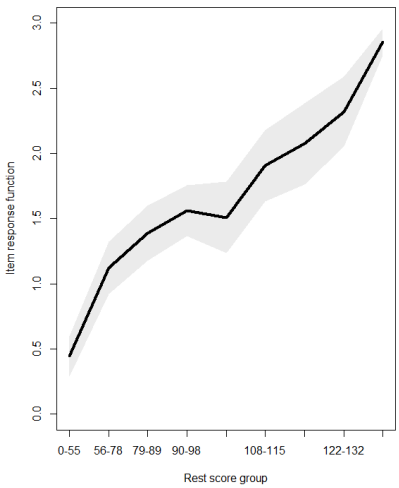

Q4_5
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-55
56-77
78-89
90-97
106-114
121-130
Rest score group


Q4_5
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-55
56-77
78-89
90-97
106-114
121-130
Rest score group


Q4_6
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-55
56-77
78-89
90-98
108-115
122-132
Rest score group


Q4_6
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-55
56-77
78-89
90-98
108-115
122-132
Rest score group


Q4_7
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-55
56-78
79-89
90-98
108-115
122-132
Rest score group


Q4_7
Item response function
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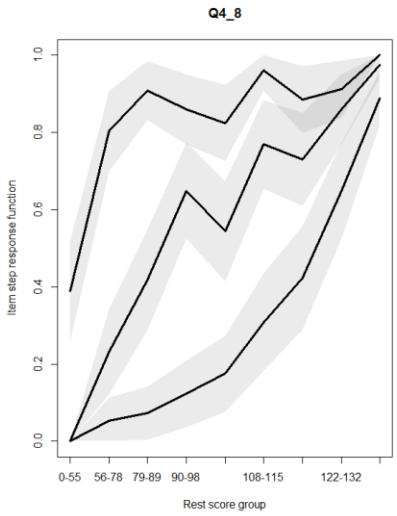
0.5
1.0
1.5
2.0
2.5
3.0
0-55
56-78
79-89
90-98
108-115
122-132
Rest score group


Q4_8
Item step response function
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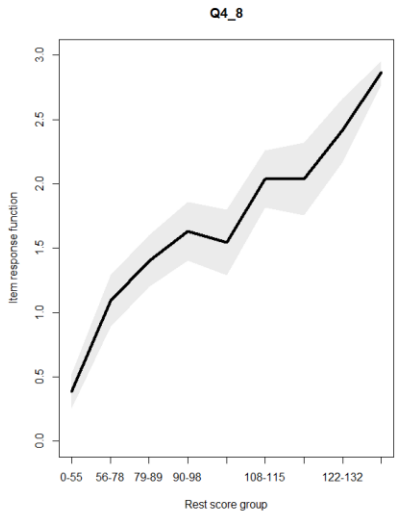
0.4
0.6
0.8
1.0
0-55
56-78
79-89
90-98
108-115
122-132
Rest score group


Q4_8
Item response function
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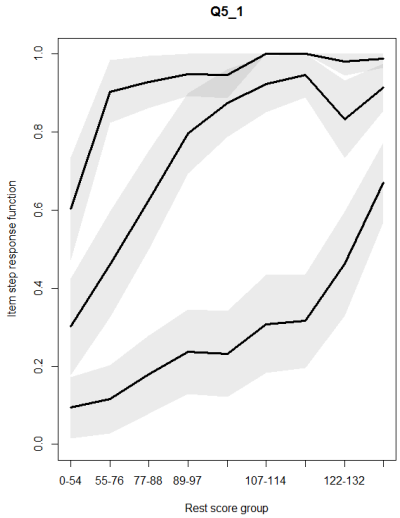
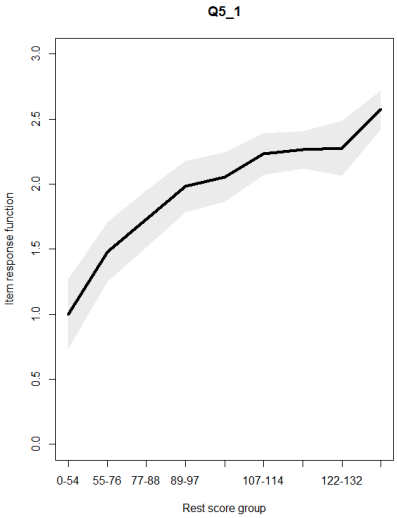
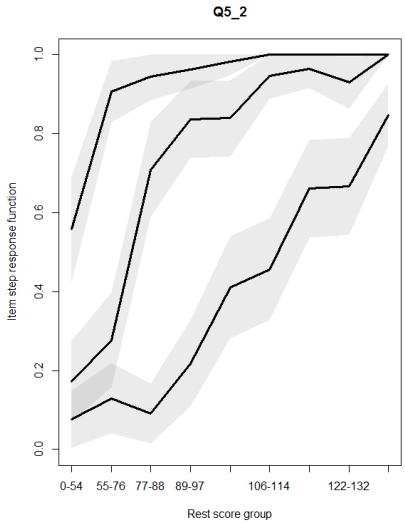
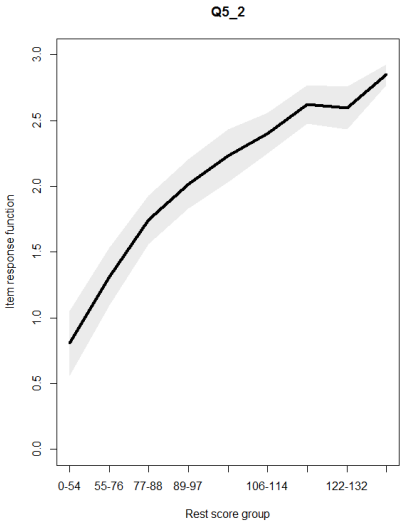
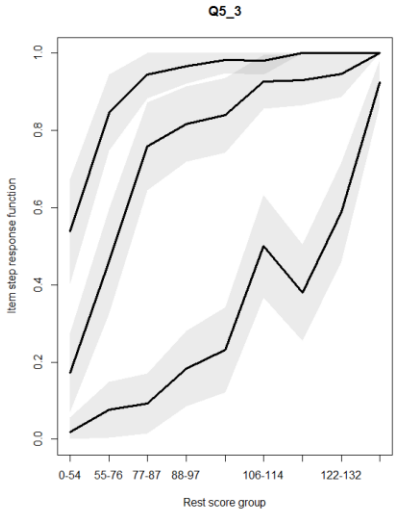
0.5
1.0
1.5
2.0
2.5
3.0
0-55
56-78
79-89
90-98
108-115
122-132
Rest score group


Q5_1
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-54
55-76
77-88
89-97
107-114
122-132
Rest score group


Q5_1
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-54
55-76
77-88
89-97
107-114
122-132
Rest score group


Q5_2
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-54
55-76
77-88
89-97
106-114
122-132
Rest score group


Q5_2
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-54
55-76
77-88
89-97
106-114
122-132
Rest score group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Item step response function
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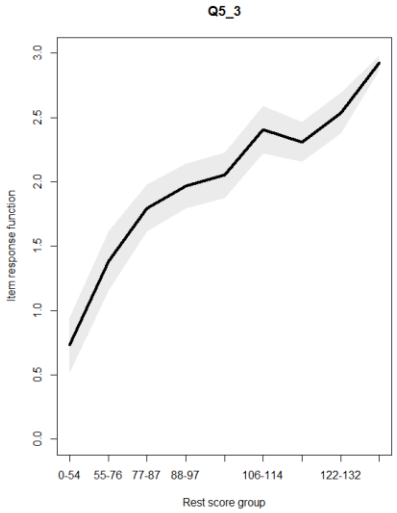
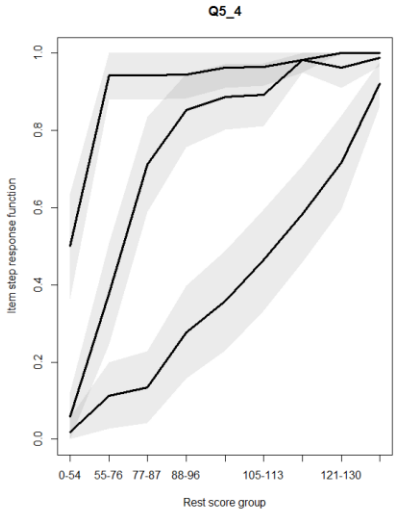
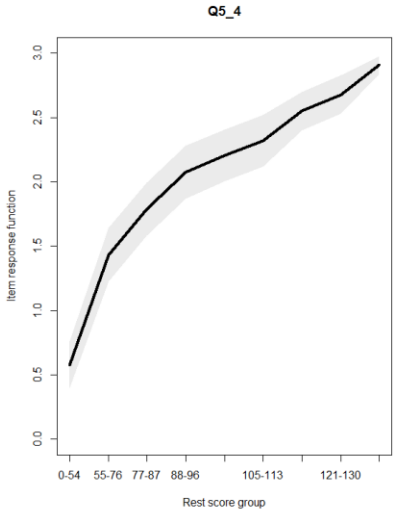
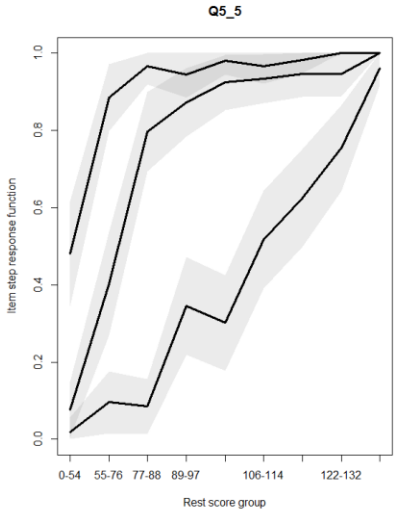
0.4
0.6
0.8
1.0
0-54
55-76
77-87
88-97
106-114
122-132
Rest score group


Q5_3
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-54
55-76
77-87
88-97
106-114
122-132
Rest score group


Q5_4
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-54
55-76
77-87
88-96
105-113
121-130
Rest score group


Q5_4
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-54
55-76
77-87
88-96
105-113
121-130
Rest score group


Q5_5
Item step response function
0.0
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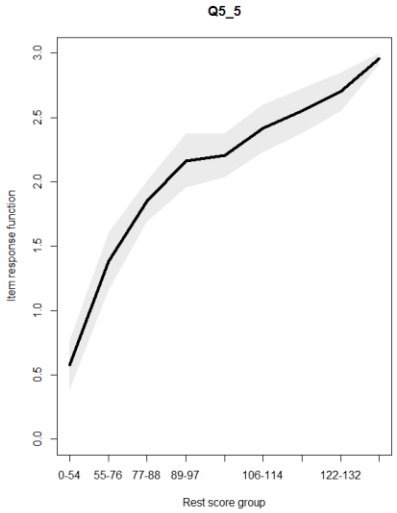
122-132
Rest score group


Q5_5
Item response function
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2.5
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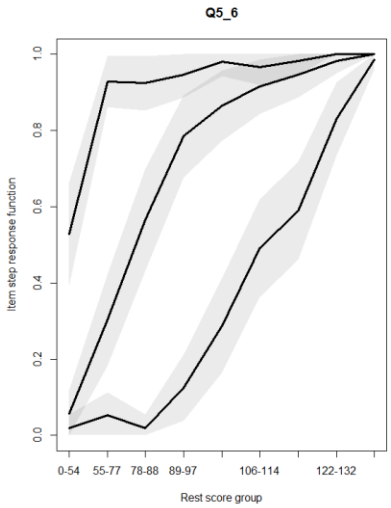
122-132
Rest score group


Q5_6
Item step response function
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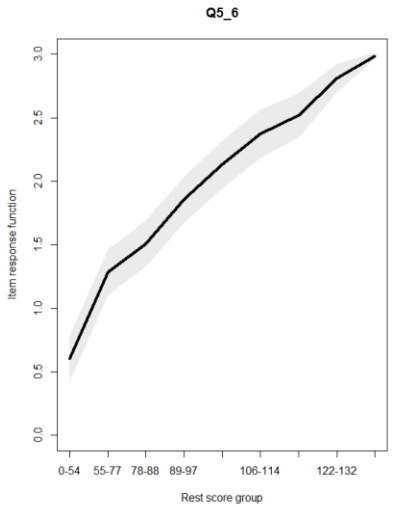
122-132
Rest score group


Q5_6
Item response function
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2.5
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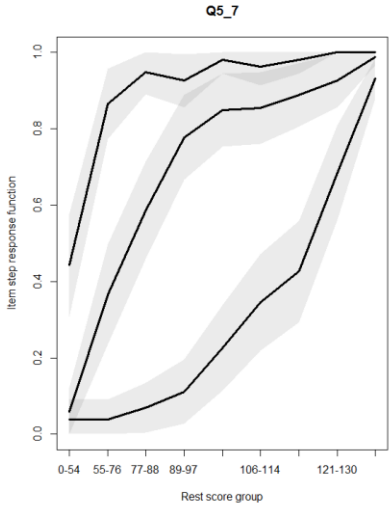
122-132
Rest score group


Q5_7
Item step response function
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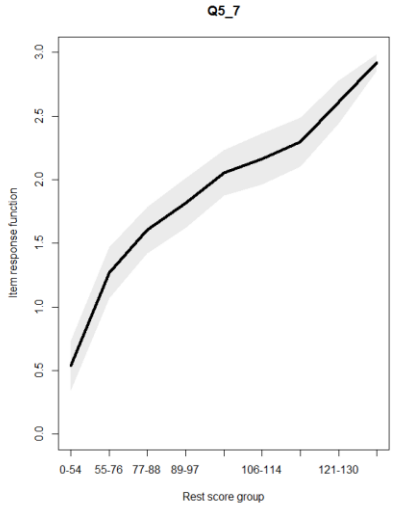
121-130
Rest score group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Item response function
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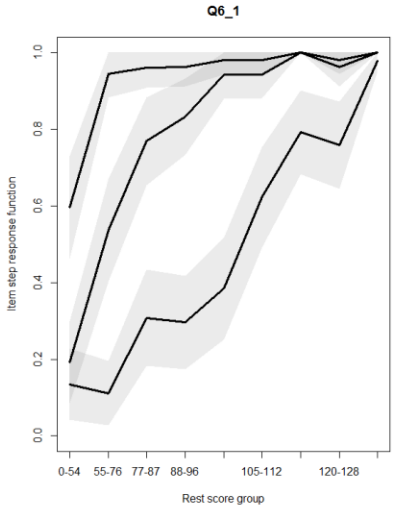
121-130
Rest score group


Q6_1
Item step response function
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77-87
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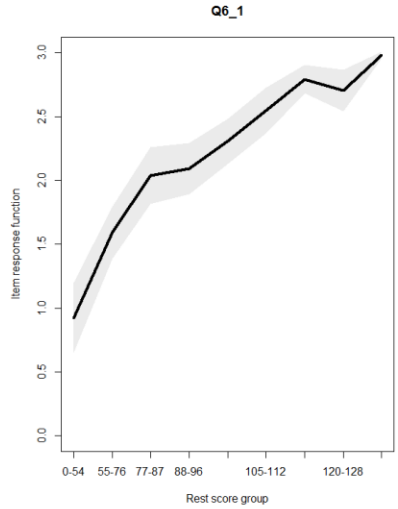
105-112
120-128
Rest score group


Q6_1
Item response function
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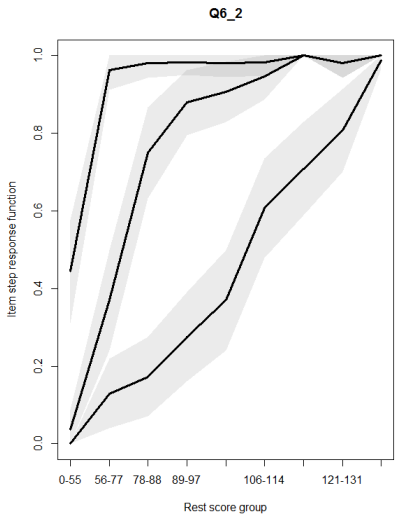
120-128
Rest score group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Item step response function
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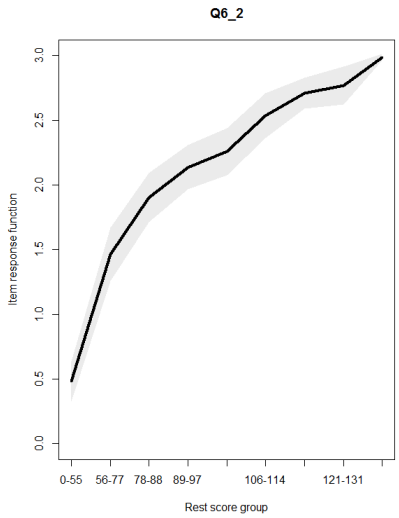
121-131
Rest score group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Item response function
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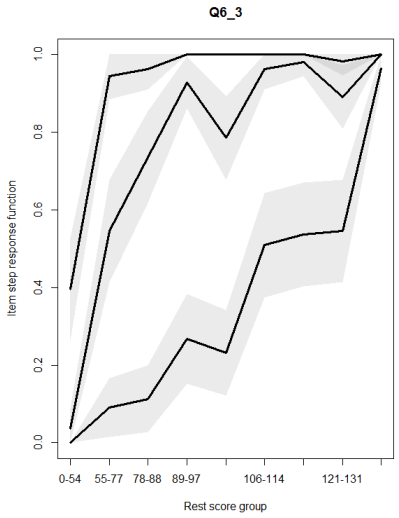
106-114
121-131
Rest score group


Q6_3
Item step response function
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0.6
0.8
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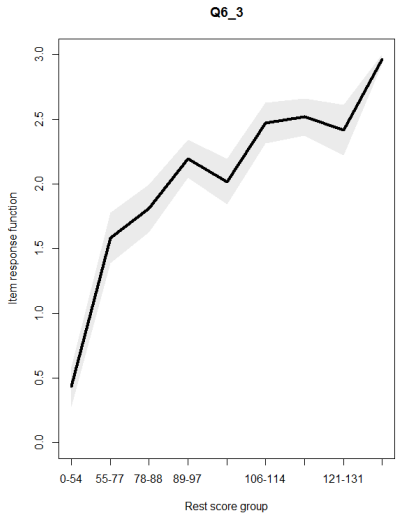
106-114
121-131
Rest score group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Item response function
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2.5
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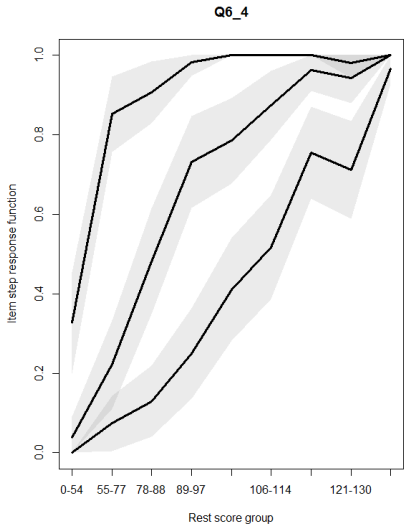
78-88
89-97
106-114
121-131
Rest score group


Q6_4
Item step response function
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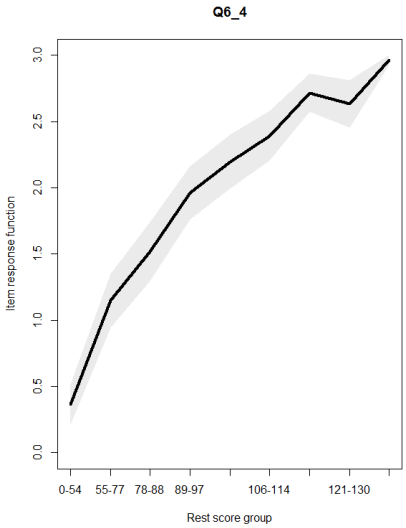
106-114
121-130
Rest score group


Q6_4
Item response function
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1.5
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2.5
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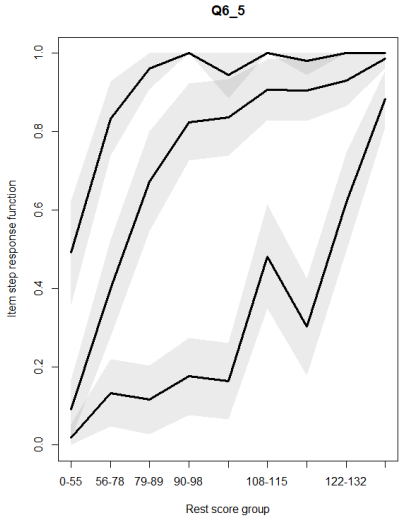
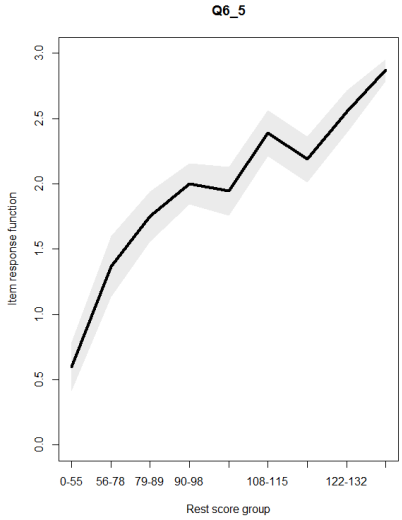
55-77
78-88
89-97
106-114
121-130
Rest score group


Q6_5
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-55
56-78
79-89
90-98
108-115
122-132
Rest score group


Q6_5
Item response function
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1.5
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2.5
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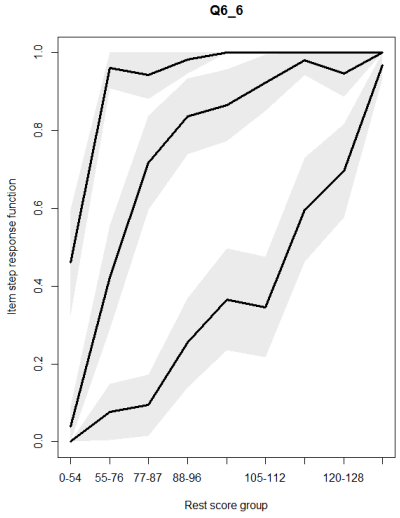
56-78
79-89
90-98
108-115
122-132
Rest score group


Q6_6
Item step response function
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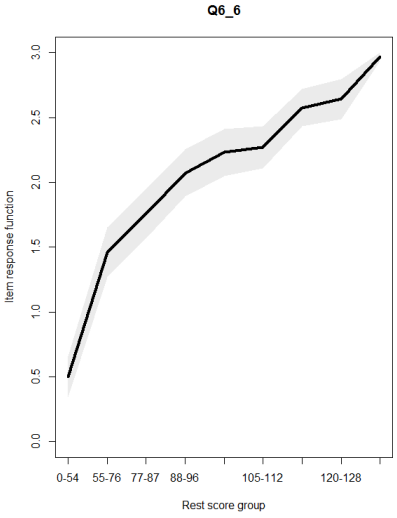
105-112
120-128
Rest score group


Q6_6
Item response function
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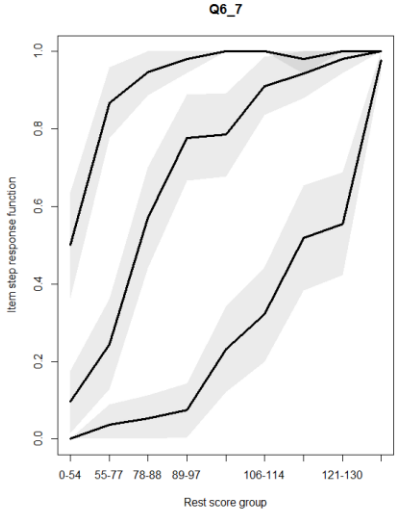
1.5
2.0
2.5
3.0
0-54
55-76
77-87
88-96
105-112
120-128
Rest score group


Q6_7
Item step response function
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0.8
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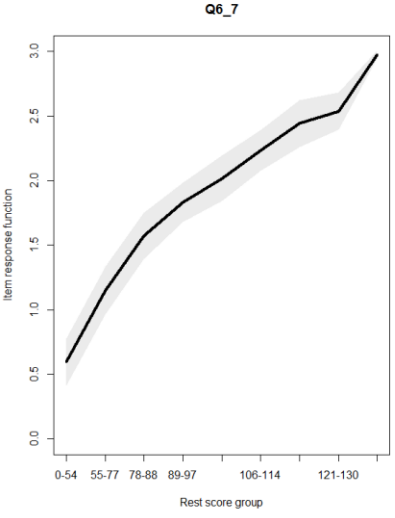
106-114
121-130
Rest score group


Q6_7
Item response function
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1.5
2.0
2.5
3.0
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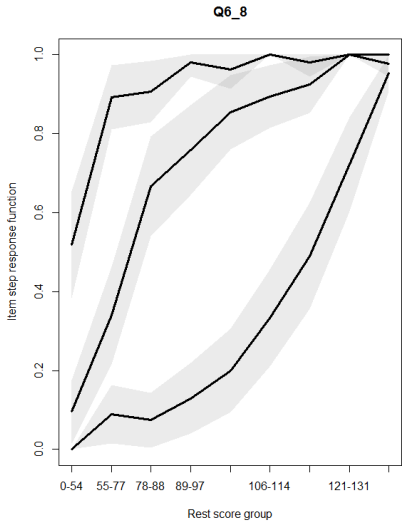
106-114
121-130
Rest score group


Q6_8
Item step response function
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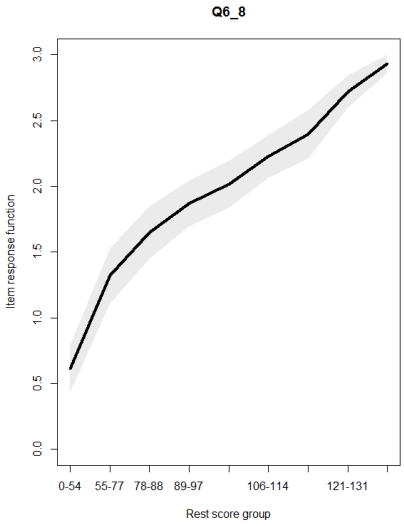
89-97
106-114
121-131
Rest score group


Q6_8
Item response function
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2.5
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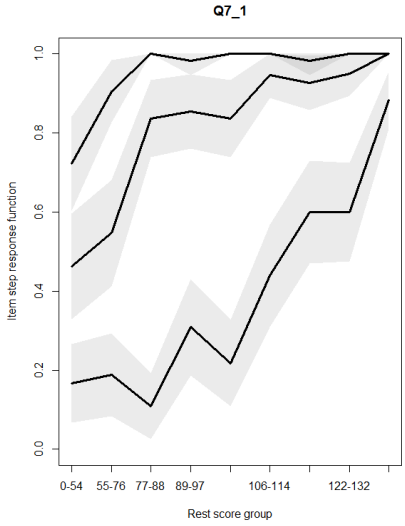
89-97
106-114
121-131
Rest score group


Q7_1
Item step response function
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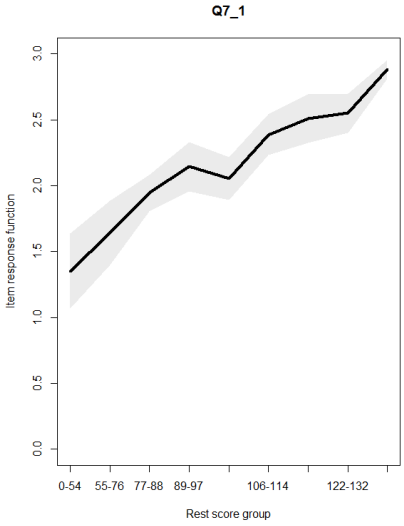
106-114
122-132
Rest score group


Q7_1
Item response function
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2.5
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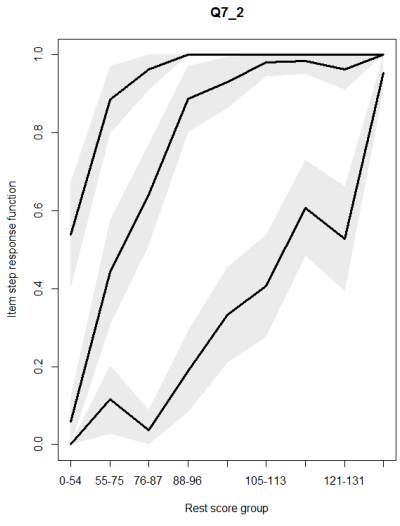
77-88
89-97
106-114
122-132
Rest score group


Q7_2
Item step response function
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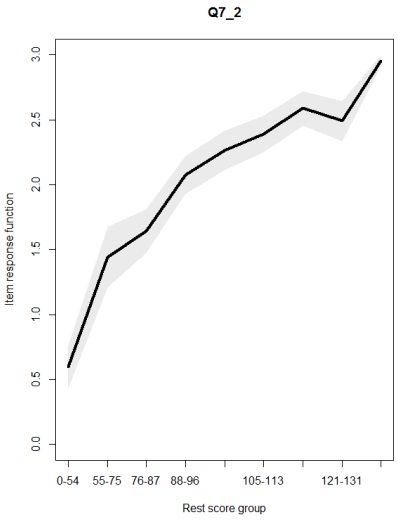
121-131
Rest score group


Q7_2
Item response function
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2.5
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76-87
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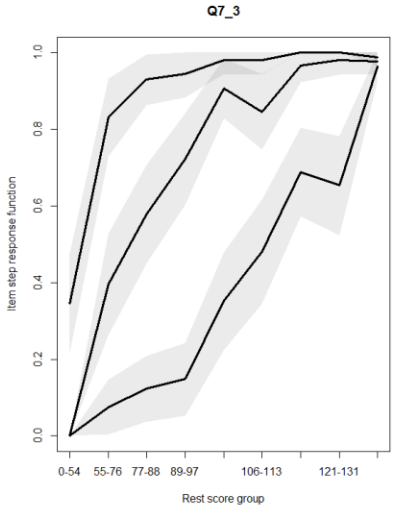
105-113
121-131
Rest score group


Q7_3
Item step response function
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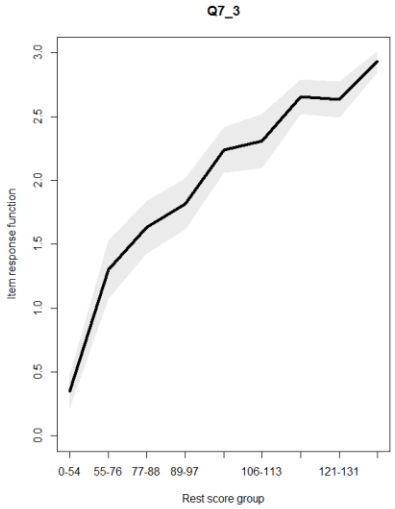
121-131
Rest score group


Q7_3
Item response function
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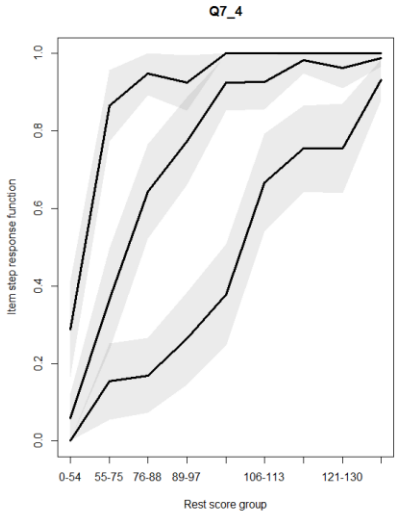
106-113
121-131
Rest score group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Item step response function
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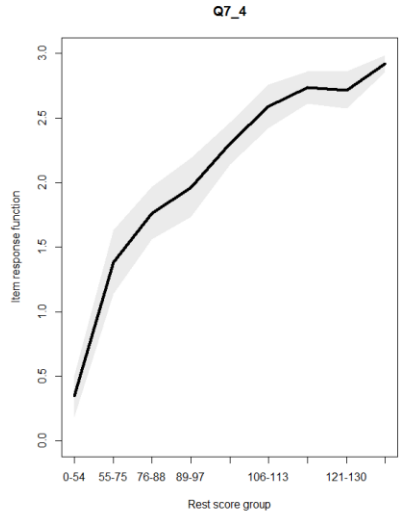
121-130
Rest score group


Q7_4
Item response function
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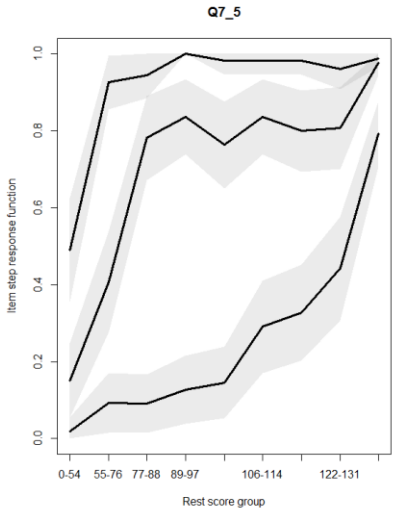
121-130
Rest score group


Q7_5
Item step response function
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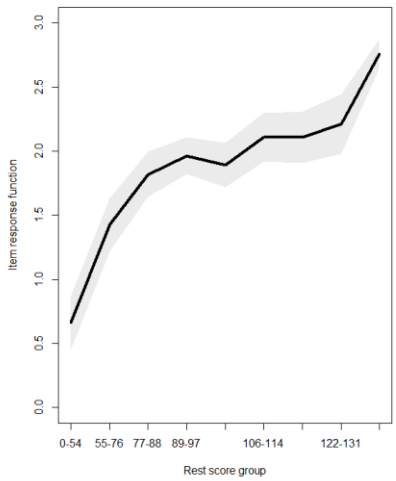
Rest score group


Q7_5
Item response function
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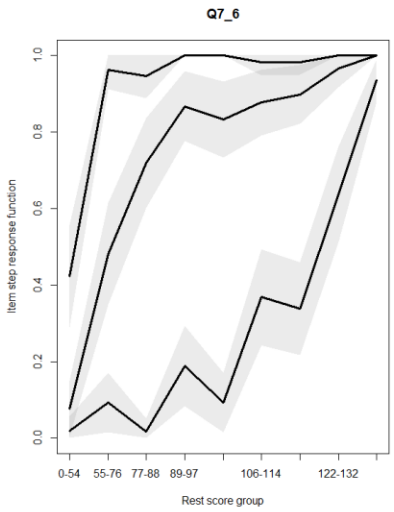
122-131
Rest score group


Q7_6
Item step response function
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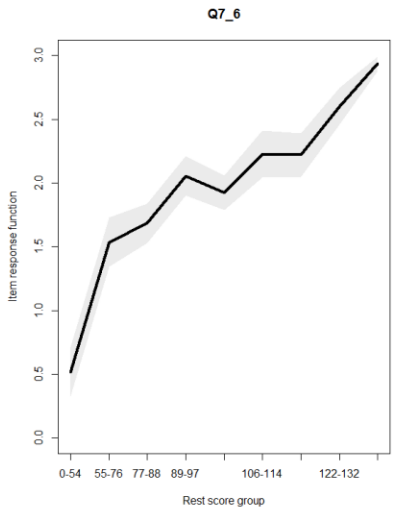
Rest score group


Q7_6
Item response function
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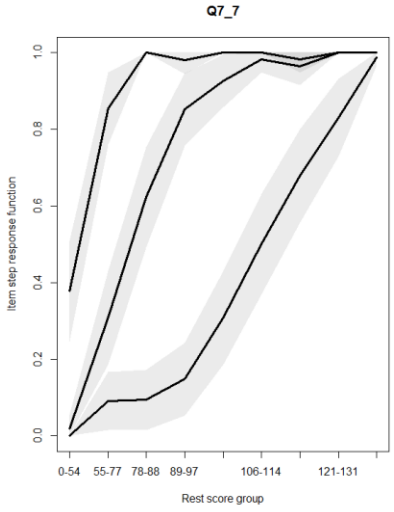
122-132
Rest score group


Q7_7
Item step response function
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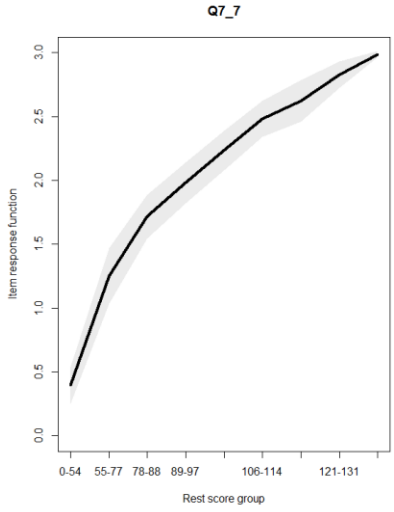
121-131
Rest score group


Q7_7
Item response function
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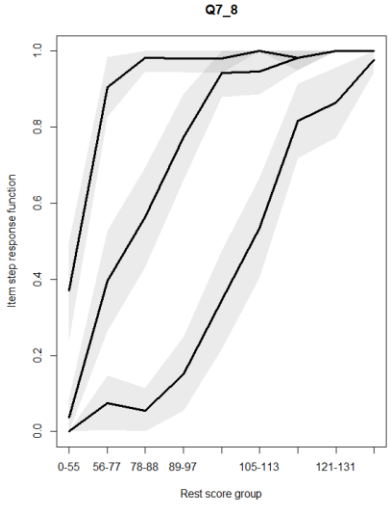
121-131
Rest score group


Q7_8
Item step response function
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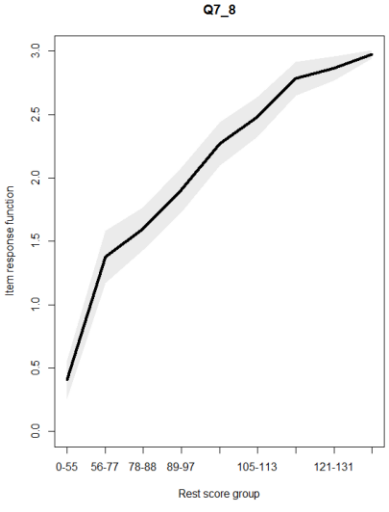
121-131
Rest score group


Q7_8
Item response function
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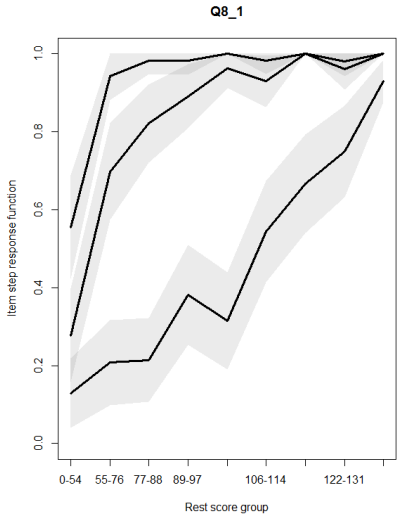
121-131
Rest score group


Q8_1
Item step response function
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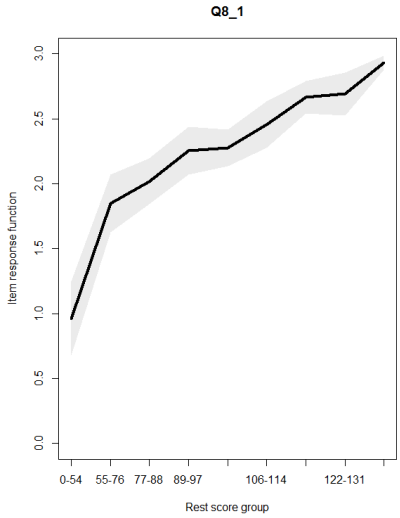
77-88
89-97
106-114
122-131
Rest score group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2.5
3.0
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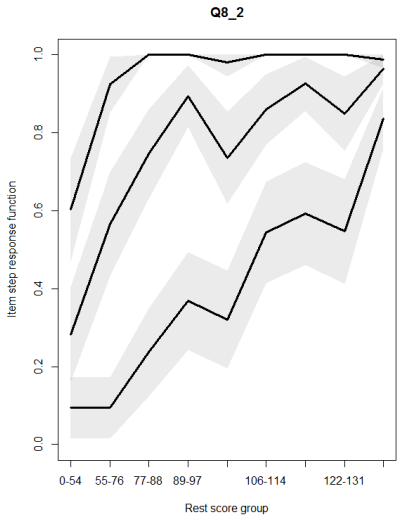
77-88
89-97
106-114
122-131
Rest score group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Item step response function
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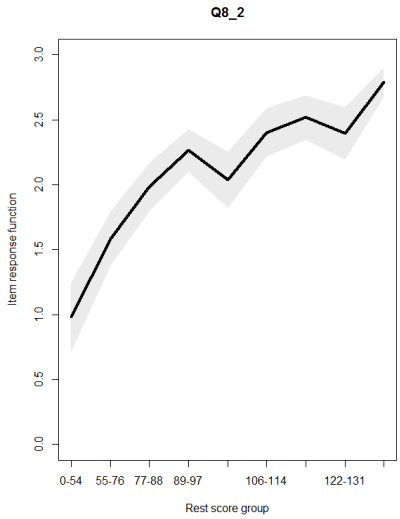
122-131
Rest score group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2.5
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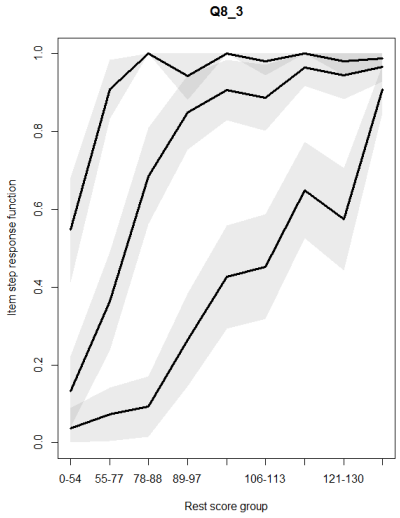
106-114
122-131
Rest score group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Item step response function
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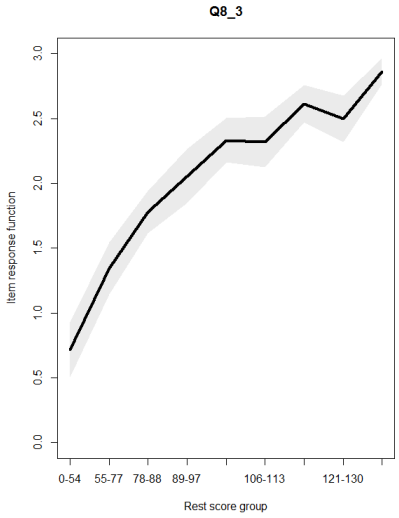
121-130
Rest score group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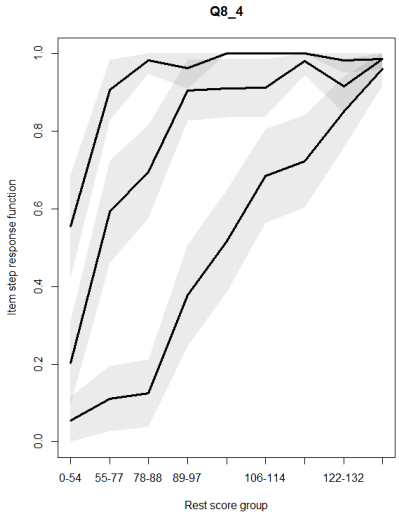
Rest score group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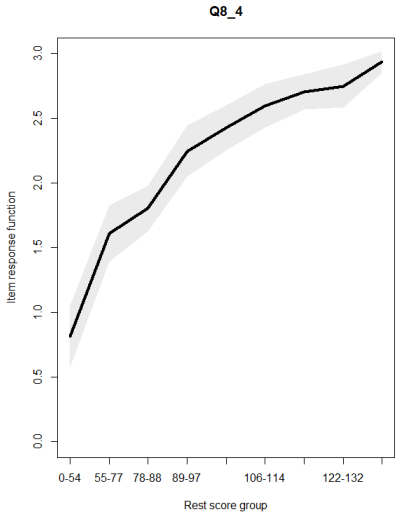
122-132
Rest score group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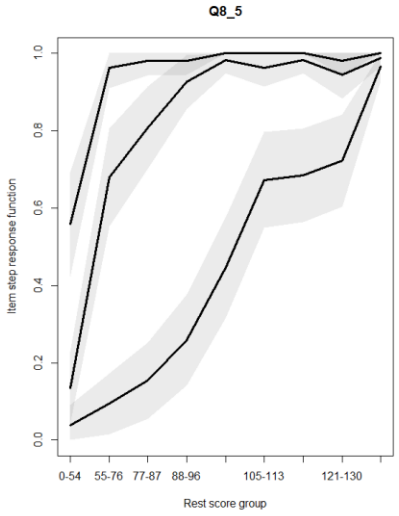
122-132
Rest score group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Item step response function
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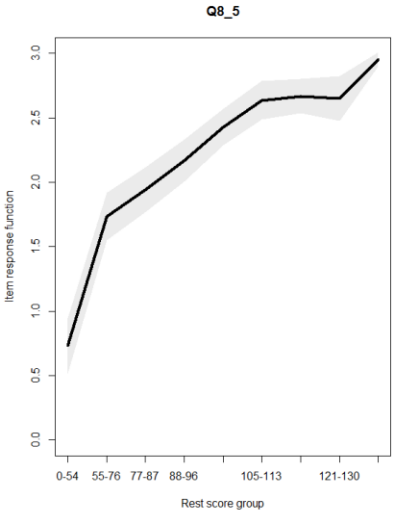
121-130
Rest score group


Q8_5
Item response function
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2.5
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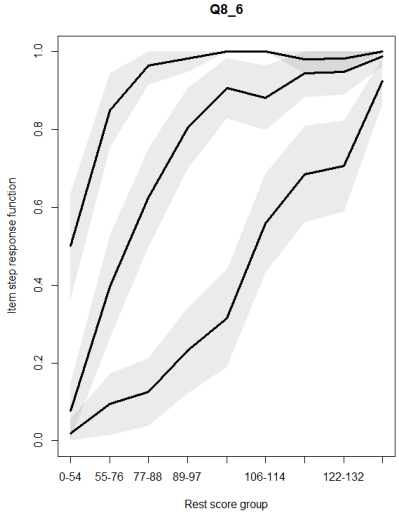
77-87
88-96
105-113
121-130
Rest score group


Q8_6
Item step response function
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0.8
1.0
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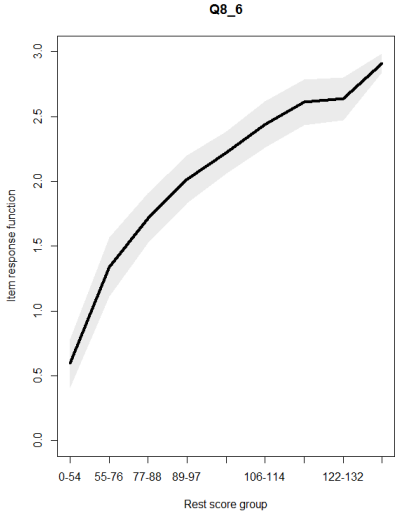
106-114
122-132
Rest score group


Q8_6
Item response function
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1.5
2.0
2.5
3.0
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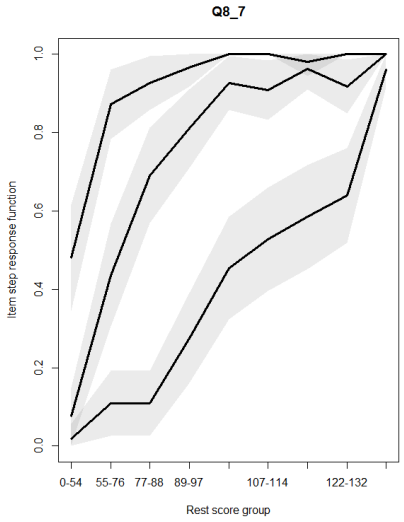
77-88
89-97
106-114
122-132
Rest score group


Q8_7
Item step response function
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0.8
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77-88
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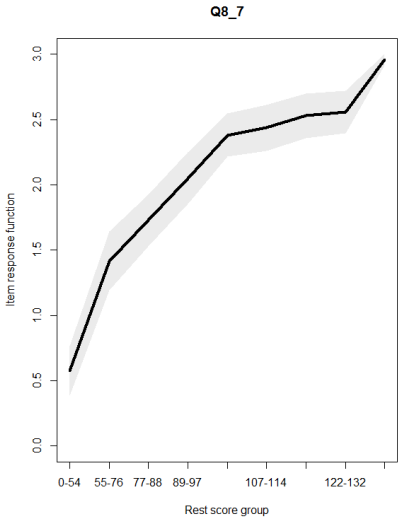
107-114
122-132
Rest score group


Q8_7
Item response function
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77-88
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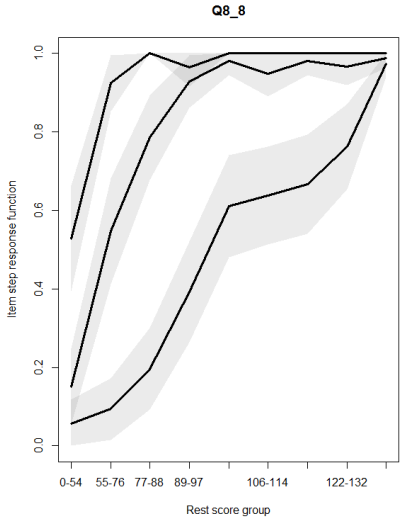
107-114
122-132
Rest score group


Q8_8
Item step response function
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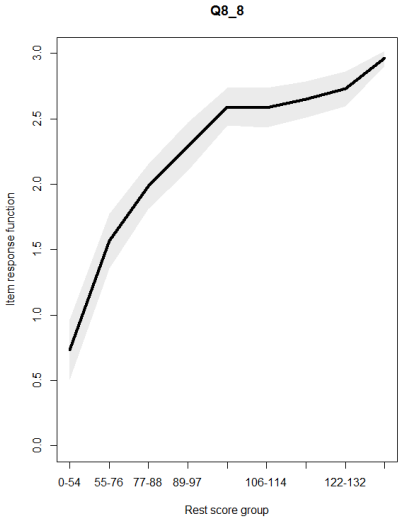
106-114
122-132
Rest score group


Q8_8
Item response function
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0.5
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1.5
2.0
2.5
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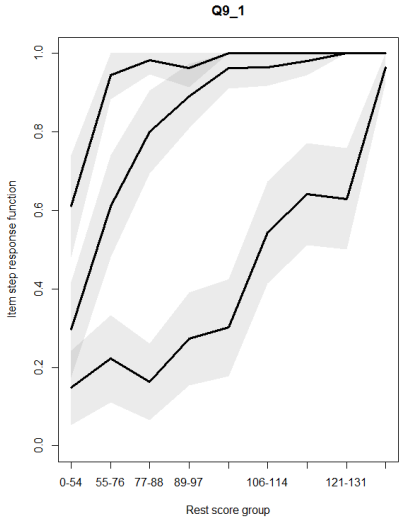
77-88
89-97
106-114
122-132
Rest score group


Q9_1
Item step response function
0.0
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1.0
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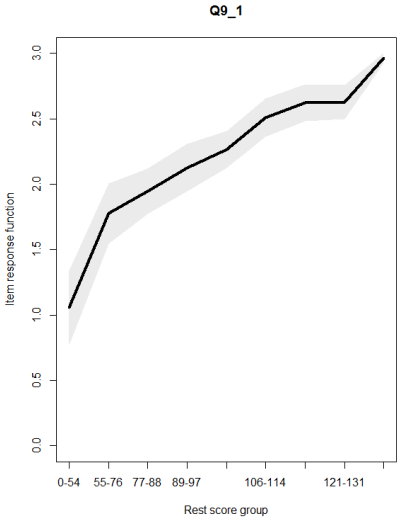
55-76
77-88
89-97
106-114
121-131
Rest score group


Q9_1
Item response function
0.0
0.5
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2.5
3.0
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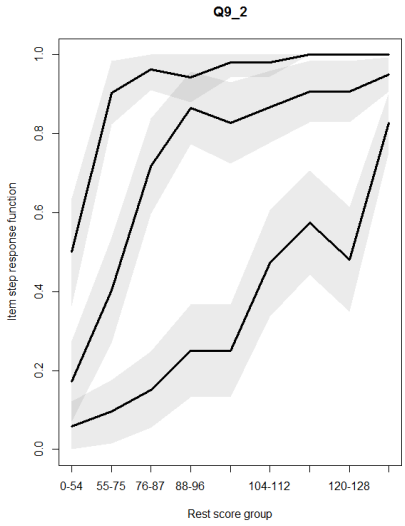
55-76
77-88
89-97
106-114
121-131
Rest score group


Q9_2
Item step response function
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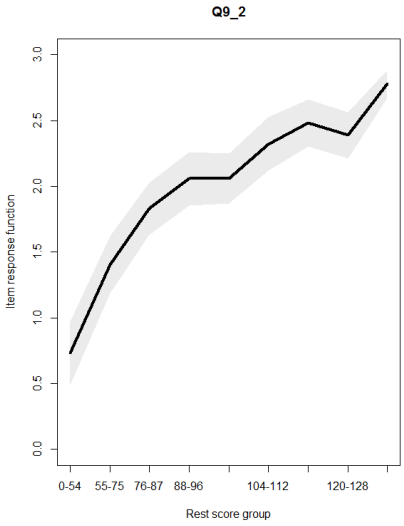
88-96
104-112
120-128
Rest score group


Q9_2
Item response function
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88-96
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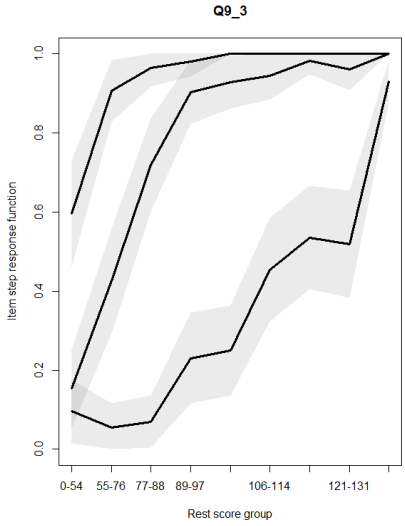
120-128
Rest score group


Q9_3
Item step response function
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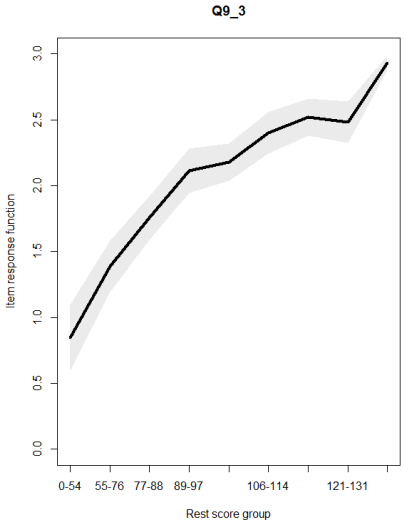
121-131
Rest score group


Q9_3
Item response function
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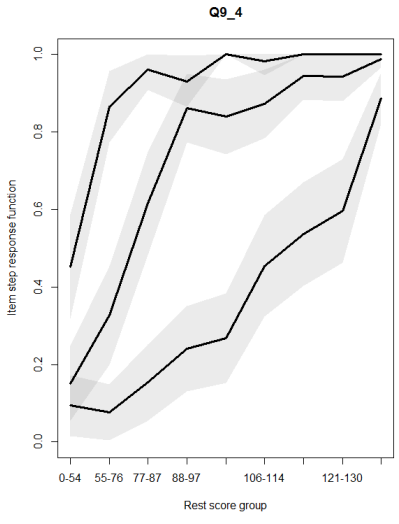
2.0
2.5
3.0
0-54
55-76
77-88
89-97
106-114
121-131
Rest score group


Q9_4
Item step response function
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0.8
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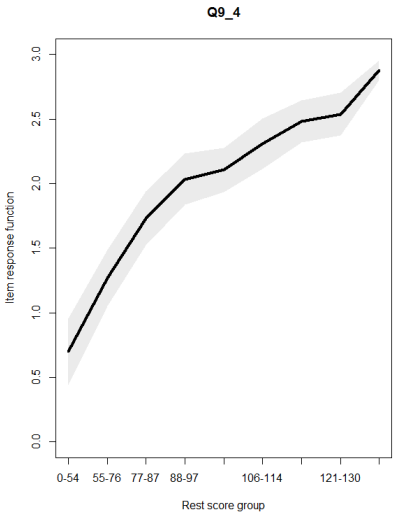
55-76
77-87
88-97
106-114
121-130
Rest score group


Q9_4
Item response function
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2.5
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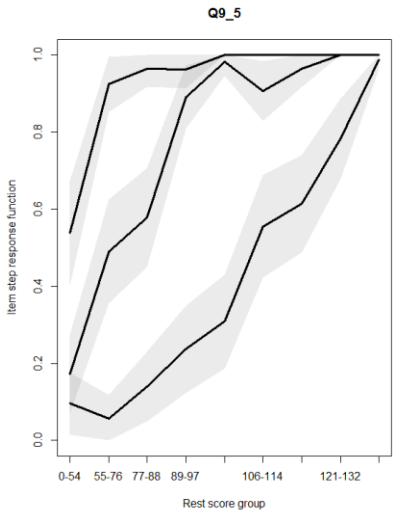
77-87
88-97
106-114
121-130
Rest score group


Q9_5
Item step response function
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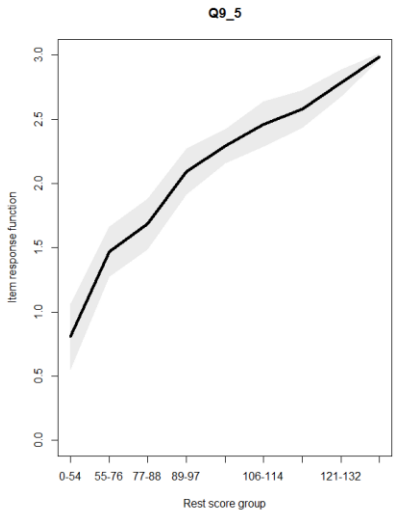
106-114
121-132
Rest score group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Item response function
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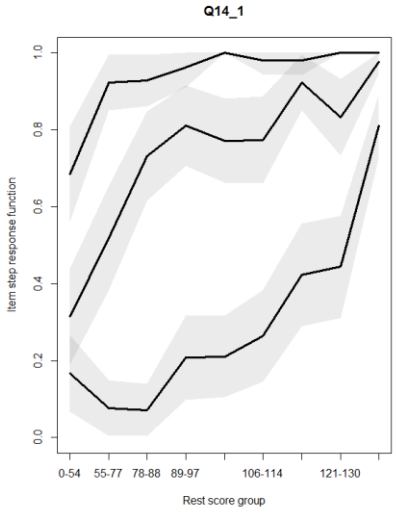
106-114
121-132
Rest score group


Q14_1
Item step response function
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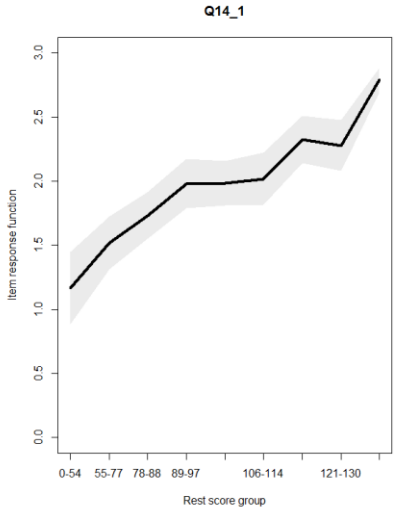
106-114
121-130
Rest score group


Q14_1
Item response function
0.0
0.5
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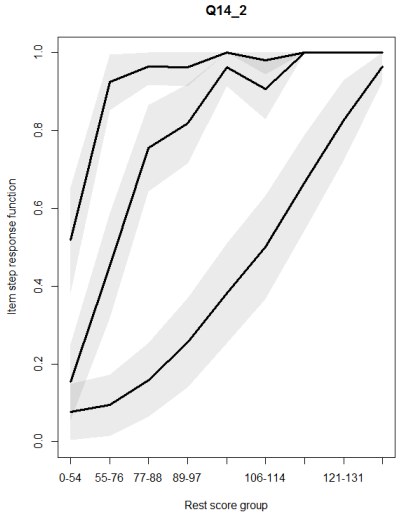
2.0
2.5
3.0
0-54
55-77
78-88
89-97
106-114
121-130
Rest score group


Q14_2
Item step response function
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0.8
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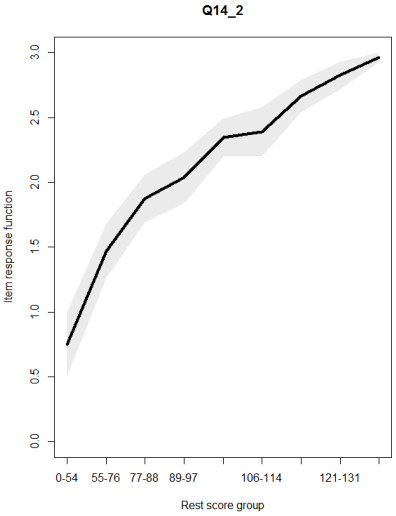
121-131
Rest score group


Q14_2
Item response function
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2.5
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77-88
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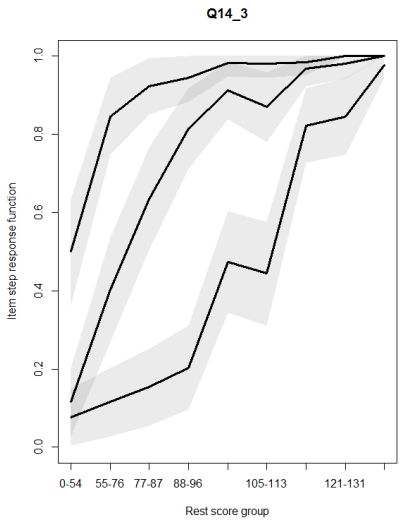
106-114
121-131
Rest score group


Q14_3
Item step response function
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77-87
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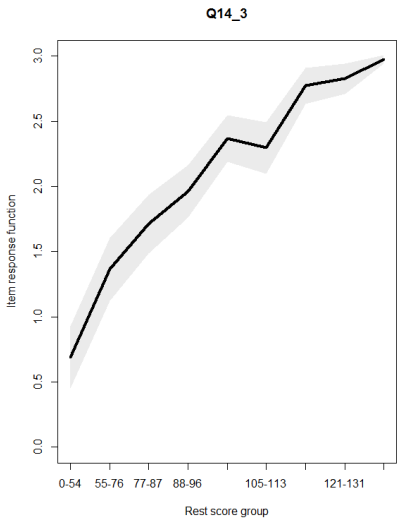
121-131
Rest score group


Q14_3
Item response function
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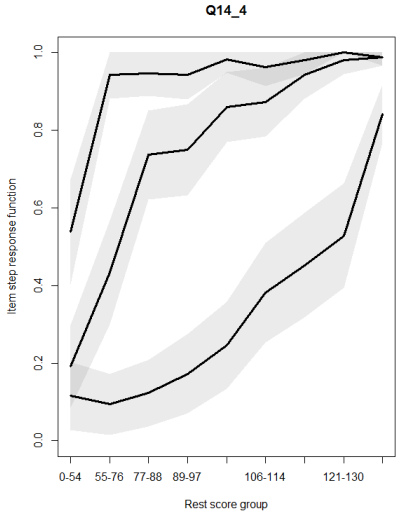
105-113
121-131
Rest score group


Q14_4
Item step response function
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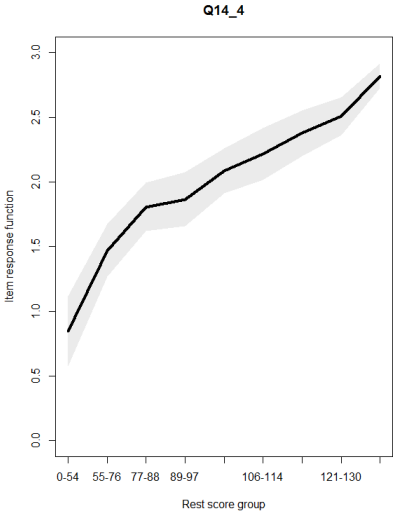
89-97
106-114
121-130
Rest score group


Q14_4
Item response function
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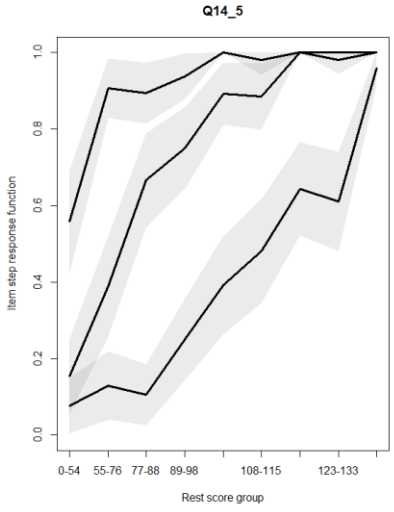
0.5
1.0
1.5
2.0
2.5
3.0
0-54
55-76
77-88
89-97
106-114
121-130
Rest score group


Q14_5
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-54
55-76
77-88
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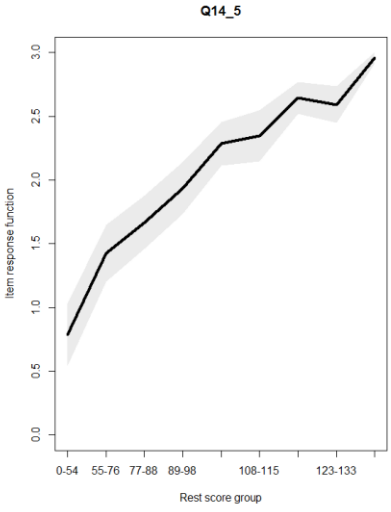
108-115
123-133
Rest score group


Q14_5
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-54
55-76
77-88
89-98
108-115
123-133
Rest score group

APPENDIX J

PCH SCALE, Q_3 STATISTICS TABLE, ITEM INFORMATION FUNCTIONS, AND MOKKEN SCALE ANALYSIS PLOTS OF THE PCH SCALE

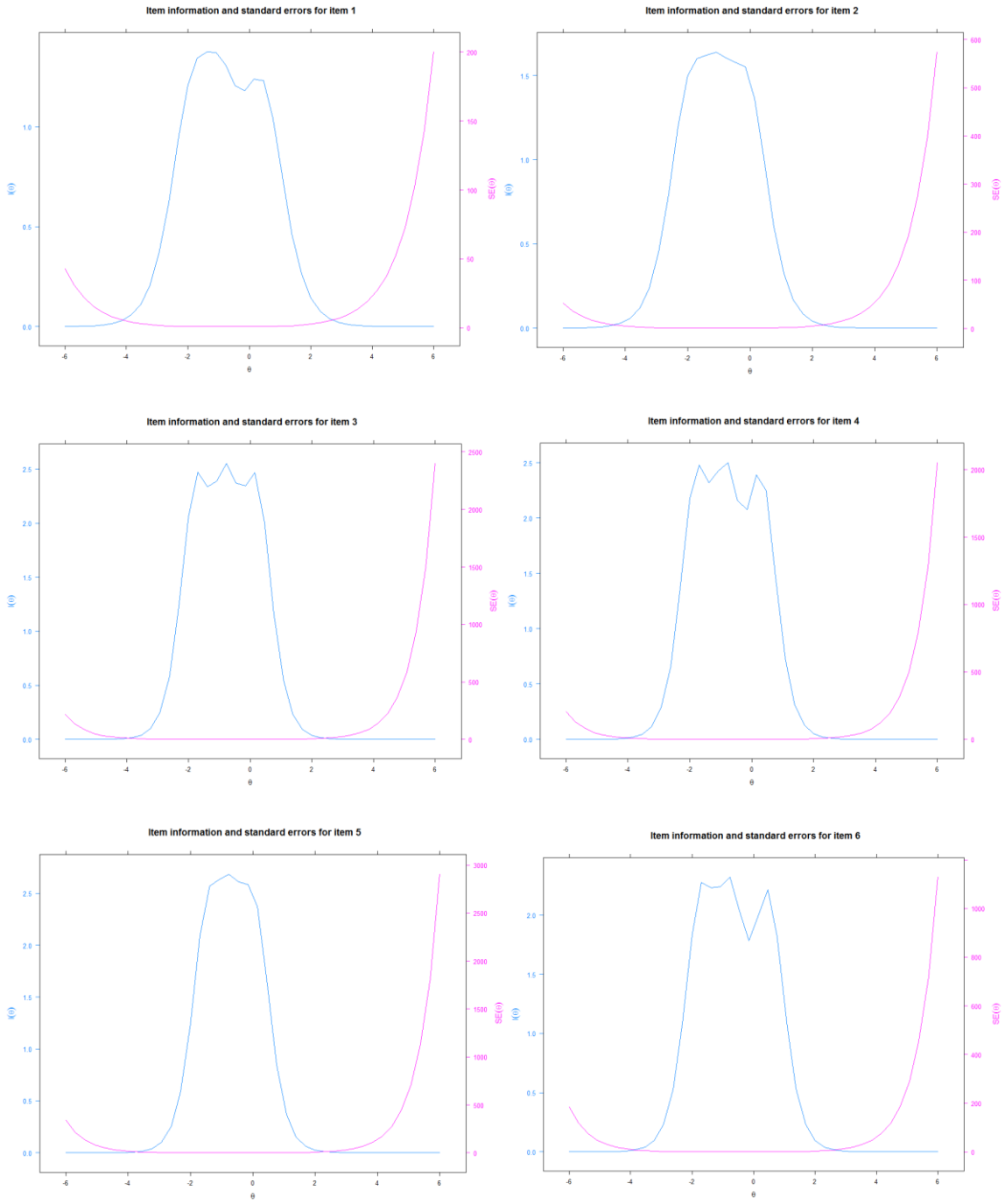
PCH scale, Inspiration Items, and Scholarly Sources

Items	Source item	Source
My company's policies do NOT match the promises made to employees	-	-
My company is UNFAIR to its employees	Fair/Unfair (no instruction or introductory sentences were shared)	Reidenbach and Robin (1990)
My company does NOT care for its employees, but only for money	-	-
My company PRETENDS to appear moral	-	-
My company engages into morally WRONG acts when it can get away with it	"Would blackmail an employee if (s)he could get away with it." And, "Would fire people just because (s)he doesn't like them if (s)he could get away with it."	Craig and Gustafson (1998) for both items
My company's values often CHANGE when it comes to getting things done	"My organization's values change when it comes to getting things done"	Phillipe and Koehler (2005)
My supervisor does NOT practice what (s)he preaches	"I wish my supervisor would practice what he or she preaches more often". And, "My manager practices what he/she preaches"	Dineen, Lewicki, and Tomlinson's (2006). And, Simons and Parks (2000), and reported in Simons, Friedman, Liu, and Parks (2007)
My supervisor does NOT hold everyone at all levels equally accountable for their mistakes	"Everyone at all levels is held accountable for their mistakes"	Phillipe and Koehler (2005)
The values my supervisor communicates to the society are NOT consistent with employees' experiences at work	"The values my hospital communicates to the community are consistent with employees' experiences at work"	Yesenia and Martinez (2016)

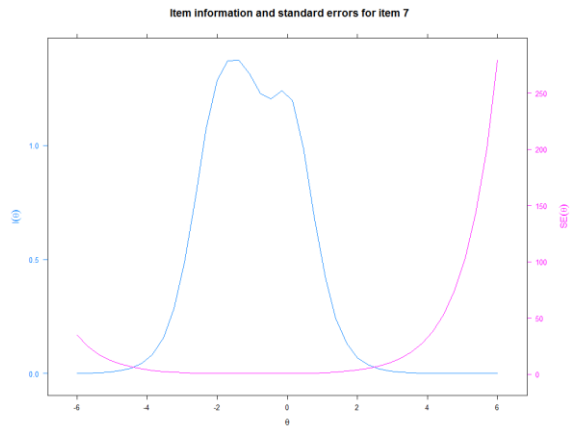
Q_3 Statistics Table to Confirm Local Independence for the PCH Scale

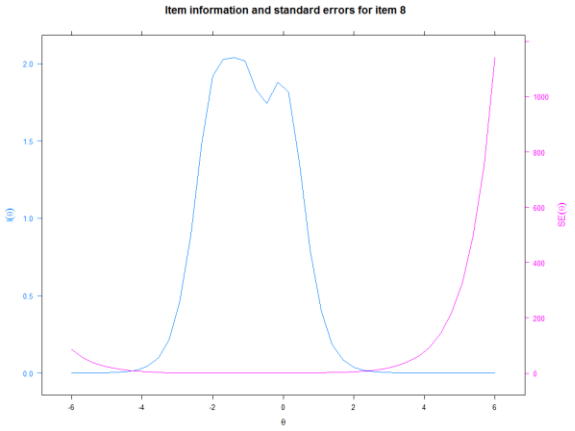
	Item 14	**Item 17**	**Item 21**	**Item 25**	**Item 26**	**Item 29**	**Item 32**	**Item 36**	**Item 42**
Item 14	1								
Item 17	0.049	1							
Item 21	0.032	-0.018	1						
Item 25	-0.115	-0.212	-0.183	1					
Item 26	-0.137	-0.091	-0.342	0.005	1				
Item 29	-0.148	-0.245	-0.008	-0.072	-0.101	1			
Item 32	-0.137	-0.079	-0.079	-0.169	-0.143	-0.210	1		
Item 36	-0.122	-0.144	-0.094	-0.265	-0.188	-0.123	0.161	1	
Item 42	-0.122	-0.168	-0.173	-0.166	-0.116	-0.114	0.024	0.100	1

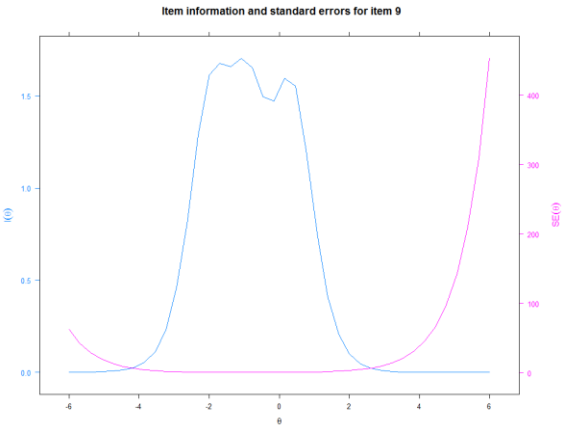
Item Information Functions for the PCH scale



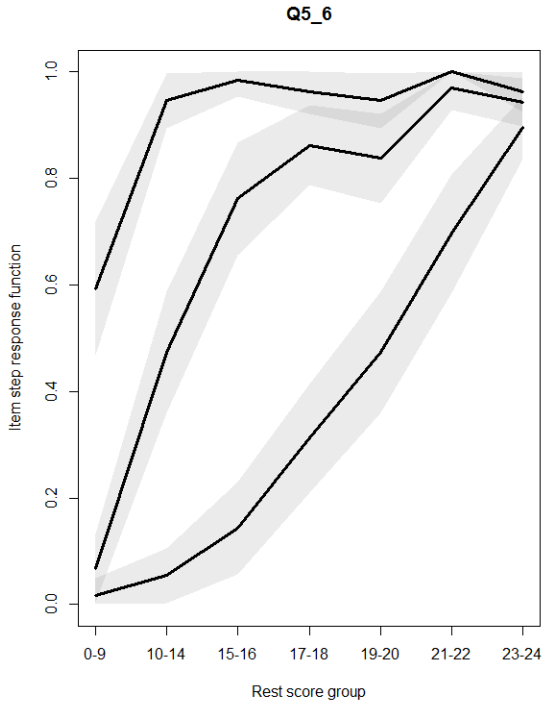
Item Information Functions for the PCH scale (Continued)

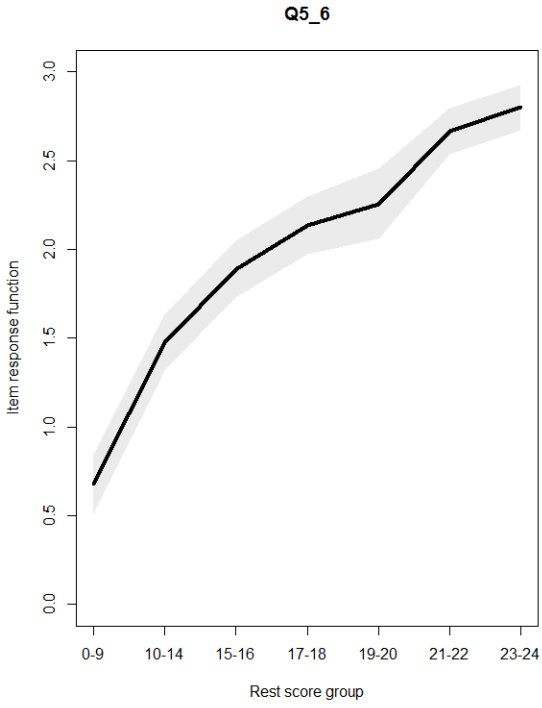


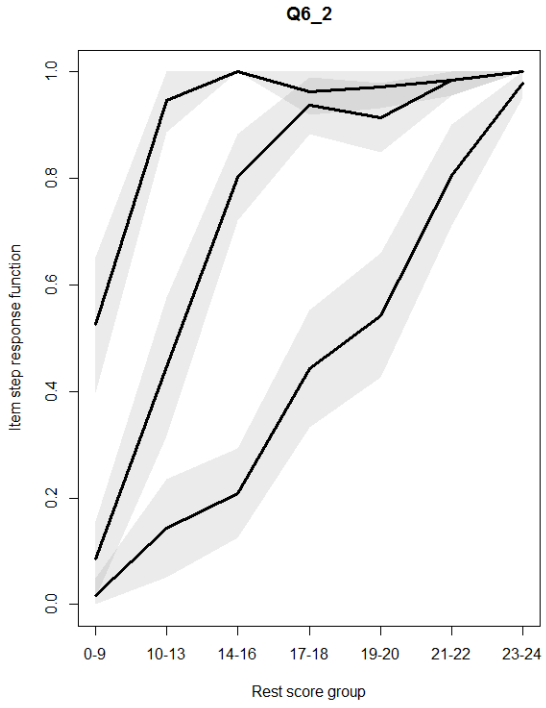


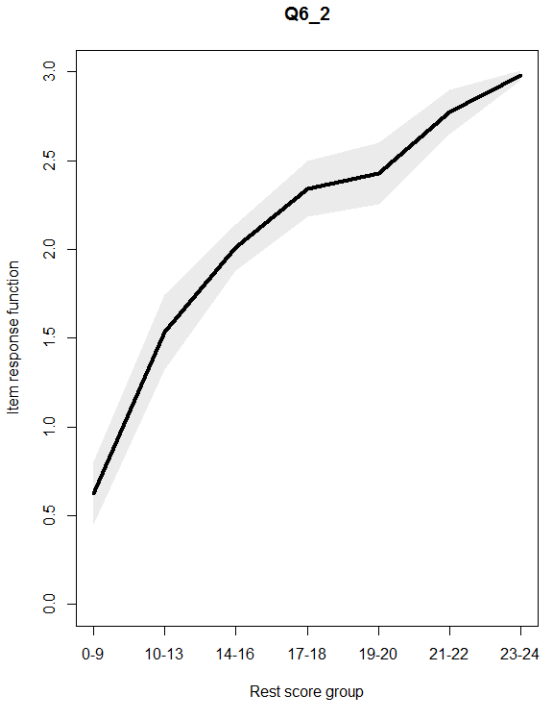


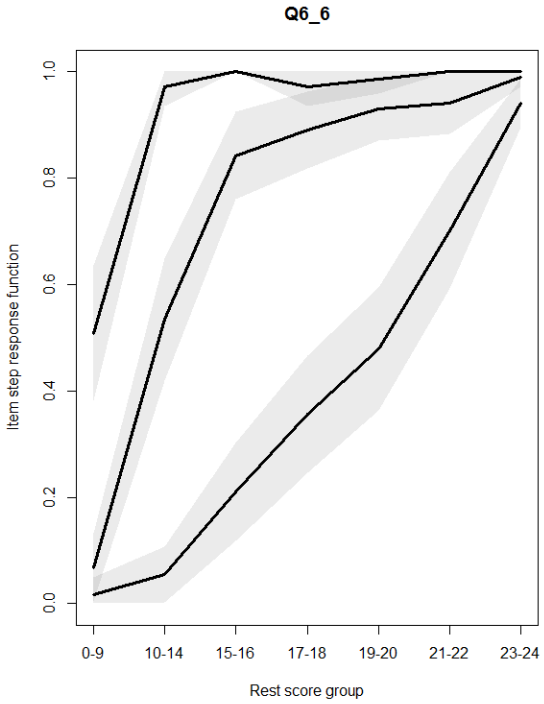
Mokken Scale Analysis for the PCH scale

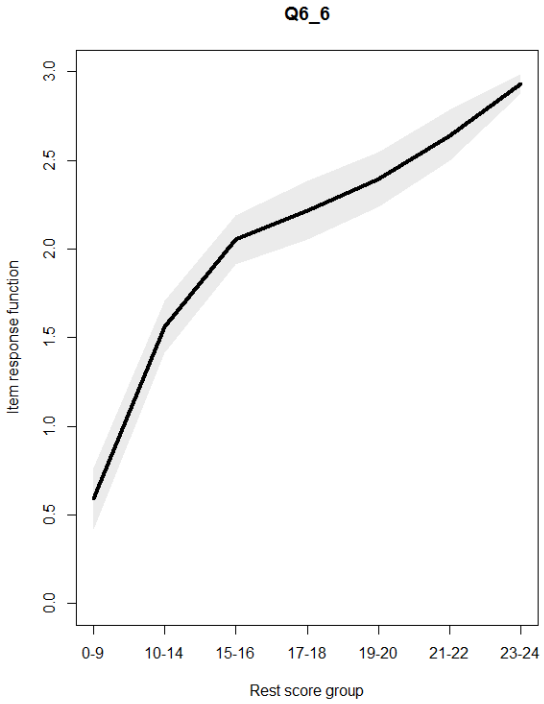









Q6_6
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-9
10-14
15-16
17-18
19-20
21-22
23-24
Rest score group


Q6_6
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-9
10-14
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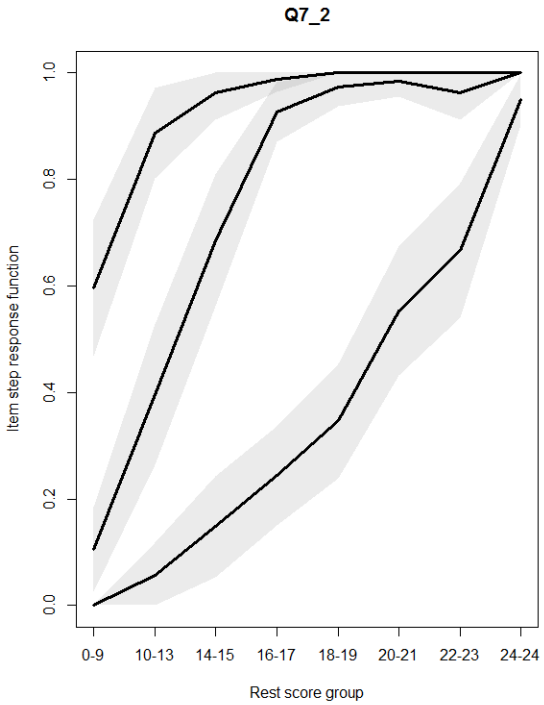
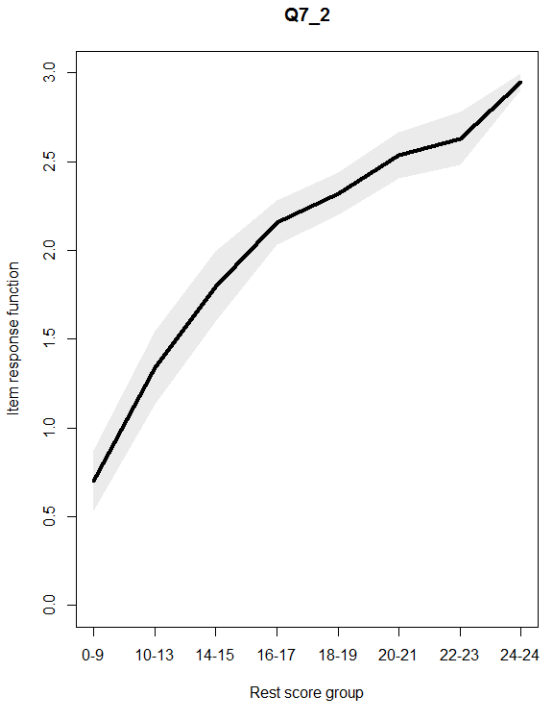
17-18
19-20
21-22
23-24
Rest score group


Q7_2
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-9
10-13
14-15
16-17
18-19
20-21
22-23
24-24
Rest score group


Q7_2
Item response function
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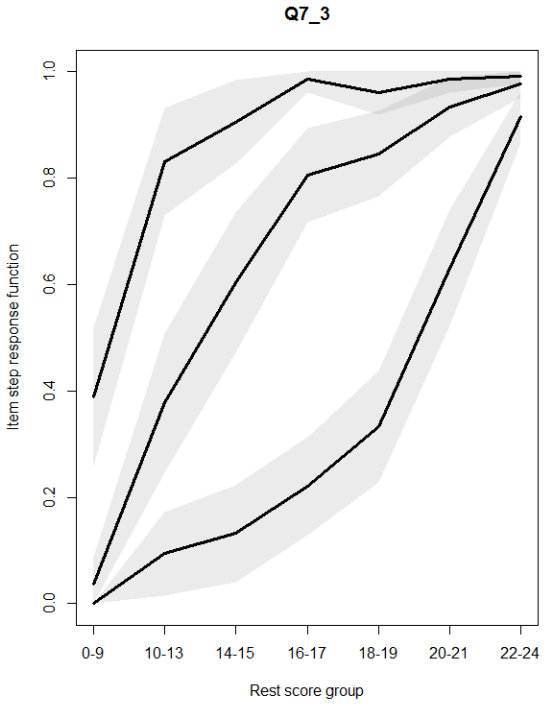
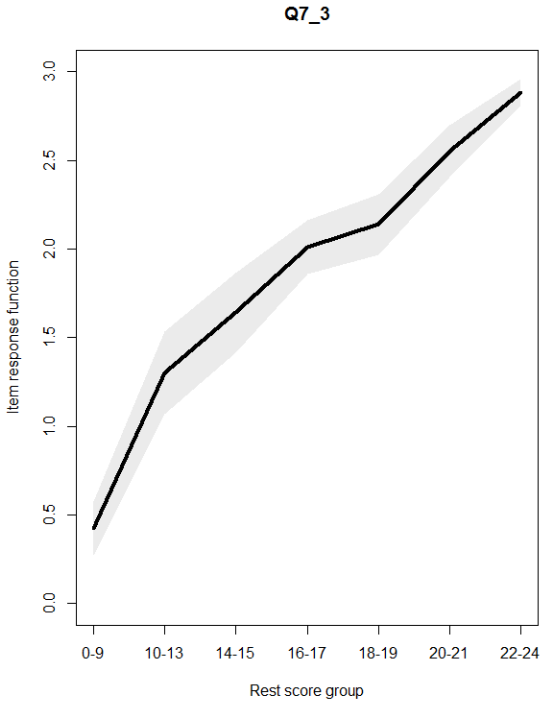
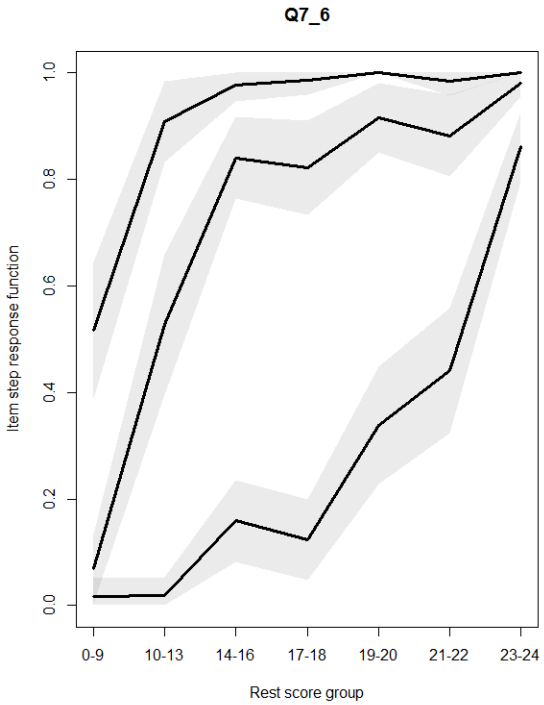
1.0
1.5
2.0
2.5
3.0
0-9
10-13
14-15
16-17
18-19
20-21
22-23
24-24
Rest score group


Q7_3
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-9
10-13
14-15
16-17
18-19
20-21
22-24
Rest score group


Q7_3
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-9
10-13
14-15
16-17
18-19
20-21
22-24
Rest score group


Q7_6
Item step response function
0.0
0.2
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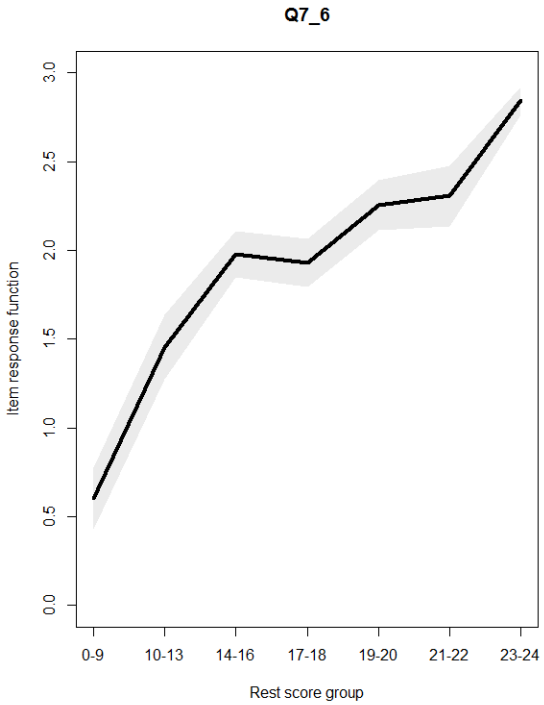
0.6
0.8
1.0
0-9
10-13
14-16
17-18
19-20
21-22
23-24
Rest score group


Q7_6
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-9
10-13
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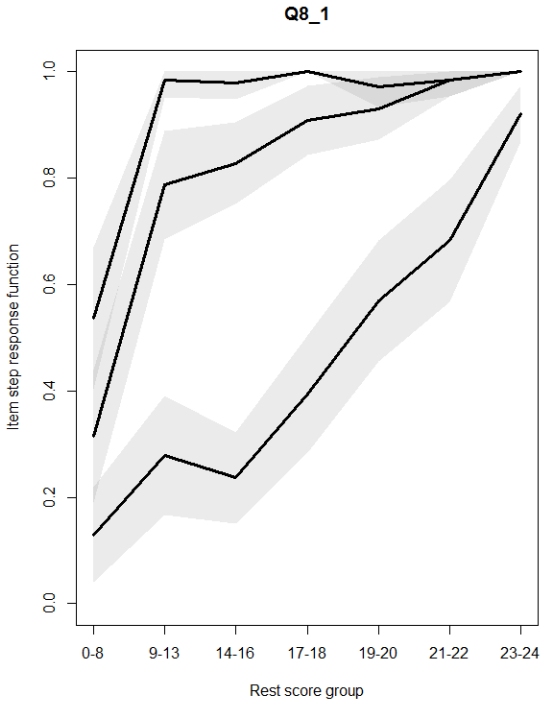
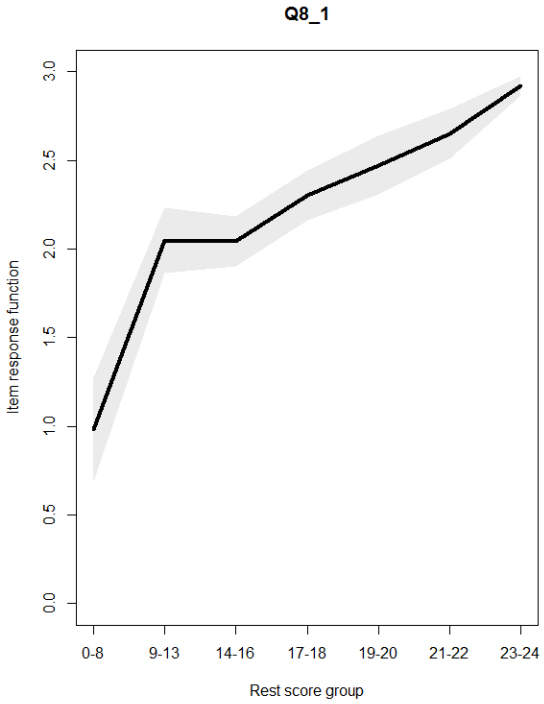
21-22
23-24
Rest score group


Q8_1
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-8
9-13
14-16
17-18
19-20
21-22
23-24
Rest score group


Q8_1
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-8
9-13
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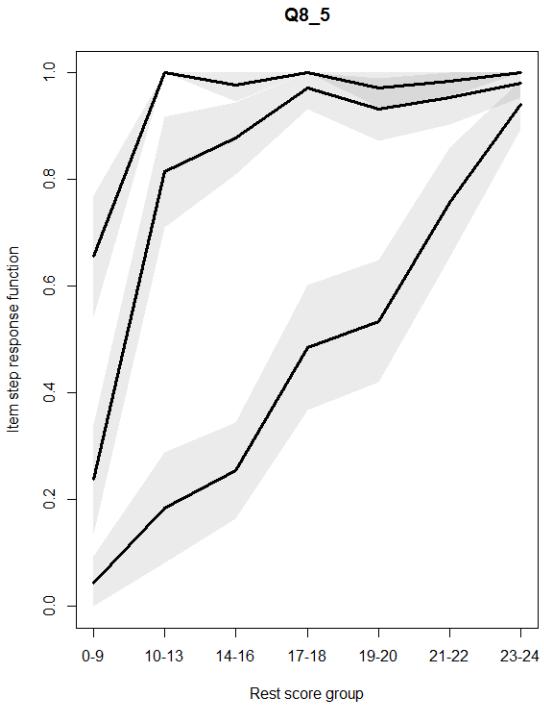
19-20
21-22
23-24
Rest score group


Q8_5
Item step response function
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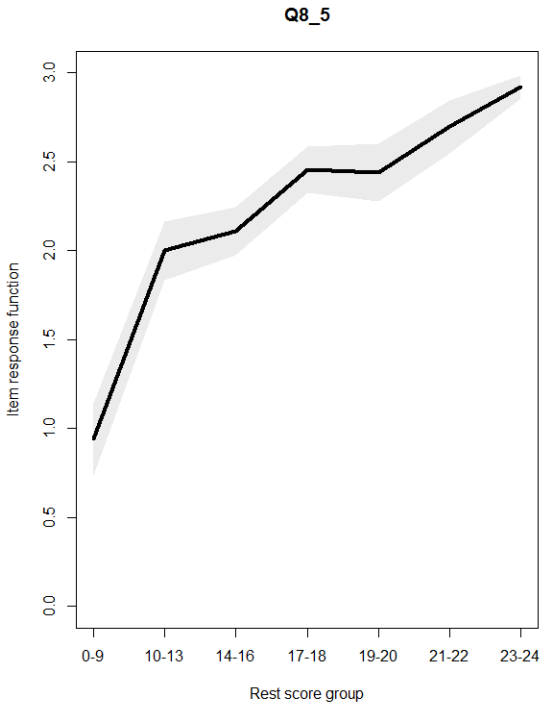
0.6
0.8
1.0
0-9
10-13
14-16
17-18
19-20
21-22
23-24
Rest score group


Q8_5
Item response function
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1.5
2.0
2.5
3.0
0-9
10-13
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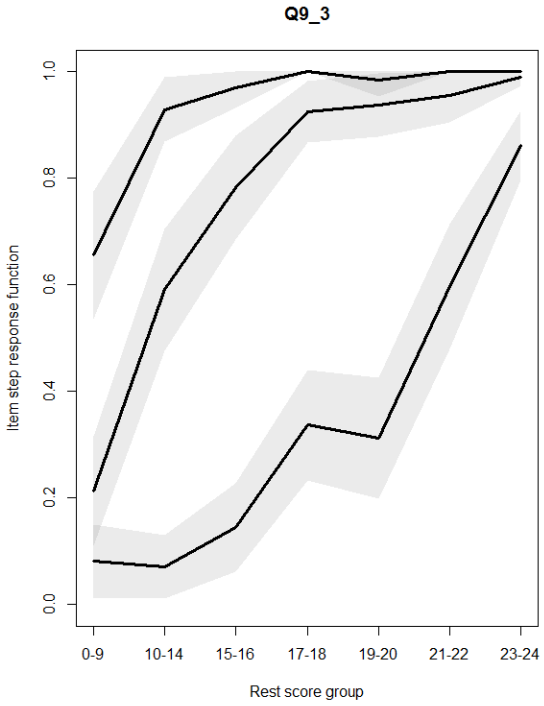
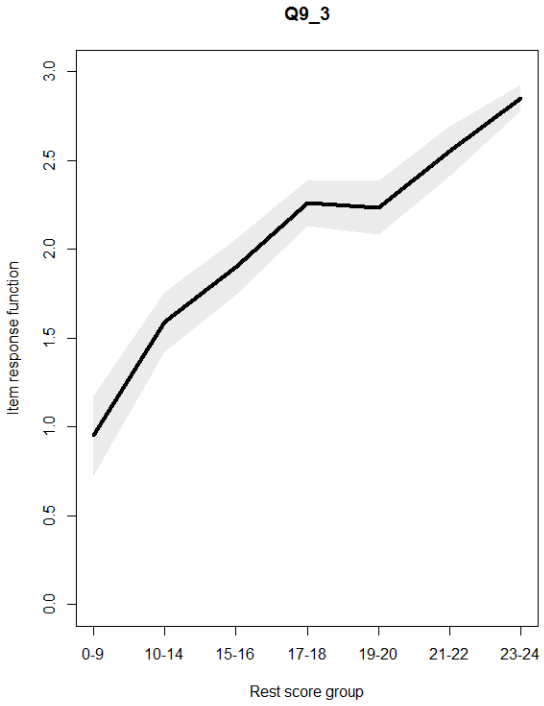
21-22
23-24
Rest score group


Q9_3
Item step response function
0.0
0.2
0.4
0.6
0.8
1.0
0-9
10-14
15-16
17-18
19-20
21-22
23-24
Rest score group


Q9_3
Item response function
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0-9
10-14
15-16
17-18
19-20
21-22
23-24
Rest score group

VITA

Saheli Goswami, Ph.D. completed her Master's degree from MU in 2012 and two graduate certificates in Center for Digital Globe and in Organizational Change in 2017. Her research interests include corporate behaviors and responsibilities, organizational ethics, and organizational psychology related to sustainable practices within the global apparel supply chain. Before returning to academia, she worked for three years as a merchandiser in the leather and apparel industry in India for companies such as Li & Fung, Next, House of Fraser, and Marks & Spencer. While a doctoral student, Saheli was a graduate instructor and teaching assistant at MU, teaching Science of Textiles. She has recently taken up a position as Assistant Professor at the University of Rhode Island. Her academic, research and service contribution has been recognized by several awards across the university. Saheli can reached at saheligoswami@mail.missouri.edu or saheli.goswami@gmail.com.