



A comparison of online and offline gender and goal directed shopping online



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ABSTRACT

The aim of this paper is to model the effect of the consumers' perceptions of their offline and online gendered behaviour on online utilitarian shopping motivation and purchase intentions. We hypothesise that when consumers shop online, their behaviour is mediated by two gendered behaviours, namely offline and online. To test this hypothesis, 515 usable responses were collected in face-to-face interviews. The conceptual model was tested with confirmatory factor analysis (CFA) and structural equation modelling (SEM) across five product categories. Our findings show that the effect of a consumer's perception of their gendered behaviour offline vs. online on online utilitarian shopping motivation and purchase intentions is significantly different. In particular we found that utilitarian shopping motivation online has a significant effect on purchase intentions online mediated by gender (online) overall: *strongly for females but not for males*. Conversely, utilitarian shopping motivation online has a significant effect on purchase intentions online mediated by gender (offline) *for males but not overall and for females*.

1. Introduction

The aim of this paper is to model the effect of consumers' perceptions of their offline and online gendered behaviour on, online utilitarian motivation and purchase intentions (Babin et al., 1994; Roy and Ng, 2012; Wood, 2005). This aim is concerned with optimizing the online shopping experience (Chang et al., 2014; Sheehan, 1999). Moreover, through gaining an understanding of variations in gender online and offline, companies can better enable consumers "to experience the body's needs by a virtual projection of the mind into cyberspace" (Achrol and Kotler, 2012, p. 38; Wolin and Korgaonkar, 2003). We propose that when consumers shop online their behaviour is mediated by two gendered behaviours: offline and online. This research is important as online and offline behaviour is not well understood (Brown et al., 2007; Danaher et al., 2003). While previous research has measured gender effects (e.g., Cleveland et al., 2006; Dobscha, 2003; Hyllegard, 2005; Laforet, 2008) no studies have measured gender-related behaviour offline and online, modelling the impact on online shopping motivation and purchase intentions (Hsu et al., 2014; Alreck and Settle, 2002). Otnes and McGrath (2001) argue this gap in our understanding has arisen because gender-related shopping behaviour often contradicts socially constructed and biological stereotypes

(Gentry et al., 2003; Kramarae and Kramer, 1995). Furthermore, Bettany et al. (2010) suggest that we should be moving towards developing theories that help us understand gender-related issues. MacLaran et al. (2004) supports this position, requesting that comparative research looking at multiple consumption of the same product or service needs to be conducted in order to explore differing gender and gender effects across various social settings (Blasco-Arcas et al., 2014).

2. Related literature

Women are often portrayed as nurturing, person-oriented, and child-centred, whereas men are seen to be competitive and work-oriented (Alreck and Settle, 2002; Dholakia and Chiang, 2003). The existing literature on gender effects is disparate. Some resolution to the debate comes from Bem (1974) who proposes that gender is behaviour, popularizing the concept of psychological androgyny (Smiler and Epstein, 2010). Moreover, McMahan et al. (2009) assert that while sex is biologically determined, gender refers to behavioural, psychological, social and cultural meanings associated with concepts of maleness and femaleness. Smiler and Epstein (2010) go as far as cautioning against the use of gender in the traditional sense because of its

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psychometric properties. The limitation of early studies is that they failed to challenge current stereotypes (e.g. Anderson, 1986; Marsh, 1985).

Cultural and political differences have been identified as influencing factors in various gender-based studies. For example cultural differences and political differences (respectively) between women were identified as influencing factors in two offline studies. First, a comparison of French and US women in relation to sex role portrayal, company image and purchase intention revealed French women as more forgiving than their US counterparts (Lundstrom et al., 1999). In another context, 'traditional feminists' were found to more likely show offence about stereotyping in advertising than 'women at large' (Harker et al., 2005). Also, a recent online-based study found that when comparing online information disclosure patterns between Western and Russian SNS users, gender appeared to be a culturally distinctive factor (Kisilevich et al., 2012). These studies suggest gender is a psychometric rather than simply demographic variable. This literature review outlines gender difference offline and online.

2.1. Gender difference offline

A number of studies have tackled gender difference and advertising. Gender differences have been explored in relation to gender stereotyping in advertising (Harker et al., 2005; Jones et al., 1998), sexual appeals in advertising (Putrevu, 2008), the effectiveness of sympathy appeals when shown to females (Kemp et al., 2013) and the private responses of males' and females' to emotional advertising (Fisher and Dubé, 2005). All but the final study revealed a gender effect. In addition, in a study examining consumer responses toward attribute- and goal-framed messages, women displayed less favourable responses toward negative attribute- as well as goal-framed messages than men; furthermore, compared to men, women vocalized more negative thoughts when exposed to negatively framed messages, and generated more negative (positive) advertisement execution thoughts in the negative (positive) frame than men (Putrevu, 2010).

Differences in the ways females and males process marketing messages is the focus of a number of studies. Brunel and Nelson (2003) suggest that under low involvement conditions females are more systematic processors than males but as involvement increases, this gender difference disappears. Similarly, as perceived risk increases women tend to change their response pattern to advertising to take in more objective information but with males there is no change in the way information is processed (Darley and Smith, 1993). Another study concluded that female processing often entails substantial, detailed elaboration of the message content resulting in females having increased sensitivity to message claims (Meyers-Levy and Maheswaran, 1991). A study which showed gender differences in purchase intent toward advertisements that are verbal, harmonious, complex and category-oriented versus advertisements that are comparative, simple, and attribute-oriented suggests that women use a relational processing style, whereas men use an item-specific processing style (Putrevu, 2004). Chang (2007) also found that comparative advertising was processed differently by women compared to men, with the former manifesting heightened perceptions of manipulative intent brought about by comparative appeals which in turn resulted in negative advertisement and brand evaluations and reduced purchase intentions. Involvement, perceived risk, message elaboration and processing style are therefore identified as important factors which inevitably lead to evaluative consequences.

2.2. Gender differences online

Men and women seem to have divergent expectations for Internet use (Wolin and Korgaonkar, 2003). Situations in which women tended to be associated with when using technology-mediated services included making friends, fighting for causes, nurturing children, role-

playing, and improving on-the-job productivity (Neilson, 2010). Men were information hungry and desired detailed and accurate information to questions relating to investments, product purchases, and personal interests whereas females have been found to prefer emails (for communicating) whereas males prefer using the Web (for searching) (Jackson et al., 2001; Teo, 2001). Clipson et al. (2012) propose that expectations differ in the case of social networking and therefore men and women use it differently. Certainly this assertion is sustained in other SNS based studies whereby women tended to use SNS to search for information while men used SNS to find friends (Haferkamp et al., 2012). Gender differences in relation to the degree and reciprocity of self-disclosure in online forums were noted by Barak and Gluck-Ofri (2007) whereby female participants tended to be more reciprocal than male participants. Similarly, females were found to be using the Internet for communication purposes more so than males (Joiner et al., 2005), and were reported to utilise different types of websites (Wasserman and Richmond-Abbot, 2005). Furthermore, Wolin and Korgaonkar (2003) report that males are more likely to purchase from the Web and surf the Web for functional and entertainment reasons, but females are more likely to surf the Web for shopping reasons.

As well as expectations, the amount and frequency of use has also emerged as a point of difference between males and females online. However, studies are not entirely consistent in their findings. Joiner et al. (2005) found that women used SNS sites more frequently than men. Also, women were found to access the Web just as frequently as men but were online less than men (Wasserman and Richmond-Abbott, 2005). McMahan et al. (2009) found no gender difference in the time spent Internet shopping but did find a difference in the time men and women spent on different types of features on Web sites. Thus length and frequency of Internet use seems to be contingent on not only modality but perhaps motivation. Furthermore, Wasserman and Richmond-Abbot (2005) propose that knowledge related to web use is an important independent variable that is likely to influence Internet use.

Attitudes towards Internet use also seem to differ. Women are more likely to experience Internet anxiety (Joiner et al., 2005), a conclusion that is supported by another study which revealed increased computer anxiety, less computer self-efficacy and less favourable and less stereotypic computer attitudes in females (Jackson et al., 2001). In addition, women display a higher level of perceived risk in online purchasing than do men, although having a site recommended by a friend seems to ameliorate this trend (Garbarino and Strahilevitz, 2004). Gender differences in beliefs, attitudes and behaviours toward web advertising manifest as males exhibiting more positive beliefs and more positive attitudes toward Web advertising than females (Wolin and Korgaonkar, 2003).

2.3. Online shopping behaviour

Whether or not offline behaviour, and therefore offline-based studies, can offer valuable insights into gender difference online is an important question. Chai et al. (2011) argue that offline expected social norms are sustained in an online context and therefore gender differences need consideration when understanding online behaviour. However, the extant literature again shows a lack of consensus. For example, several studies portray women online to be the principal shoppers (e.g., Dholakia and Chiang, 2003; Mitchell and Walsh, 2004). However, Rodgers and Harris (2003) found that in nearly every study exploring gender in online shopping environments, males were typically reported to be the dominant online shopper. Other studies suggest that males tend to shop online more in technology-mediated channels than non-technology mediated channels (e.g., Wajcman, 1991). However, recent work has suggested there is no difference between males and females in their online shopping behaviour (Kim and Forsythe, 2008). An exploration into why women tend to be less

satisfied than men with the online shopping experience found that trust and convenience predicted women's dissatisfaction and men's satisfaction within online shopping as well as men and women's actual shopping behaviour (Rogers and Harris, 2003). The seeming disparity between various studies and contexts suggests that gender effects are contingent and complex. Furthermore, it could be argued that gender-based trends may change in different ways over time.

3. Research question and contribution

To help reconcile this debate we model the effect of consumers' perceptions of their offline and online gendered behaviour on utilitarian motivation and purchase intentions. We suggest that the variation may be constructed by the context in which the consumer exists, that is, gender offline or online. Therefore, our research question is: *Does gender (online and offline) matter in the relationship between utilitarian motivation online and purchase intentions online?*

The contribution of this research is three-fold. We conceptualize and measure gender in different environments and model the impact of these differences on shopping motivation and purchase intention. This type of study is important because there is no empirical evidence that supports the hypothesis that a consumer's gender is the same offline and online. The measurement of gender in this way has also not been done before and gender effects on shopping motivation are unclear. Furthermore, marketers may be incorrectly assuming that, in the design of their strategies, no account should be taken of gender differences. This study will also help marketers to understand the different ways in which males and females may exhibit cross-gender perceptions of techno-consumption, and could therefore provide further insight into some of the key situations that drive males and females to use technology-mediated channels.

This paper is structured as follows. To build our conceptual model and hypotheses, we first discuss the importance of shopping motivation in terms of utilitarian consumption and gendered behaviour. This discussion leads to our conceptual model and hypotheses. The methodology precedes our data analysis and discussion of the results and their implications.

4. Conceptual model and hypotheses

In this research we first posit that in the relationship between a consumer's utilitarian motivation to shop online and retail purchase intentions, gender will have a mediating effect. Gender behaviour will differ because of the environment in which the consumer shops, that is, whether online or offline (Brown et al., 2007; Noble et al., 2006). This proposition is supported by Sengupta et al. (2002) and Argo et al. (2006) who found empirical evidence that a consumer's gender-related behaviour will vary because of the effect of symbolic consumption and social comparison.

Offline a male engages in what society perceives to be typical male behaviours. These male traits diminish online: he is able to break free of (1) the gender constraints and comparisons rooted in society (Berger and Luckmann, 1967; Mitchell and Walsh, 2004; Thompson, 1996) and (2) restraints defined by biological determinism (Dobscha, 2003; Gentry et al., 2003; Martin, 2003). He is able to change his behaviour online because there is no physical interaction (Davis et al., 2000). He is able to participate in female-oriented chat-rooms, browse for and purchase female-oriented products such as skincare supplies, and even develop an online relationship with another male.

Also, the importance of utilitarian shopping motivations (Holbrook and Hirschman, 1982; Holbrook and Gardner, 1998) offline and online (Childers et al., 2001; Wood, 2005) should also be considered. Motivations for retail shopping can differ, depending on whether the consumer's motivation is primarily experiential (hedonic) or goal-directed (utilitarian) (Wang et al., 2007).

A utilitarian approach at its extreme is associated with terms such as task-oriented, instrumental, rational, and efficient and is also

defined by Batra and Ahtola (1991) as an attitude pertaining to the usefulness, value, and wisdom of a particular behaviour as exhibited by a consumer. Utilitarian motives usually reflect a work mentality (Babin et al., 1994) and are dependent on whether the task at hand was accomplished. The consumer employing a utilitarian approach will thus experience greater levels of satisfaction once they feel they have made an efficient and purposeful purchase especially if done in a fastidious manner. Dholakia (1999) observes that the motivations and approaches taken towards shopping are reflected by the cultural and socialization conditions surrounding the consumer.

Since gender is also culturally derived (Palan, 2001), it is assumed that the cultural understandings of what is masculine and what is feminine will be associated with the approach taken towards shopping. Since shopping is traditionally categorized mainly as a female-oriented activity (Dholakia, 1999) and is reported by women to help them relax, socialize and to enhance a special occasion (Buttle and Coates, 1984), the literature promotes that female-oriented consumers will be associated with hedonic rather than utilitarian shopping behaviour (Dittmar et al., 2004).

A consumer employing hedonic feminine behaviour may tend to savor the shopping experience by participating in the online chat rooms and reading book reviews. Men want detailed and accurate information about the products they wish to purchase, yet they are not willing to work very hard to get it (Smith and Whitlark, 2001). Thus, the literature argues that masculine-oriented customers will be associated with utilitarian shopping behaviour wanting to complete the task of shopping with minimum time and effort (Dittmar et al., 2004).

A key proposition of this research is that consumers may display different gender orientations online compared to their offline social and biological construction, challenging what Cockburn and Ormrod (1993) called technology-related gender symbolism. The Internet in contrast has allowed consumers greater freedom of expression in their gender (Chen et al., 2002). McLaren et al. (2004, p. 149) argue that the Internet provides an "escape route" from the "cultural constrictions of gender". Kozinets et al. (2003) and Schau and Muniz (2002) argue for prosthetic feminism online promoting gender online as the private androgynous self (Argo et al., 2006) that is more akin to their own gendered symbolic consumption (Sengupta et al., 2002).

Therefore, given these two key research propositions, we model the mediating effect of the consumers perceived gender behaviour (offline and online) on utilitarian shopping motivation online and purchase intentions online (Fig. 1). In our model we have three distinct pathways: (1) the *Mediated Gender Pathways* – where the relationship between motivation and purchase intention is mediated by offline or online gender (Path a and Path b) and, (2) *Control Pathways* which shows the relationship between motivation and offline or online gender (Path a) and, offline or online gender and purchase intentions (Path b) and, (3) the relationship between motivation and purchase intention is

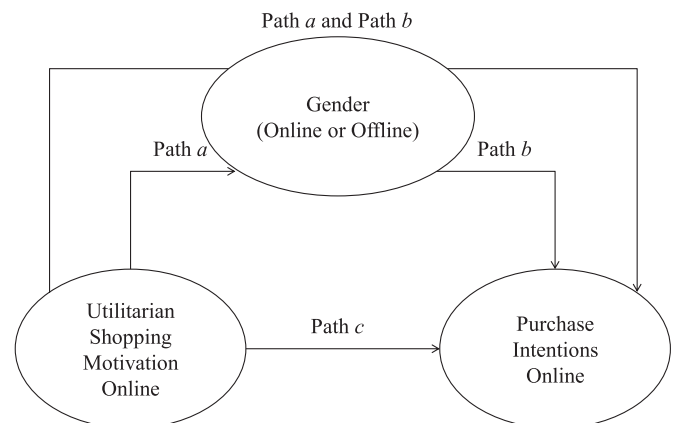


Fig. 1. Conceptual model.

not mediated by offline or online gender (Path c). Our hypotheses are in Table 2 with a summary of the key results.

5. Methodology

Five-hundred and fifty consumers responded face-to-face to a questionnaire. All consumers who walked past the interviewers were considered to be potential respondents. The interviewers were rotated around four locations in Auckland (New Zealand); east, west, south, and north. Every potential respondent was asked to participate so they had an equal chance to complete the survey. Those that agreed to participate were asked to respond to a structured questionnaire. Respondents were screened with the following question: Have you bought anything online in the last 6 months? The survey yielded 515 usable responses. Around two thirds (63%) of respondents had shopped between 1 and 5 years online and females (61%) and males (65%) did not differ much in this regard. The characteristics of the sample are broadly consistent with the national population statistics (www.stats.govt.nz). Fifty-two per cent of the respondents were male and 48% were female. The majority of the respondents (58%) were 25 years and under. About 48% of the respondents have received a college degree and 57% were single. Thirty-seven per cent are NZ European and 42% of the respondents are fully employed. Thirty-five per cent of the respondents have an annual income of within the \$30,001–\$50,000 range. The questionnaire was designed with the data collection method in mind. That is, it was purposefully designed to be suitable for street intercept, face-to-face interviews. Throughout the whole questionnaire, a seven point scale was used to measure the constructs of interest (1=“Strongly Disagree”, 7=“Strongly Agree”). In this study we measure gender in 2 ways: (1) The consumers’ perceptions of their gender while shopping (1) online on a 7 point scale and (2) offline on a 7 point scale (Avery, 2012; Bettany et al., 2010; Smiler and Epstein, 2010; McLaran et al., 2004; Beere, 1990) and (2) sex in our measure of gender: if they are biologically male or female (Smiler and Epstein, 2010). In this study we use this to test our hypotheses across: (1) 5 product groups and (2) 3 groups of sex (overall male/female, male and female). We used the Babin et al. (1994) scale to measure utilitarian shopping motivation online (Arnold and Reynolds, 2012). The original product groups included in the survey were similar to those used by Nielsen (<http://nz.nielsen.com>).

6. Results

The analysis had three stages. The first stage was to conduct an exploratory factor analysis (PCA) to distil the product items into groups. Second and third, the analyses tested the proposed conceptual model with confirmatory factor analysis (CFA) and structural equation modelling (SEM). The process was to conduct separate measurement models for each latent variable and then to create the structural model. The approach was employed as we wanted to use an analysis method that not only supported model refinement but also had the ability to rigorously assess model fit across our ten models (Kline, 1998). Before data analysis was started, initial data screening was carried out for missing values and outliers, and the normality of the dataset was tested. In our analysis, we utilized a combination of Microsoft Excel 2007 software, PASW Statistics 19 and Analysis of Moment Structures (AMOS 19) (Arbuckle, 2010) for structural equation modelling (SEM). The reporting of our results is consistent with other authors (e.g., Bagozzi and Youjae, 2012; Jepsen, 2007).

6.1. Exploratory factor analysis

The questionnaire included 27 product items. In order to group the product items an exploratory factor analysis was used (e.g., Brakus et al., 2009). The Kaiser Meyer Olkin (KMO) value was 0.90 and is well over the required minimum (Hutcheson and Sofroniou, 1999). The individual item

KMO values for all variables are in the range of 0.80–0.90. Bartlett’s test is also highly significant ($p < 0.001$). Therefore, a factor analysis is appropriate. We conducted a factor analysis using a Varimax rotation. Five factors were derived and we included items that had a loading of greater than 0.34. The Cronbach’s Alpha measure of internal consistency and reliability of the factors were satisfactory (Nunnally, 1978). Factors 1, 4 and 5 were highly significant based on a scree plot (variance explained=43%) with all 5 factors accounting for 50% of the variance explained. The 5 product categories derived from the factor analysis procedure were: (1) Group 1: Consumer Electronics, Computer Hardware/Software, Electronic Games/Consoles, (2) Group 2: Entertainment (Movies DVDs/videos, Recorded music, Entertainment) and Clothing/shoes, (3) Group 3: Travel Related Services, Airline Tickets, Books/Magazines, (4) Group 4: Cars, Collectibles, Insurance, Sports Equipment, Stocks/Shares, Toys, Vehicle Accessories and, (5) Group 5: Art, Flowers, Food, Furniture, Garden, Health and Beauty, Home Appliances, Jewellery, Ornaments. We found these product groups to be generally consistent with previous research on gender and product choice (McDonagh and Weightman, 2003; Dholakia and Chiang, 2003).

6.2. Confirmatory factor analysis (CFA)

The convergent and discriminant validity of the constructs were tested using confirmatory factor analysis (CFA) that combined all constructs concurrently. Maximum likelihood estimation (MLE) was used to fit the models (Pampel, 2000). Construct refinement was enabled by an analysis of covariance residuals and modification indices, and exclusion of items until the goodness-of-fit was achieved, while maintaining theoretical meaningfulness. Following Bagozzi and Youjae (2012) and Baumgartner and Homburg (1996) the following measures were used to assess the model fit: Goodness-of-Fit Indices, chi-squared (X^2), the comparative fit index (CFI) and normalized fit index (NFI). For CFI and NFI, values close to 1 are indicative of good model fit (Bentler, 1990). The root mean square errors of approximation (RMSEA) was calculated for the overall model and according to Bentler (1990), values below 0.05 indicate close fit and values up to 0.08 are reasonable. Finally, the standardized root mean squared residual (SRMR) as described by Hu and Bentler (1995) computes how much the model explains the correlations to within an average error. The final measurement models show a reasonably good fit and most of the fit indices are above or close to the required minimum threshold level. The ratio of minimum discrepancy to degree of freedom (chi-square/d.f. ratio) should be less than 5 or preferably less than 2 (Bentler, 1990). The GFI index is above the threshold of 0.90 and CFI is close to 1 (Bentler, 1990) for every construct. Composite reliability is an indicator of the shared variance among the set of observed variables used as indicators of a latent construct (Bacon et al., 1995). The two items included in utilitarian motivation were: (1) respondents accomplished what they wanted to do on this online shopping trip; and (2) while shopping online, respondents found just the item(s) they were looking for. The construct reliability was 0.75, above the threshold value of 0.70 that Nunnally (1978) recommends. Moreover, the average variance extracted (AVE) value was 0.60, which is above the recommended threshold of 0.5 (Chin, 1998; Fornell and Larcker, 1981).

6.3. Structural equation modelling

Our results showed adequate model fit across or measures (GFI, CFI, TLI, RMSEA, SRMR, X^2/DF) for all our model variations across the 5 product groups when modelling the relationship between utilitarian shopping motivation online and online purchase intentions, as well as the mediating effect of gender (offline and online) (Bagozzi and Youjae, 2012; Baumgartner and Homburg, 1996). Table 1 gives details of the model fit results. Overall, when manipulating product group and gender our results compare 30 competing models.

Table 1
Model fit.

Model	Group	n=515 (Male and Female)										n=268 (Male only)										n=247 (Female only)									
		Ratio					Ratio					Ratio					Ratio					Ratio									
		X ²	X ₂ /DF	CFI	TLI	GFI	RMSEA	SRMR	X ²	X ₂ /DF	CFI	TLI	GFI	RMSEA	SRMR	X ²	X ₂ /DF	CFI	TLI	GFI	RMSEA	SRMR	X ²	X ₂ /DF	CFI	TLI	GFI	RMSEA	SRMR		
1	Utilitarian/Gender (Online)	36.42	3.04	0.97	0.95	0.98	0.06	0.03	29.74	2.48	0.96	0.92	0.97	0.07	0.03	20.67	1.72	0.98	0.96	0.98	0.05	0.04	20.67	1.72	0.98	0.96	0.98	0.05	0.04		
2	Utilitarian/Gender (Offline)	41.34	3.45	0.97	0.94	0.98	0.07	0.03	34.96	2.91	0.95	0.92	0.97	0.09	0.04	22.99	1.92	0.97	0.95	0.97	0.06	0.04	22.99	1.92	0.97	0.95	0.97	0.06	0.04		
3	Utilitarian/Gender (Online)	25.98	2.17	0.98	0.96	0.99	0.05	0.03	31.66	2.64	0.93	0.90	0.97	0.08	0.04	13.63	1.05	0.99	0.99	0.99	0.01	0.04	13.63	1.05	0.99	0.99	0.99	0.01	0.04		
4	Utilitarian/Gender (Offline)	22.45	1.87	0.98	0.97	0.99	0.04	0.03	34.63	2.89	0.93	0.90	0.97	0.08	0.04	11.26	0.94	0.99	0.99	0.99	0.01	0.03	11.26	0.94	0.99	0.99	0.99	0.01	0.03		
5	Utilitarian/Gender (Online)	10.71	1.53	0.99	0.97	0.99	0.03	0.03	10.14	1.45	0.98	0.96	0.99	0.04	0.04	11.75	1.68	0.97	0.94	0.99	0.05	0.04	11.75	1.68	0.97	0.94	0.99	0.05	0.04		
6	Utilitarian/Gender (Offline)	7.61	1.09	0.99	0.99	0.99	0.01	0.02	14.43	2.06	0.96	0.91	0.98	0.06	0.04	10.15	1.45	0.98	0.96	0.99	0.04	0.05	10.15	1.45	0.98	0.96	0.99	0.04	0.05		
7	Utilitarian/Gender (Online)	73.75	2.17	0.97	0.96	0.97	0.05	0.04	78.60	2.31	0.93	0.91	0.95	0.07	0.05	48.75	1.48	0.98	0.97	0.96	0.04	0.04	48.75	1.48	0.98	0.97	0.96	0.04	0.04		
8	Utilitarian/Gender (Offline)	72.07	2.12	0.97	0.96	0.97	0.05	0.04	67.00	1.97	0.95	0.93	0.95	0.06	0.05	50.51	1.49	0.97	0.97	0.96	0.04	0.04	50.51	1.49	0.97	0.97	0.96	0.04	0.04		
9	Utilitarian/Gender (Online)	146.82	2.77	0.93	0.93	0.91	0.05	0.05	123.12	2.32	0.92	0.90	0.93	0.07	0.06	106.16	2.00	0.91	0.90	0.94	0.06	0.06	106.16	2.00	0.91	0.90	0.94	0.06	0.06		
10	Utilitarian/Gender (Offline)	153.52	2.90	0.93	0.91	0.95	0.06	0.05	130.29	2.46	0.91	0.90	0.92	0.07	0.06	112.03	2.11	0.90	0.90	0.93	0.07	0.05	112.03	2.11	0.90	0.90	0.93	0.07	0.05		

6.4. Results summary

Table 2 summaries the results across our hypotheses and models. We conclude the following:

1. Utilitarian shopping motivation online has a significant effect on gender (online) overall. Strongly for females but not for males.
2. Gender (online) has a significant effect on purchase intentions online.
3. Utilitarian shopping motivation online has a significant effect on purchase intentions online mediated by gender (online) overall and strongly for females but not for males.
4. Utilitarian shopping motivation online has a significant effect on purchase intentions online overall and for males but not for females (online and offline gender model).
5. Utilitarian shopping motivation online has a significant effect on gender (offline) for males but not overall and for females.
6. Gender (offline) has a significant effect on purchase intentions online overall (weak) but strongly for males and females.
7. Utilitarian shopping motivation online has a significant effect on purchase intentions online mediated by gender (offline) for males but not overall and for females.

7. Discussion

In this study we measured whether gender matters in the relationship between utilitarian motivation and purchase intentions online. Our findings show that the effect of a consumer's perception of their gendered behaviour offline vs. online on, online utilitarian shopping motivation and purchase intentions is significantly different. We conclude that online gender for females has a strong mediating effect across all product categories on, online utilitarian shopping motivation and purchase intentions. For males it is their offline gender that has a strong mediating effect. Therefore, female gendered behaviour online is oriented by the notion of rational thought and process of structured decision making based upon known outcomes and set constraints. Because the online and offline gender effect varies in its effects we argue that this finding challenges the definition of gender in shopping in terms of social construction and biological determinism (Catterall and Maclaran, 2002). This assertion is supported by Kozinets et al. (2003, p. 92) argument for “manoeuvring...of gender positions” online. Schau and Muniz (2002, p. 93) explain gender online as a performance. They may hold this view because gender offline for females is strongly oriented to hedonic value. When females choose to purchase online they become more rational and goal directed in their behaviour. The differences in gender position could also be attributed to the fact that the online environment is a hidden platform for experiences, allowing gender variation to play a more important role in that experience. In sum, online environments enhance particular motivations and associated gender behaviours (Bardhi and Arnould, 2005). With the added discretionary nature associated with being online consumers are able to maintain their anonymity, exhibiting their desired behaviours without any form of social constraints or criticisms.

Argo et al. (2006) suggest that consumers may change, misrepresent or ‘lie’ about their gender online (private self) compared to offline (public self) because of self-threatening social comparison. Social comparison in terms of gender threatens the public and private selves and is the consumers’ way to challenge social constructivism and biological determinism online. Misrepresenting purchase behaviour helps to create a positive self-image in social interactions and experience different or more consistent gender orientations. In this way individuals tend to encode information in terms of gender (Bem, 1974). Achrol and Kotler (2012, p. 39) provide a summary argument:

[T]he digital world will offer nearly endless possibilities of shaping life and experiences so that the physical world will pale in

Table 2
Hypothesis conclusions: Male/Female=Male and Female across Product Categories 1-5.

Hypothesis	n=515 (Male/Female)			n=268 (Male)			n=247 (Female)		
	Accept	Reject		Accept	Reject		Accept	Reject	
H ₁ Utilitarian shopping motivation online has a significant effect on gender (online). Product Group	3 1, 2, 5	2 3, 4	A	0	5 ALL	R	5 1, 2, 3, 4, 5	0	A
H ₂ Gender (online) has a significant effect on purchase intentions online. Product Group	2 1, 5	3 2, 3, 4	A	3 3, 4, 5	2 1, 2	A	4 1, 3, 4, 5	1 2	A
H ₃ Utilitarian shopping motivation online has a significant effect on purchase intentions online mediated by gender (online). Product Group	2 1, 5	3 2, 3, 4	A	0	5 ALL	R	4 1, 3, 4, 5	1 2	A
H ₄ Utilitarian shopping motivation online has a significant effect on purchase intentions online. Product Group	3 1, 2, 3	2 4, 5	A	2 1, 2	3 3, 4, 5	A	0	5 ALL	R
H ₅ Utilitarian shopping motivation online has a significant effect on gender (offline). Product Group	0	5 ALL	R	3 1, 4, 5	2 2, 3	A	0	5 ALL	R
H ₆ Gender (offline) has a significant effect on purchase intentions online. Product Group	1 1	4 2, 3, 4, 5	A	5 1, 2, 3, 4, 5	0	A	5 1, 2, 3, 4, 5	0	A
H ₇ Utilitarian shopping motivation online has a significant effect on purchase intentions online mediated by gender (offline). Product Group	0	5 ALL	R	4 1, 2, 4, 5	1 3	A	0	5 ALL	R
H ₈ Utilitarian shopping motivation online has a significant effect on purchase intentions online. Product Group	3 1, 2, 3	2 4, 5	A	2 1, 2	3 3, 4, 5	A	1 2	4 1, 3, 4, 5	A

significance and may well become a secondary world in which our bodies live wired to a digital reality...We stand at the threshold of a virtual world of experiences and an incredible expansion of the science by which experiences are experienced.

We also suggest that the difference between gender orientation online vs. offline could be attributed to homophily. [Brown et al. \(2007, p. 9\)](#) argue that:

...homophily of an interpersonal relationship, as based on an evaluation of individual characteristics, is not particularly relevant in an online context.... it is notions of shared group interests and group mind-set, evaluated at the level of the Web site itself, which drive online homophily.

Therefore, it could be suggested that for females and males, interpersonal relationships tend to be grounded offline. In contrast when female consumers want to transact online they become more strongly oriented around the online service offering; rationally evaluating the online brand with their known objectives and set constraints.

8. Managerial implications

The major practical implication of this study is to acknowledge that consumers with strongly female orientation online will place a greater importance and emphasis on consumption that fulfils task-oriented outcomes which meet a desired end-state. Traditionally online marketers would have associated this type of behaviour offline and online with consumers who are strongly male. Possibly, consumers online who are more female online use the offline shopping environment to explore and socially interact in the consumption experience. To transact they may shift online to obtain the best value or lowest price. Marketers need to find ways to channel these consumers offline, online ([Davis and Sajtos, 2008](#)); for example, using advertising through the television channel to stimulate the consumers use of their Smartphone for shopping online with the right deal to complete the transaction. Marketers may also necessitate the need to revise traditional defini-

tions of gender and embrace the complexities and contingencies of gender, particularly in online contexts. This study has implications for measuring a consumer's gender within technology environments as opposed to the consumer's gender being stated in a customer profile. Such an approach may provide a more meaningful assessment for digital marketers.

9. Limitation and future research

The main limitations of our study relate to a lack qualitative work to help explain our results. We suggest using a grounded theory approach to further explore gender's role in shopping motivation and purchase decisions online. Further, work should also clarify differences in online and offline behaviour through a link to actual purchase behaviour. Also, utilitarian consumption online is only one aspect of a consumer's motivation to shop online; for example, the individual as well as the combined effects of: cognitive style, trust ([George, 2002](#)) and techno-consumption ([Van Slyke et al., 2002](#)) need to also be considered. Second, the misrepresentation of gender online and offline raised the issue of authenticity. This issue is particularly pertinent when transactions are enacted online. [Rose and Wood \(2005, p. 284\)](#) argue that “the connectedness of objects to highly valued elements of consumers’ lived experience grounds judgments of authenticity in the “real” world”. This argument raises the following question: when gender is manipulated online and offline what environment most influences the consumer's judgments of a true lived experience and thus their evaluation of the authentic? Consumers may desire to disrupt the authentic and symbolically redefine their gender; a performance of the ‘cannibalization’ of self: to escape from a self-threatening social comparison ([Argo et al., 2006](#)). This research is about online shopping but what about ubiquitous markets and technology markets such as smart phones across channels of communication? Some work in a multi-channel suggests that gender does not affect usage ([Slack et al., 2008](#)). We also suggest that to increase our emphasis on gender in consumer behaviour research that we look beyond generic products and perceptions of gendered behaviour: (1) feminism ([Wilkes and Laverie, 2007](#)); (2)

leisure (golf; McGinnis et al., 2012); (3) masculinity (Gentry and Harrison, 2010); and (4) conspicuous consumption.

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