The effectiveness of gendered wording in health promotion leaflet - exploratory experiment in four English-speaking countries: the UK, USA, Ireland and Canada.

Abstract

This article reports results from a cross-national exploratory experiment in which we examined the effectiveness of gendered wording and endorser's gender in a leaflet promoting walking across four English-speaking countries: the UK, USA, Ireland, and Canada. Data were collected from 1072 students via an online questionnaire in the four countries to ensure cross-cultural data equivalence. Results demonstrated that respondents evaluated the leaflets in similar ways regardless of the country with few exceptions, suggesting that gendered content may be an effective creative strategy to use in health promotion across the studied English-speaking countries. Masculine males in the UK were the only group who evaluated communal wording in terms of attitude towards ad and behavioural intention negatively. As a result, the study presents applied suggestions and implications for future message structure within both social and commercial marketing related to gender content in social marketing advertisements.

Key words: health communication, exploratory experiment, gendered wording, endorser's gender, English-speaking countries

Introduction

Communication is an essential strategy utilised by social marketers, policy makers, and public health practitioners on both a local and global scale to influence people's behaviours. Whilst the direct effect of communication on behaviour change is difficult to prove, communication raises awareness and knowledge which in turn enhances and encourages behaviour change (van Schalkwyk, 2021; Doughty et al, 2021; Borawska, Oleksy, & Maison, 2020). Communication approaches are necessary and often the main behaviour influence strategy in cases where behaviours cannot be legislated and regulated, for example in case of physical exercise.

One communication strategy that is often used by social marketers is targeting individuals based on their gender. For instance the Government of Canada previously released a campaign to encourage behaviour change through a 'Common Vision' of increasing physical activity, supported by targeted communications on multiple platforms (Government of Canada, 2018). The campaign was based on an assumption that men and women requires different strategies hence the campaign was tailored towards males and females. In Ireland a recent gender focused communications campaign has encouraged men to take part in 30 minutes of moderate physical activity 5 days per week (Sport Ireland, 2020). Ireland also has targeted campaigns under the umbrella of 'women in sport' to encourage physical activity for females (Sport Ireland, 2021). In the UK, *This Girl Can* campaign was targeted specifically at women, who continuously remain less active than men (Sport England, nd). In the USA, gender-specific campaigns such as *Us Girls* target young women and girls to increase their participation in sports (Us Girls, n.d.).

Therefore, one decision that practitioners need to make is the choice of creative strategy – what to say and show in a message (Eagle et al., 2020). Gendered content, including gendered wording and the choice of endorser's gender, is one of the strategies they can pursue. Gendered wording is described as words that are associated with stereotypical male or female behaviours. Those words are derived from social role expectations – societies expect women and men to behave in certain ways and hence those characteristics are more often described in relation to women than men and vice versa (Getchell & Beitelspacher, 2020). The stereotypical wording is usually discussed in two distinct categories: agentic which are words that are associated with masculine traits and behaviours, and communal which are associated with feminine traits and behaviours (Hentschel, Braun, Peus, & Frey, 2020). Examples of agentic wording are: leader, competitive, assertive or dominant which have traditionally been associated with male stereotypes and on the other hand words such as interpersonal, co-operate, supportive and understanding have traditionally been associated with female stereotypes (Gaucher, Friesen, & Kay, 2011).

In addition to wording, effectiveness of messaging has also been attributed to the spokesperson or endorser who presents the wording (Fatfouta, 2021; Infanger & Sczesny, 2015; Edwards & La Ferle, 2009; Boyd & Shank, 2004). An important characteristic of the endorser that can impact the effectiveness of the messages is their gender, which has previously been investigated in a multitude of settings and contexts (e.g., Roden, Mustafaj & Saleem, 2021; Huang, 2021; Zhang, Zheng, & Zhang, 2020).

The aim of this study was to examine the effectiveness of gendered wording and endorser gender cross-culturally in native English-speaking countries of USA, Canada, Ireland, the UK. The researchers conducted an online survey experiment to understand whether the wording and the endorser's gender influenced the respondents' attitude towards ad, advertising credibility, and behavioural intention amongst males and females and across dominant gender role identities.

Gendered content: gendered wording and endorser's gender

Gendered wording has been defined as words that are stereotypically associated with or used to describe each gender (Hentschel, Braun, Peus, & Frey, 2020). The wording stereotypically associated with males is referred to as agentic wording and includes terms such as decisive, ambitious, assertive, and independent. Such words are stereotypically associated with male characteristics and are related to gender social role expectations (Löffler & Greitemeyer, 2021). The words associated with or used to describe stereotypically female characteristics are referred to as communal wording and include terms such as emotional, supportive, sensitive and compassionate (Hentschel, Braun, Peus, & Frey, 2020; Eagly, 2013; Grossman & Wood, 1993; Eagly, 1997; Xu, Zhang, Wu, & Wang; 2019).

Despite marked societal changes and evolving gender equality, studies of public opinions still show that certain traits are more likely to be associated with males more than with females and vice versa (Storage, Charlesworth, Banaji, & Cimpian, 2020; Rivera & Tilcsik, 2019; Baxter, 2017). For example, Madera, Hebl and Martin (2009) investigated the wording in recommendation letters for academic job roles, looking at the inclusion of agentic and communal language and whether this was a factor in influencing occupational selection choices in US academia. Findings showed that females were described throughout the letters as less agentic and more communal than males. It was also found that communal wording made such an impact in the recommendation letters that this influenced hiring decisions in academia negatively. A similar pattern was discovered in a more recent US study. Getchell & Beitelspacher (2020) analysed language describing 50 male and female Chief Marketing Officers in Forbes magazine. A large majority of males and females were each described with words

associated with their stereotypical gender. In fact, out of the whole list only two males were described with feminine words and two females were described with mainly masculine words.

In new technological environments gender bias is also apparent, even when users search for avowedly 'neutral' phrases curated by the algorithm ranking processes on search engines (Otterbacher, Bates, & Clough, 2017). Further, on social media platforms females have been found to use different language to males when analysing their comments on posts (Park et al., 2016). Females use certain phrases more often than males and males were found to use certain phrases that females did not use.

Gendered wording has been studied in a variety of different countries, however, most studies regardless of the location focus on a job or occupational advertisement context (e.g., Tokarz & Mesfin, 2021; Aziz et al., 2021; Oldford & Fiset, 2021; Hryniewicz & Grzegorczyk, 2020). For example, in Germany female employees were examined in the ways they react to communal and agentic wording. The results showed a divide between the perceptions of the gender stereotypical language for older females versus younger females. Older females did not feel they belong in the advertised roles when the wording was agentic regardless of the endorsers gender. Although younger females showed no differences in the way they reacted to agentic language regardless of whether the endorser was male or female (Hentschel et al., 2020). In Denmark, researchers studied the use of gendered wording in top executive job advertisements. The content analysis revealed that the advertisements featured mostly agentic wording. Moreover, when the study participants were asked to then profile applicants' characteristics for the positions their response was that they would most likely have stereotypical agentic traits (Askehave and Zethsen, 2014). A study in Belgium revealed that job advertisements that contained masculine language were perceived as less appealing by women. Female respondents reported that they felt less likely to belong within that advertised position (Wille and Derous, 2018). This was also emulated in a US study that examined male and females' perceptions of job advertisements when the wording was communal versus agentic. In this study females also found the job less attractive than males and had a lower sense that they would belong to that advertised position (Gaucher, Friesen and Kay, 2011).

Gender role identity is another aspect of gender identification that may be important in explaining the role of gender in communication (Schertzer, Laufer, Silvera, & Brad McBride; 2008). Most of the aforementioned studies considered gender of participants but failed to consider gender role identity which may differ from the declared gender.

Hence, the question we aim to answer in this study is whether there are differences in evaluations of the gendered content as measured by advertising credibility, advertising attitude and behavioural intention across the

four English-speaking countries (UK, USA, Ireland and Canada) between men and women who identify with different gender role identity. In order to answer this question, we conducted an online survey experiment with 1072 student respondents from the four countries.

Research methods

This study is an exploratory experiment which is a specific type of experiment whereby researchers vary a number of parameters in order to explore the patterns that are formed to then infer and deduce rules from the findings. The aim of such an experiment is not to test theories, but to examine relationships between variables (Scheel, Tiokhin, Isager, & Lakens, 2020; Steinle, 2002). We collected data via an online questionnaire (Qualtrics) in which respondents were exposed to randomly assigned stimuli (leaflet) and then had to answer a number of Likert-style questions. The scenario was that respondents were asked to imagine that they were given a leaflet on campus.

Stimuli development

Leaflets are an important part of health promotion campaigns as they have the ability to target specific audiences at familiar locations (GP surgeries, community centres) with more detailed information (PHE, 2021). They can also be effective for audiences who do not have access to digital communications (PSNC, 2017).

The leaflets were developed in line with recommendations by Geuens and De Pelsmacker (2017). In the first instance a systematic review was undertaken of existing literature to compile gendered words and phrases (Storage, Horne, Cimpian, & Leslie, 2016; Newman, Groom, Handelman, & Pennebaker; 2008; Rudman & Kilianski, 2000; Hoffman & Hurst,1990). It was also important to review real-world health promotion materials and campaigns to assist in developing the experimental leaflets.

Undergraduate students then assisted in the creation of four leaflets: two versions of communal worded leaflets and two versions of agentic leaflets. To improve validity of the leaflets a linguist who specialises in gendered wording then assessed the content of the leaflets. Then, to ensure that the leaflets would be suitable for the target audience a SMOG (simple measure of gobbledygook) test was used. The results found that the text would be appropriate for readers from age 11 upwards confirming that the leaflets would be suitable for the participants of the study who would be over 18 (Readability Formulas, 2017).

Subsequently, the four leaflets with different versions of gendered wording were pretested with 33 participants to pick the texts that gave the highest scores containing communal and agentic wording. The leaflets that were found to have the most feminine and most masculine text were then selected.

The four leaflets included comparable messages on the positive benefits of physical activity. Another pre-test was then conducted measuring whether participants felt that walking was a masculine or feminine activity on a 5-point Likert scale (1=very masculine 5=very feminine). The results reported that walking is a gender-neutral activity (M=3.23, SD=0.68). Furthermore, participants were surveyed to measure if an occupation as a doctor was seen as stereotypically feminine or masculine. The results also reported that a doctor's role is perceived to be gender neutral.

Concurrently with the initial pre-test, a further pre-test was performed to choose four images of endorsers. Ten images were selected from a stock photo provider. The images met specific criteria including the endorsers having similar characteristics: male and female hospital doctors with dark brown hair, arms folded stance, a similar body shape and size, Caucasian ethnicity, aged between 35-40, and comparable facial expressions. Twenty participants were employed to test the attractiveness of the endorsers on the images. Two images evaluated as equally attractive on a Likert-type scale were then selected.

The campaign name 'Life training' was selected by first generating a list of names different than existing real-world campaigns whilst still drawing on what should be presented. To assist in selecting from the final list a group of undergraduate marketing students were recruited to assist in selecting the one that they felt was most appropriate for the campaign and the name 'Life Training' was chosen. Correspondingly, the doctor names for the leaflets were also chosen from a list of names by the same group of undergraduate students. The guidelines were to avoid very common and very uncommon names. Finally, Dr Julie Baxter and Dr James Baxter were selected (For Ireland, the names were adjusted to O'Connor).

Final leaflets

Two of the final leaflets that were used for the experiments are included in Appendices 1 and 2. For the communal leaflet the gendered words included were: making the choice, chance, pleasant, gentle, flatterable, understandably, communally, cheerful (Gaucher *et al.*, 2011). For the agentic leaflet the gendered words included in the leaflet were decide (making the decision), active, determination, challenging, self-confident, ambitious, and individually (Newman *et al.*, 2008; Gaucher *et al.*, 2011).

The percentage of gendered wording included in each leaflet was calculated at 3.5%. This was to be consistent with existing literature in the field whilst still presenting as realistic and convincing (Gaucher *et al.*,

2011). A professional graphic designer designed and printed the final versions of the leaflets. Participants were then randomly allocated to receive one of the variations of the messages in an in between- subjects design (Geuens & De Pelsmacker, 2017).

Data collection

In order to ensure cross-cultural equivalency of data collection, we drew matched samples and data was collected from students (Van de Vijver & Tanzer, 2004). After considering the issue of the need for comparability of samples versus the need for representativeness, we have used student samples to increase comparability of samples in this cross-cultural study. It needs to be noted when looking at the results of this study that while homogenous samples (such as student samples) enhance comparability and are needed to ensure equivalence, they are not likely to be representative of the target populations (Buil, de Chernatony, & Martínez, 2012). An online survey was distributed in four universities in the following countries: UK, Ireland, Canada and USA. Undergraduate and postgraduate students were surveyed at each respective university. Students were also asked to forward the link to the survey to their friends.

After agreeing to take part in the study, respondents were asked to imagine that they were given a leaflet on campus, and then asked to read the leaflet and answer a range of questions listed below.

Measures

Gender identity of the participants was assessed by a categorial one-item question "What is your gender"? (Male, Female).

Attitude towards the advertisement (AAd) is used in this study to measure recipients' reactions towards the developed stimuli and whether the inclination is to respond in a positive or negative manner. Aad was measured on a five-point semantic differential scale focusing on 6 items including: Irritating/ not irritating, boring/not boring, good/not good, informative/not informative, objective/subjective and appropriate/not appropriate (Pope, Voges, & Brown, 2004).

Behavioural intention (BI) is used in this study to measure the willingness to perform a specific behaviour based on the reactions towards the leaflets. The participants answered the question 'What is the likelihood you will take up walking 30 minutes a day 5 days a week in the near future?'. This was measured on a five-point semantic differential scale. (Unlikely/ Likely, Improbable/ Probable, Impossible/ Possible, and Uncertain/ Certain) (Kareklas, Muehling, & Weber, 2015).

Advertising credibility (AC) was measured by 3-items adopted from Choi and Riffon (2002) rated on a 7-point semantic differential scale (unconvincing-convincing; not believable – believable; not credible-credible).

Dominant gender role identity (DGRI) was measured by first measuring Femininity and Masculinity adopted from Schertzer, Laufer, Silvera, & Brad McBride (2008). Each dimension was assessed by 8 items on a 5-point scale. Mean scores for each dimension (femininity and masculinity) were then calculated. After that, those who scored higher on masculinity were assigned masculinity as their DGRI; those who scored higher on femininity were assigned femininity as DGRI, and those whose scores on these two dimensions were equal were assigned 'neutral' DGRI.

Data analysis

The data analysis approach followed a three-step approach: i) data examination; ii) descriptive statistics of the sample, iii) testing the assumptions and reliability analysis, and iv) analysis All statistical analyses were computed with IBM SPSS Statistics Version 26. First, data were examined for attention check and those who did not pass attention check were excluded from the study. Next, data were examined for missing values. Cases which had missing data were deleted following listwise deletion.

Sample characteristics

The final sample size was 1072 respondents. No respondents reported to suffer from medical conditions or physical impairments, which could prevent them from walking. In addition, all respondents had done a minimum of 30 minutes or more of physical activity in the week the study was conducted. Detailed sample characteristics are presented in Table 1. The sample was skewed towards business degrees students in all four countries.

Table 1. Sample characteristics.

Variable	Country				Overall
	Canada **N= 271**	**Ireland** **N= 257**	**UK** **N= 275**	**USA** **N= 269**	**N = 1072**
Age					
Mean	23.83	21.13	21.89	22.37	22.32
SD	5.24	2.89	5.71	4.15	4.75
Min	18	18	18	18	18
Max	45	45	53	53	53
Mode	20	20	20	21	20
Gender					
Female	133 (49.1%)	128 (49.8%)	139 (50.5%)	130 (48.3%)	530 (49.4%)
Male	131 (48.3%)	128 (49.8%)	134 (48.7%)	135 (50.2%)	528 (49.3%)
Other/prefer not to say	7 (2.6%)	1 (.4%)	2 (.7%)	4 (1.5%)	14 (1.3%)
Ethnicity					

White	198 (73.1%)	241 (93.8%)	205 (74.5%)	160 (59.5%)	704 (75.0%)
Black/Black British/African American	12 (4.4%)	2 (.8%)	34 (12.4%)	34 (12.6%)	82 (7.6%)
Asian	30 (11.1%)	6 (2.3%)	11 (4.0%)	17 (6.3%)	64 (6%)
Native Hawaiian or Pacific Islander	0	1 (.4%)	1 (.4%)	2 (.7%)	4 (4%)
Other	21 (7.7%)	2 (.8%)	11 (4.0%)	19 (7.06%)	53 (5%)
Latin American	8 (3%)	2 (.8%)	2 (.7%)	34 (12.6%)	46 (4.3%)
Middle Eastern	2 (.7%)	3 (1.2%)	11 (4.0%)	3 (1.1%)	19 (1.8%)
Degree area					
Arts & Humanities	8 (3%)	24 (9.3%)	14 (5.1%)	32 (11.9%)	78 (7.3%)
Business & Management	247 (91.1%)	222 (86.4%)	193 (70.2%)	213 (79.2%)	875 (81.6%)
Law	2 (.7%)	5 (1.9%)	31 (11.3%)	0 (0%)	38 (3.5%)
Social Sciences	9 (3.3%)	6 (2.3%)	18 (6.5%)	15 (5.6%)	48 (4.5%)
Medical Sciences	3 (1.1%)	0 (0%)	4 (1.5%)	7 (2.6%)	14 (1.3%)
Mathematical, Physical and Life Sciences	2 (.5%)	0 (0%)	15 (5.5%)	2 (0.7%)	19 (1.8%)

MANOVA requires several assumptions to be met including that the within-group covariance matrices are equal. If the design is balanced so that there is an equal number of observations in each cell, the robustness of the MANOVA tests is guaranteed. However, in our sample, the number of observations per cell were not equal and therefore we tested the equality of covariance matrices using Box's M test. If this test is significant at less than 0.001, there may be severe distortion in the alpha levels of the tests. The test resulted in p=.000. In such cases researchers may use Pillai's trace or to present only descriptive statistics. After assessing the assumptions, the authors decided to present descriptive statistics as the assumptions of MANOVA were not met.

Reliability statistics are presented in Table 2. All measures meet the reliability criteria alpha was larger than 0.7.

Table 2. Reliability measures

Variable	Canada	Ireland	UK	USA

AAd	.770	.855	.859	.832
BI	.845	.870	.935	.848
AC	.780	.759	.873	.810
Masculinity	.802	.746	.900	.856
Femininity	.900	.861	.935	.920

Table 3 presents mean and standard deviation scores for each of the selected effectiveness measures. We looked at the mean scores to identify the scores that were positive (above the midpoint of the scale) and negative (below the midpoint of the response scale). For these comparisons, we only considered cells with 5 or more observations. Essentially, our approach was to assess if any of the creative options were evaluated negatively by any of the groups on any of the employed measures of effectiveness.

The negative evaluations included Masculine males in the UK, evaluating consistently negatively on all two measures (ad cred and BI) the communal wording presented by a male, and also the communal wording presented by a female. Also, Masculine Irish males indicated negative behavioural intention for communal wording for both male and female endorsers. Masculine Irish men did not find credible the ad with agentic wording presented by a male but evaluated it positively on other measures. Masculine females from UK evaluated negatively on attitude towards ad agentic wording presented by a male but positively on other measures. This may suggest that whilst adverts may be perceived as credible, they are not perceived as 'likable' – this makes determining effective communication approaches even more difficult.

Table 3. Descriptive statistics – mean, SD for attitude towards ad, ad credibility and behavioural intention.

Respondent's gender	DGRI	Wording	Endorser's gender	Respondent's country	N	AAD		AC		BI	
						M	SD	M	SD	M	SD
Male	Femininity	Communal	Male	UK	6	5.72	1.96	5.78	1.41	3.00	1.26
				Ireland	12	4.92	1.04	4.89	1.14	3.35	1.26
				USA	13	5.35	0.85	5.21	1.00	4.10	0.46
				Canada	15	5.27	0.95	4.76	0.95	3.83	0.96
			Female	UK	12	5.46	0.42	5.67	0.62	3.67	0.22
				Ireland	22	5.73	0.85	5.82	0.65	3.80	0.76
				USA	17	5.65	0.87	5.00	1.25	3.84	0.79
				Canada	15	5.59	0.91	5.36	0.46	3.92	0.55
		Agentic	Male	UK	7	5.35	1.10	5.00	1.62	3.57	1.09
				Ireland	19	5.46	0.97	5.37	0.99	3.66	0.88
				USA	17	4.76	1.21	4.76	1.39	3.53	0.92
				Canada	20	4.88	1.01	4.53	1.60	3.53	1.20
			Female	UK	7	4.88	0.74	4.57	1.21	3.68	1.09
				Ireland	19	5.06	0.89	5.47	0.75	3.59	0.93
				USA	16	5.15	0.90	5.04	0.89	3.61	0.70
				Canada	11	5.45	1.01	4.67	1.07	3.52	0.59
	Masculinity	Communal	Male	UK	25	4.49	0.70	3.77	1.33	2.71	1.07
				Ireland	19	4.92	1.42	4.33	1.52	2.93	1.41
				USA	17	4.88	1.24	4.39	1.89	3.56	1.19
				Canada	14	4.94	0.76	4.33	0.68	3.34	0.89
			Female	UK	17	4.19	0.67	3.37	0.96	2.21	0.76
				Ireland	11	4.38	1.49	4.42	1.39	2.95	0.42
				USA	12	5.08	0.80	5.00	1.33	3.60	1.09
				Canada	14	5.77	0.70	5.62	0.74	4.25	1.20
		Agentic	Male	UK	31	6.27	0.73	6.45	0.88	3.44	0.47
				Ireland	12	4.18	1.63	3.89	0.70	3.19	0.89

				Country	n	M	SD	M	SD	M	SD
				USA	16	5.84	0.92	5.13	1.40	3.50	0.73
				Canada	14	5.70	1.20	5.38	1.01	3.95	0.84
			Female	UK	24	5.98	0.69	5.92	0.93	3.33	0.63
				Ireland	9	4.67	0.74	5.11	0.58	4.19	0.92
				USA	17	4.95	0.98	4.84	1.30	3.21	0.73
				Canada	20	5.30	1.04	5.15	0.83	3.55	0.74
	Neutral	Communal	Male	USA	1	1.17	-	2.67		1.00	-
				Canada	2	6.00	0.00	4.00	0.00	2.25	0.00
			Female	UK	1	7.00	-	7.00		5.00	-
				USA	1	6.00	-	6.67		4.50	-
		Agentic	Male	UK	1	4.17	-	3.33		5.00	-
				USA	3	4.61	0.48	3.89	1.35	4.25	1.30
				Canada	2	3.33	0.00	2.33	0.00	1.25	0.00
			Female	UK	3	5.39	0.98	4.89	1.71	4.00	1.00
				Ireland	5	4.93	1.01	4.93	1.85	3.45	0.87
				USA	5	5.77	1.43	5.20	1.82	3.90	1.23
				Canada	4	5.92	0.10	6.17	0.19	4.25	0.29
Female	Femininity	Communal	Male	UK	19	5.59	1.26	5.26	1.62	3.66	1.25
				Ireland	33	4.95	1.08	5.12	1.33	3.70	0.71
				USA	10	5.12	1.43	4.77	1.57	3.48	1.04
				Canada	22	4.98	0.88	5.02	0.93	3.58	0.72
			Female	UK	30	5.89	1.17	5.98	1.36	3.55	0.78
				Ireland	24	5.34	1.21	5.72	1.13	3.69	0.70
				USA	17	5.50	0.72	5.55	0.59	3.59	0.65
				Canada	20	4.80	0.91	4.52	1.09	3.41	1.28
		Agentic	Male	UK	26	4.97	1.02	4.82	1.01	3.50	0.88
				Ireland	18	4.59	1.29	4.74	1.36	3.49	0.77
				USA	18	5.34	1.72	5.22	1.52	3.67	0.96
				Canada	20	5.31	0.87	5.38	1.16	3.91	0.89
			Female	UK	20	4.85	0.81	4.40	0.97	3.24	0.92

				Country	N						
				Ireland	20	5.17	1.34	5.30	1.32	3.90	0.64
				USA	18	5.59	1.06	5.33	1.39	3.82	0.94
				Canada	16	5.40	0.69	5.00	1.34	3.28	0.68
	Masculinity	Communal	Male	UK	11	4.65	1.34	4.55	1.38	3.11	0.82
				Ireland	3	3.50	1.59	4.00	1.15	3.58	0.38
				USA	15	5.50	0.91	5.47	0.86	4.03	0.77
				Canada	8	5.25	1.26	5.21	1.10	3.47	0.69
			Female	UK	7	5.60	1.04	5.62	1.25	3.75	1.13
				Ireland	5	4.97	0.27	5.20	1.04	3.85	0.65
				USA	18	5.76	1.15	5.48	1.18	4.06	0.79
				Canada	16	4.76	0.96	4.96	1.02	3.13	0.68
		Agentic	Male	UK	8	3.79	1.63	4.25	1.78	3.28	1.21
				Ireland	12	4.46	1.66	4.78	1.09	3.90	0.94
				USA	13	5.17	0.81	5.03	1.14	3.67	0.92
				Canada	12	4.65	1.17	4.25	1.78	3.44	0.63
			Female	UK	9	4.85	1.43	5.15	1.07	3.19	0.80
				Ireland	10	5.53	1.06	5.60	0.93	3.83	1.06
				USA	11	5.24	0.77	5.15	1.08	3.39	0.69
				Canada	11	4.86	1.11	4.48	1.46	3.39	0.87
	Neutral	Communal	Male	UK	1	4.67	-	4.00	-	2.25	-
				USA	6	6.11	0.57	6.11	0.54	4.00	0.89
			Female	Ireland	1	3.50	-	2.33	-	2.50	-
		Agentic	Male	UK	5	5.67	0.59	5.33	0.75	3.90	0.58
				USA	1	3.83	-	4.67	-	5.00	-
				Canada	5	5.00	0.20	5.27	0.98	4.15	0.14
			Female	UK	3	5.61	1.02	5.22	1.07	4.08	0.88
				Ireland	2	6.00	1.41	5.67	1.89	4.38	0.88
				USA	3	5.22	0.19	4.33	0.58	3.25	0.00
				Canada	3	3.72	1.50	3.89	1.26	2.83	0.52
	Femininity	Communal	Male	USA	2	3.67	0.00	3.17	0.24	4.00	0.00

Other/prefer not to say		Agentic	Male	Canada	1	5.50	-	6.33	-	5.00	-
			Female	Ireland	1	2.00	-	2.00	-	1.00	-
	Masculinity	Communal	Male	USA	2	4.17	0.00	5.00	0.00	4.00	0.00
				Canada	2	6.17	0.00	5.00	0.00	5.00	0.00
		Agentic	Male	UK	1	5.50	-	4.33	-	3.50	-
			Female	Canada	4	5.42	0.87	4.50	1.73	3.50	0.00
	Neutral	Agentic	Female	UK	1	4.00	-	5.33	-	3.25	-

Discussion and further research

Whilst some wording and endorser combinations in our study were evaluated more positively than other creative design choices, across all countries the stimuli were mostly evaluated positively with very few exceptions, but even those negative evaluations were not consistent across all measures of effectiveness. Our study suggests that, contrary to previous findings, women are not more likely to dislike agentic wording. Masculine females from the UK were the only group who on averagre rated agentic wording presented by a male as negative on attitude towards ad measure, but rated it positively on advert credibility and behavioural intention. However, agentic wording presented by a female was evaluated positively. Feminine females evaluated all combinations positively. The lack of consistent difference in preferences that women showed towards masculine and feminine wording follows similar pattern identified by Hentschel et al. (2020) who found that younger women did not differentiate between agentic and communal wording. Although we wonder if it may be the case of generations (Shu, & Meagher, 2017; Shorrocks, 2016) with younger women being socialised to perform more roles and exhibit more personality traits, hence they are not less likely to prefer agentic wording.

The finding that British masculine male respondents were the only ones who evaluated communal wording in a negative way may suggest that it may be related specifically to the British culture, and this is area that should be explored further in subsequent studies. This could be evaluated further by measuring cultural characteristics or conducting a larger study with samples drawn from the general population. The findings indicate that regardless of gendered wording and endorser's gender, such messages may be persuasive, and there will be men and women for whom such designs will and will not work. The recommendation is to use a range of wording options and endorsers – so that it increases the likelihood of matching the right message to the right person. It could also be that content makes little difference but frequency (reaching individuals with the message several times), timing (reaching individuals at the right time) and reach are more important than what we say as advertisers (within certain boundaries of course). It may be more important to communicate at the right time and this may make more difference than to modify the content to suit genders.

It could be that what is important in communication is to have a good enough creative idea but to repeat exposure and maintain exposure so that it becomes part of the evoked set – but these are ideas for further investigation.

Another area of further study is to examine the effect of the volume of gendered wording in messages. As shown by O'Keefe & Hoeken (2021), effect sizes are often very small when small changes in creative content

are examined, meaning that whilst there may be differences they are not practically meaningful. Future research could explore content that is substantially more gendered than our stimuli. Another avenue of research is exploring what role gender role conformity plays in evaluating gendered messages.

Limitations

The study needs to be viewed within its limitations. First, our sampling strategy, although chosen to ensure cross-cultural sampling equivalence, limits the findings to a very specific population segment, that is students. Thus, generalisations are limited and should not be extrapolated to the whole population. Future research could focus on exploring effectiveness of gendered wording across generational cohorts and across different product categories (for example products that are targeted at men versus women, or that are neutral). Generational cohorts may be the reason why, in our sample, women did not dislike agentic wording. Our younger respondents were socialised in a different society in which women were encouraged to pursue employment, careers and display characteristics that are not gender-specific (Fagan & Rubery, 2018; Scarborough, Sin, & Risman, 2019). An important limitation of this study is our approach to measuring effectiveness with Likert-scale items which we treated as interval data in data analysis. Statistical means may not be the most appropriate measurements of effectiveness, and other measures (categorical measures) could be better. For example, calculating proportions of respondents who evaluated stimuli positively, negatively or neutral may lead to different conclusions. However, future research and use of such gendered wording should be considered within the context of how language influences attitudes, opinions and behaviours. It may be that the use of gender -fair language or gender-neutral language may be a more ethical approach to employing wording in communications (Sczesny, Formanowicz, Moser, 2016).

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APPENDICES

Appendix 1: Male endorser and agentic wording leaflet.

Walking Campaign

Benefits of Walking

Hi, I am Dr James Baxter I have been a hospital Dr for 15 years and I am now an avid walker. I recommend walking *30 minutes a day* for 5 times a week as this can bring you lots of health benefits. *Start walking soon!*

Improve your mental health Reduces risk of depression and anxiety

Increase your lifespan Reduces risk of diabetes and bowel cancer

Improve your heart health Reduces risk of heart disease

Burn fat Reduces weight

Boost your immunity Reduces risk of getting a cold

Make your bones stronger Reduces risk of osteoporosis

Improve your balance Reduces risk of having a fall

Making the decision to keep active is good for your mental health. Exercise promotes good mental health because it stimulates chemicals in your brain that leaves you feeling more self-confident and more relaxed than you were before you worked out. Exercise is also good for your physical health and for your weight. When you are physically fit you burn off calories.

The more you exercise, the more calories you burn. This helps you maintain your ideal weight and keeps you looking good. Building walking into everything that you do is one of the best ways to get the workout you need.

Challenge yourself and take the stairs at every chance you get. When you are driving, be ambitious and park in the car park or space that is the farthest from your destination. If you have been sitting for a long period of time, be determined to take some time to get up and walk around. The benefits are yours for the taking. All you need to do is start moving now either individually or even better walk with colleagues or friends!

Start walking *30 minutes a day*, 5 times a week!

*Walking not only changes your **BODY**, it changes your **MIND**, your **ATTITUDE** and your **MOOD***

LIFEtraining

Appendix 2: Female endorser and communal wording leaflet.

Walking Campaign

Benefits of Walking

Hi, I am Dr Julie Baxter I have been a hospital Dr for 15 years and I am now an avid walker. I recommend walking *30 minutes a day* for 5 times a week as this can bring you lots of health benefits. *Start walking soon!*

Improve your mental health Reduces risk of depression and anxiety

Increase your lifespan Reduces risk of diabetes and bowel cancer

Improve your heart health Reduces risk of heart disease

Burn fat Reduces weight

Boost your immunity Reduces risk of getting a cold

Make your bones stronger Reduces risk of osteoporosis

Improve your balance Reduces risk of having a fall

Making the choice to keep fit is good for your mental and emotional health. Exercise promotes good mental health because it stimulates chemicals in your brain that leaves you feeling more cheerful and more relaxed than you were before you worked out. Exercise is also good for your physical health and for your weight. When you are keeping fit you burn off calories.

Understandably the more you exercise the more calories you burn. This helps you maintain your ideal weight and will give you a flatterable physique. Building gentle walking into everything that you do is one of the best ways to get the exercise you need.

Take the stairs at every chance you get. When you are driving, park in the car park or space that is the farthest from your destination. If you have been sitting for a long period of time, be sure to take some time to get up and walk around. The benefits and pleasant effects are yours for the taking. All you need to do is start moving now on your own or even better walk communally with colleagues or friends!

Start walking *30 minutes a day*, 5 times a week!

*Walking not only changes your **BODY**, it changes your **MIND**, your **ATTITUDE** and your **MOOD***

LIFEtraining