# Does it pay to act feminine? A cross-cultural study of gender stereotype endorsement and cognitive legitimacy in the evaluation of new ventures

Gender stereotype endorsement

Received 3 July 2020 Revised 6 March 2021 7 May 2021 Accepted 8 May 2021

Golshan Javadian
Morgan State University, Baltimore, Maryland, USA
Maria Figueroa-Armijos
EDHEC Business School, Lille, France
Vishal K. Gupta
The University of Alabama, Tuscaloosa, Alabama, USA
Meisam Modarresi
Semnan University, Semnan, Iran, and
Crystal Dobratz
Colorado School of Mines, Golden, Colorado, USA

#### Abstract

**Purpose** – Does gender stereotype endorsement play a role in the customer's cognitive evaluation of new ventures owned by women entrepreneurs? The authors' cross-cultural study integrates literature on gender stereotype endorsement and cognitive legitimacy to address this research question.

**Design/methodology/approach** – The authors use a two-study experimental design and analyze our results by cultural context to test our hypotheses: one drawn from college students in Iran and one from working professionals in the United States.

**Findings** – The authors' comparative results suggest that the evaluation of feminine versus masculine characteristics of women entrepreneurs varies depending on the evaluator's (in this case the customer's) endorsement of gender stereotypes and the cultural context. Specifically, the authors found that a new venture owned by a woman entrepreneur who displays feminine characteristics is perceived as more legitimate when the customer endorses feminine stereotypes, regardless of the country.

**Research limitations/implications** – The authors' research contributes to the literature on cognitive legitimacy and women's entrepreneurship by unveiling the cultural conditions and factors that allow women entrepreneurs to benefit from acting in a stereotypically feminine way. The authors use a binary approach to gender. Future research should extend our findings to also include a non-binary approach.

**Originality/value** – This study contributes to women's entrepreneurship research by unraveling the implications of gender stereotype endorsement, legitimacy and culture in customer evaluation of ventures owned by women.

**Keywords** Women's entrepreneurship, Gender stereotype endorsement, Cognitive legitimacy, New venture, Customer evaluation

Paper type Research paper

#### Introduction

Entrepreneurship has been traditionally understood as a masculine activity (De Bruin *et al.*, 2006) and has been stereotypically defined with masculine terms such as aggressiveness, risk taking and achievement orientation (Baron *et al.*, 2001; Fagenson and Marcus, 1991; Marlow, 2002). Prior evidence suggests that the possession of feminine characteristics may be a liability for women entrepreneurs (Ahl, 2006; Ahl and Marlow, 2012; Yang and Aldrich, 2014).



International Journal of Gender and Entrepreneurship © Emerald Publishing Limited 1756-6266 DOI 10.1108/IJGE-07-2020-0092 Women are frequently judged for being "emotional" and for their apparent emphasis on the social aspects of entrepreneurship (Mirchandani, 1999). For instance, in the realm of venture capital, the overwhelming evidence suggests that women are viewed less favorably by potential investors when trying to obtain funding for new ventures, with funding to womenled ventures reaching less than five percent of the total awarded (Tinkler *et al.*, 2015).

Overall, funding decisions seem to be based on the notion that masculine characteristics are more suitable for entrepreneurs than feminine characteristics (Malmstrom et al., 2017). Fittingly, women entrepreneurs are advised to not "pitch like a girl" as investors are "biased against the display of feminine-stereotyped behaviors" (Balachandra et al., 2019, p. 116). Although the perspectives of stakeholders other than investors (e.g. customers) have not been yet explored in the literature, the expectation is that they would have similar perceptions of entrepreneurs' characteristics. The purpose of this study is to examine how customer's stereotypical perceptions impact the evaluation of a new venture owned by a woman entrepreneur.

Overall, the stereotypical masculine view of entrepreneurship appears to have overshadowed feminine characteristics. However, a recent stream of research suggests that terms such as "adaptability," "compassion," "empathy" and "affection" are also becoming positively associated with entrepreneurship (e.g. Engel et al., 2020; Goel et al., 2013; Murnieks et al., 2019) [1]. Cross-checking these latter terms with measures of femininity-masculinity suggests that these terms are generally categorized as stereotypically feminine (e.g. Gaucher et al., 2011) [2]. This suggests that, in addition to masculine terms, entrepreneurship is now also being associated with feminine terms. Nonetheless, the literature on this topic remains scant, thus limiting our understanding of the reasons behind why women entrepreneurs may (not) benefit from possessing and displaying feminine characteristics.

In this study, we aim to enhance our understanding on why women entrepreneurs may (not) benefit from displaying feminine characteristics during the early years of starting a venture. We hypothesize that the customer's endorsement of gender stereotypes (Schmader et al., 2004) plays a key role in the evaluation of new ventures owned by women entrepreneurs. Endorsement of gender stereotypes, which refers to the degree to which an individual accepts gender differences, is known to impact behavior and perceptions (Schmader et al., 2004). In particular, by exploring the customer's gender stereotype endorsement and cognitive legitimacy in two differing cultural contexts, we explore the dynamic (i.e. not fixed) conditions under which feminine attributes benefit a new venture owned by a woman entrepreneur. We test our predictions in an experimental context, which has the advantage of high internal validity (Colquitt, 2008). Experimental designs are known to facilitate theory testing and development (Spencer et al., 2005) and have been increasingly used in entrepreneurship research (Hsu et al., 2017).

This study contributes to the literature on cognitive legitimacy and women's entrepreneurship by exploring the customer perspective (i.e. a person who buys goods or services from a business) in the evaluation of a new venture owned by a woman. Obtaining legitimacy is a critical factor in new venture development and entrepreneurs are expected to recognize and adapt their strategies toward attaining it (Fisher *et al.*, 2016). A new venture's legitimacy is evaluated by its ability to "balance the interests of diverse stakeholders [...] including customers" (Fisher *et al.*, 2016, p. 393). Nonetheless, the perspective of the customer remains unexplored in the literature. Indeed, despite the importance of the customer perspective for new ventures, there is little understanding of what contributes to achieving customer legitimacy of a new venture (Diez-Martin *et al.*, 2013). Being unable to obtain the "intimacy with the customer" can be damaging for a startup, and as an important stakeholder group, customers' evaluations of a new venture are pertinent to understand (Fisher *et al.*, 2016, p. 395).

Our inquiry also contributes to the stereotype research by redirecting attention from self-focused to other-focused attitudes in the stereotype endorsement literature. The majority of published stereotype research examines how one's stereotypical perceptions impact their own attitudes (for a comprehensive review see Spencer *et al.*, 2016). Early research on stereotype threat (Steele, 1997) suggests that an individual or a group might be the target of others' stereotypical expectations (Shapiro and Neuberg, 2007); [3] however, such expectations have not been empirically explored (Swab *et al.*, 2021) [4]. In this study, we examine the impact of the stereotypical beliefs of others (customers) on the stereotyped individual (women entrepreneurs) pursuing a new venture, a perspective that has received limited attention in stereotype research.

The following section offers the conceptual rationale for the relationship between cognitive legitimacy, including customer perceptions and gender stereotype endorsement followed by the research design, hypotheses and results. We conclude with a discussion of findings and their implications for future research and practice.

## Theoretical background and hypotheses development

Legitimacy theory

In broad terms, legitimacy refers to social judgment of acceptance, appropriateness and desirability, which allows firms to access resources to survive and grow (Zimmerman and Zeitz, 2002). Suchman (1995) defined legitimacy as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (p. 574). According to legitimacy theory (Meyer and Rowan, 1977), "organizations that incorporate societally legitimated rationalized elements in their formal structures maximize their legitimacy and increase their resources and survival capability" (p. 352). The underlying assumption of the theory is that the organization's ability to become isomorphic with its highly elaborated institutional environment plays a crucial role in the success of the organizations (Meyer and Rowan, 1977), especially at an early-stage (Becker-Blease and Sohl, 2015; Farhat et al., 2018).

A key form of legitimacy involves stakeholders, including customers, who make legitimacy judgments about an organization *passively*, rather than through active evaluation processes, which is known as cognitive legitimacy (Nagy and Kacmar, 2013). Often a positive indicator of survival (Wang, 2009), cognitive legitimacy is critical for a new venture because as a social judgment (Ashforth and Gibbs, 1990) it enables the acquisition of resources and responsiveness to competitive threats (Baum and Oliver, 1991; Christensen and Bower, 1996). In fact, when cognitive legitimacy is perceived, key stakeholders such as customers become aware of the values of the new venture, which helps to minimize the liability of newness (Nagy and Kacmar, 2013).

### Customer legitimacy

Customer legitimacy acts as a critical force in the firm's strategy (Christensen and Bower, 1996) and daily operations (Dahlmann and Grosvold, 2017). Indeed, customers often use observable legitimacy characteristics of a new venture to determine the quality or value of the firm (Batchelor and Burch, 2011; Wang *et al.*, 2014). Further, customers can "communicate positive information about both the offering and the organization [. . .] if the venture has a high degree of legitimacy" (Wang *et al.*, 2014, p. 1,061). As a result, firms are increasingly responding to customer legitimacy perceptions as a high-level priority to avoid a potential loss of business if expectations are not met (Malik and Abdallah, 2019).

Furthermore, previous research indicates that customers assess a new venture's cognitive legitimacy based not only on perceptions of the product, but also of the firm's founders and top management (Shepherd and Zacharakis, 2003). Indeed, a customer's perception of qualities and characteristics of the entrepreneur is crucial to obtain cognitive legitimacy for the new venture (Wang *et al.*, 2014; Shepherd and Zacharakis, 2003; Suchman, 1995; Zimmerman and Zeitz, 2002). This information can in turn be used to better define the structure of the organization (Geroski *et al.*, 2010) and develop the firm's reputation and competitive advantage (Dahlmann and Grosvold, 2017). Thus, following the assumptions of legitimacy theory, especially cognitive legitimacy, if the characteristic of the entrepreneur is consistent with the customer's perceptions, it is more likely for the customer to perceive the new venture as legitimate.

## Gender stereotype endorsement and customer cognitive legitimacy

Gender stereotype endorsement refers to the degree to which an individual accepts gender differences (Schmader *et al.*, 2004). An individual's perception about a member of the stereotyped group (e.g. a woman entrepreneur) is impacted by their stereotypic conception of social groups or their gender stereotype endorsement (Branscombe and Smith, 1990; Hamilton, 1981). Masculine stereotype endorsement is the degree to which an individual attributes masculine characteristics to men, whereas feminine stereotype endorsement is to the degree to which an individual attributes feminine characteristics to women.

Indeed, most customers' stereotypical expectations derive from a "binary essentialist account of male and female" (Galloway et al., 2015, p. 5), which considers gender as a fixed attribute rather than as a phenomenon that takes shape through everyday activities (Poggio, 2006). Feminist approaches have advanced this conceptualization over time. In fact, four decades ago, Goffman (1976) and West and Zimmerman (1987) proposed that gender takes shape from an individual's "doing" of particular activities. Accordingly, the way an entrepreneur performs (e.g. in a manner that is perceived as either feminine or masculine) is expected to play a role in the customer's evaluation of the entrepreneur.

Customers can play a crucial role in the success of ventures during the early stages of their formation. In fact, to overcome resource constraints and achieve growth, a new venture must rely on its customers to communicate value to others (Wang et al., 2014). Through interactions with customers during early stages of founding, the entrepreneur learns about and adjusts to the requirements of the product or service, gains legitimacy and accesses financial resources through customer purchase (Aaboen et al., 2017). Customers who purchase from the new venture not only bring value to the venture by possibly engaging in repeat purchases, but also by influencing others' purchase probabilities as they become the opinion leaders for the new venture (Kirmani and Rao, 2000).

Based on legitimacy theory (Meyer and Rowan, 1977), the observable legitimacy characteristics of a new organization, such as the gender of the entrepreneur, are used by critical external constituents such as customers to infer the quality of the firm (Wang et al., 2014). Evidence suggests that women entrepreneurs face more obstacles to gain legitimacy, and lack of legitimacy affects new venture performance because customers are a needed resource for success (Murphy et al., 2007). Indeed, customers will not "patronize a venture that they do not perceive as legitimate" (Murphy et al., 2007, p. 131). We argue that the display of feminine versus masculine characteristics by the woman entrepreneur impacts the cognitive legitimacy of the new venture favorably or unfavorably depending on the customer's endorsement of gender stereotypes. Indeed, by inferring the characteristics of the firm from the characteristics of the entrepreneur (Shepherd and Zacharakis, 2003; Wang et al., 2014), customers can attribute legitimacy of the firm and its products offered to observable feminine characteristics (e.g. compassionate, understanding of employees, enthusiastic) or masculine characteristics (e.g. aggressive, risk taking, decisive) of the entrepreneur (Gupta et al., 2009, 2014) leading the firm.

Gender stereotypes both describe and prescribe how men and women actually are, as well as how they "should be" (Schein, 2001; Heilman *et al.*, 2004). Accordingly, in the context of entrepreneurship, a customer who endorses feminine stereotypes is expected to believe that women entrepreneurs perform consistently with stereotypically feminine characteristics, such as empathy and affection. Based on the assumptions of legitimacy theory, customers who endorse feminine stereotypes would evaluate a woman entrepreneur who displays feminine characteristics more favorably than one who displays masculine characteristics. Accordingly, the customer will perceive the new venture that is owned and run by a woman entrepreneur who displays feminine characteristics as more legitimate than the same new venture owned and run by a woman entrepreneur who displays masculine characteristics. This is because the woman entrepreneur who displays feminine characteristics is acting in a way that is consistent with the stereotypical expectations of the customer. Therefore, we propose the following hypothesis:

H1. When a customer endorses feminine stereotypes, the new venture owned by a woman entrepreneur who displays feminine characteristics receives higher cognitive legitimacy than the new venture owned by a woman entrepreneur who displays masculine characteristics.

Alternatively, a customer who endorses masculine stereotypes will perceive that it is legitimate for male entrepreneurs, but not for female entrepreneurs, to display masculine characteristics such as aggressiveness, risk taking and achievement orientation. According to our logic, a customer who endorses masculine stereotypes will evaluate a new venture owned by a woman entrepreneur who displays masculine characteristics less favorably than a new venture owned by a woman entrepreneur who displays feminine characteristics. Fittingly, we propose the following hypothesis:

H2. When a customer endorses masculine stereotypes, the new venture owned by a woman entrepreneur who displays masculine characteristics receives lower cognitive legitimacy than the new venture owned by a woman entrepreneur who displays feminine characteristics.

On the other hand, when the customer does not endorse any form of gender stereotype (masculine or feminine), the customer does not believe that female entrepreneurs should display masculine or feminine characteristics to a lower or higher degree than men. In this case, the customer will evaluate the new venture owned and run by a woman entrepreneur who displays masculine characteristics in a way that is not significantly different from a new venture owned and run by a woman entrepreneur with feminine characteristics. Thus, we propose the following hypothesis:

H3. When a customer does not endorse gender stereotypes, there is no difference between the cognitive legitimacy of a new venture owned by a woman entrepreneur who displays masculine characteristics and the cognitive legitimacy of the new venture owned by a woman entrepreneur who displays feminine characteristics.

# Experimental design methodology and results by cultural context

Experiments are a particularly suitable method to examine whether a predicted relationship does exist in a controlled environment (Gregoire and Shepherd, 2012). They allow researchers to control extraneous influences and manipulate focal variables, making them an ideal choice to investigate causal relationships (Colquitt, 2008; Gupta *et al.*, 2013). Prior research has recommended experimental studies as an appropriate approach to clarify the causal mechanisms underlying stereotypical expectations within the context of entrepreneurship (e.g. Hsu *et al.*, 2017). Given that external validity can be confirmed only through systematic testing

with different subjects and settings (Berkowitz and Donnerstein, 1982), we conducted two between subject experimental studies with varying samples to test the predicted relationships.

We conducted the first experiment in the United States (US) and the second one in Iran, an under-researched international context. Iran is the second largest economy in the Middle East and North Africa (MENA) region (Dastmalchian et al., 2001). Studies testing predictions using data collected in Islamic societies, particularly from Iran, are sparse in international journals, making it difficult to unravel the extent to which theories and concepts developed in Western countries translate to other unique cultural contexts (Gupta et al., 2014). Thus, by conducting our experimental research in Iran, we advance knowledge about entrepreneurial processes in the international context of an understudied society, offering the opportunity to unearth new and noteworthy research questions. Notably, Iran and the US depict significant differences regarding emphasis on cultural measures including gender egalitarianism, thus making them an appropriate cross-cultural context for our study.

Table 1 shows a summary of key parameters measuring each country's cultural and entrepreneurial context. Compared to Iran, US has a higher rate of total early-stage entrepreneurial activity rate (TEA) [5] suggesting that US population is more involved in early entrepreneurial activities. The US also has a higher ratio for female/male TEA indicating that women's participation in early entrepreneurial activities is higher compared to Iran.

Furthermore, in the US culture more emphasis is placed on masculine qualities such as competition and achievement. As a result, the US is considered a relatively masculine society. The US culture is also positioned as an individualistic and indulgent society, with low preference for avoiding uncertainty, a strong normative cultural orientation and a low power distance culture. Moreover, US is considered a culture with relatively high gender egalitarianism [6].

On the other hand, Iran's culture places less emphasis on masculine qualities, indicating that the dominant values in the society are "caring for others" and "quality of life." Accordingly, Iran is considered a relatively feminine context. Iran's culture is considered as a hierarchical, collectivistic and restraint society, with a high preference for avoiding uncertainty and a strong normative cultural orientation. Also, Iran is considered a culture with relatively low to medium gender egalitarianism.

#### Sample

US sample. The sample for the US experiment was collected from Amazon Mechanical Turk, a crowd-sourcing web service that coordinates supply and demand of tasks requiring human

Parameter	United States	Iran
Total early-stage entrepreneurial activity <sup>1</sup>	17.42%	10.69%
Female/male early-stage entrepreneurial activity ratio <sup>1</sup>	0.91	0.63
Masculinity vs Femininity score <sup>2</sup>	62	43
Individualism versus collectivism score <sup>2</sup>	91	41
Indulgence versus restraint score <sup>2</sup>	68	40
Uncertainty avoidance index <sup>2</sup>	46	59
Long-term orientation versus short term normative orientation score <sup>2</sup>	26	14
Power distance index <sup>2</sup>	40	58
Gender egalitarianism (values) <sup>3</sup>	Relatively High	Between Relatively Low and Medium
N ( ) 100 ( ) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 . 3 /	

**Table 1.** Information on contexts of the study

Note(s): <sup>1</sup>The source of data is 2019 Global Entrepreneurship Monitor <sup>2</sup>The source of data is 2015 Hofstede's National Culture Insights

<sup>3</sup>The source of data is 2020 GLOBE Project

intelligence to complete (Horton et al., 2011). MTurk is associated with benefits such as ready access to a large and diverse pool of participants, and the ability to maintain complete anonymity of participants' identity (Gupta et al., 2014). Various recent studies have demonstrated the efficacy of using Amazon MTurk as a reliable source of data for experimental research (Eriksson and Simpson, 2010; Inbar et al., 2012; Paolacci et al., 2010). In recent years, MTurk has gained acceptance as a valid research environment for social scientists to conduct experiments (Mason and Suri, 2012). Among the benefits of using Amazon Mturk are large and diverse participant pools, ease of access and speed of data collection at a reasonable cost and flexibility in research design choice (Aguinis et al., 2020). However, the use of Amazon Mturk is not without challenges. These challenges include participant's inattention, inconsistent English language fluency, vulnerability to web robots and perceived researcher unfairness [7] (Aguinis et al., 2020).

In conducting our study, we took several steps to minimize the effects of the challenges associated with Amazon MTurk studies. We provided the participants with a consent letter explaining in detail what the purpose of the study is, who the researchers and their affiliated institutions are, how long the survey will take and that the survey does include attention seeking questions. We required participants to complete the entire survey and only accepted those who correctly answered our manipulation check questions. We invited US-based individuals to participate in exchange for a cash payment of 25 cents (USD). Amazon MTurk allows for rejection of work that does not meet expected standards or requirements, which in turn lowers a worker's approval rating. We stipulated that participants needed to have a minimum of 98% approval rating to eliminate respondents who have not shown good performance in the past. Of the 414 respondents who completed the survey satisfactorily, 51% were male with 37 as the average age. Approximately, 44% of our sample had a bachelor's degree and 81% of the sample reported their race as White.

*Iran sample.* The sample from Iran was collected from a public university in Semnan, a city in the North of Iran. College students (graduate and undergraduate) were asked to complete the survey. A total of 254 students completed the survey in a classroom setting,44% of them were seniors and 51% female, with an average age of 22.

#### Procedure

In each of the experiments (for both US and Iran), similar to previous research on customers' evaluation of entrepreneurs (e.g. Nagy *et al.*, 2012; Ogbolu *et al.*, 2015), participants were randomly assigned to evaluate a written scenario of a woman entrepreneur in one of the two experimental conditions. In one condition, the woman entrepreneur was described as having masculine characteristics and in the other condition she was described as having feminine characteristics. Within each of these conditions, the participants were rated either on their feminine stereotype endorsement or masculine stereotype endorsement. Appendix includes the conditions and the measures used for the US study [8].

Following prior research (Gupta et al., 2009, 2014), in the masculine condition, the woman entrepreneur was defined as a "aggressive," "risk taking," "competitive" and "decisive" and in the feminine condition, the woman entrepreneur was defined as "compassionate," "understanding of employees," "excited" and "enthusiastic" about the future of her business.

In both conditions, the respondents read about a woman entrepreneur who started an insurance agency three years ago in their neighborhood and is currently running it. Respondents read about a woman entrepreneur named Judy in the US and Maryam in Iran. Because research shows that industries can be gendered (Ko *et al.*, 2015), we selected the gender-neutral insurance industry for our investigation (Ramaswami *et al.*, 2010; Garcia-Retamero and Ló pez-Zafra, 2006). The respondents then answered a set of questions to capture the cognitive legitimacy of the business held by the woman entrepreneur.

#### Measures and control variables

Feminine and masculine stereotype endorsement. Participants were asked to rate the degree to which they agreed with five statements measuring their gender stereotype endorsement. The scale was adopted from Chatard et al. (2008) and modified to reflect gender stereotype endorsement based on a selection of feminine and masculine terms identified in entrepreneurship research. For the masculine stereotype endorsement, respondents were asked whether they agree that male entrepreneurs possess stereotypically masculine characteristics such as "risk taking" and "aggressiveness" more than female entrepreneurs. For the feminine stereotype endorsement, respondents were asked whether they agree that female entrepreneurs possess stereotypically feminine characteristics such as "understanding her employees" and "excited" more than male entrepreneurs. Respondents were asked to rate their level of agreement with each statement based on a five-point Likert scale (from 1: strongly disagree to 5: strongly agree). For the experiment in the US, the Cronbach's alpha of the feminine stereotype endorsement scale was 0.92, and the masculine stereotype endorsement was 0.89. For the experiment in Iran, the Cronbach's alpha of the feminine stereotype endorsement scale was 0.85, and the masculine stereotype endorsement was 0.80.

The gender stereotype endorsement variable was turned into a dichotomous variable using the median of the scale. The median for the feminine stereotype endorsement was 3.0 for the experiment in the US and 3.6 for the experiment in Iran, and the median for the masculine stereotype endorsement was 3.4 for both experiments. Participants whose response was below the median were categorized as individuals who do not endorse gender stereotypes, and those with responses above the median were categorized as individuals who endorse gender stereotypes. Dividing the sample based on gender stereotype endorsement levels gave a between subject research design of a 2 (gender stereotype endorsement: yes vs no) × 2 (entrepreneurial characteristic: feminine vs masculine) experiment for each of the studies.

Cognitive legitimacy. Cognitive legitimacy was measured using the four-item measure proposed by Pollack et al. (2012). Respondents were asked to rate their level of agreement with each statement based on a five-point Likert scale (from 1: strongly disagree to 5: strongly agree). For the experiment in the US, the Cronbach's alpha was 0.84. For the experiment in Iran, the Cronbach's alpha was 0.71.

Control variables. We controlled for age and gender of the customers because both have been shown to influence a customer's attitude toward and perception of a new venture (Nagy and Kacmar, 2013; Babakus and Yavas, 2008).

#### Analyses and results

The sample from the US showed a slightly above average degree of feminine stereotype endorsement, with a mean of 3.07 (SD = 0.95) and median of 3.0 (median absolute deviation [MAD] = 0.6). The sample also showed an above average degree of masculine stereotype endorsement, with a mean of 3.26 (SD = 1.0) and median of 3.4 (median absolute deviation [MAD] = 0.6). The inspection of the full distribution suggests that many in the sample show moderate to high levels of endorsement. For the feminine stereotype endorsement, approximately 70% of the sample gave ratings at or above the level of 3 (neither agree or disagree) and for the masculine stereotype endorsement, 76% of the sample gave ratings at a level that was at or above the level of 3.

The sample from Iran showed an above average degree of feminine stereotype endorsement, with a mean of 3.59 (SD = 0.92) and a median of 3.60 (median absolute deviation [MAD] = 0.6). The sample also showed an above average degree of masculine stereotype endorsement, with a mean of 3.25 (SD = 0.92) and a median of 3.40 (median absolute deviation [MAD] = 0.6). In addition, inspection of the full distribution suggests that many in the sample show relatively high levels of endorsement. For the feminine stereotype

endorsement, approximately 82% of the sample gave ratings at or above the level of 3 (neither agree or disagree) and for the masculine stereotype endorsement, 75% of the sample gave ratings at a level that was at or above the level of 3.

Comparing the feminine and masculine stereotype endorsements in US and Iran, we found that the sample in Iran and the US equally endorsed masculine stereotypes (Ms = 3.25 and 3.26, respectively), t(358) = -0.07, ns. However, the sample in Iran had a significantly higher endorsement of feminine stereotypes (Ms = 3.58 and 3.08 respectively), t(386) = 5.37, p < 0.001.

Study 1 (US) results. Comparing participants on the control measures, we found that there was no age difference between respondents with low and high feminine stereotype endorsement (Ms = 37 years for both groups). Similarly, no age difference was found between respondents with low and high masculine stereotype endorsement (Ms = 37 and Ms = 38 respectively). The result of the Chi–Square test revealed no sex differences in feminine stereotype endorsement ( $\chi^2_{2df} = 3.85, p > 0.05$ ). However, the result of the Chi–Square test revealed sex differences in the masculine stereotype endorsement ( $\chi^2_{2df} = 4.65, p < 0.05$ ). More men endorsed masculine stereotype than women did (n = 63 vs 42).

Table 2 (Section A) presents the cognitive legitimacy means and standard deviation by condition for the experiment conducted in the US. To test hypotheses, we conducted two sets of analysis of covariance (ANCOVA) with cognitive legitimacy as the dependent variable and the age and sex of the respondents (potential customers) as covariates. The first analysis was

Parameters	Feminine characteristics condition	Masculine characteristics condition	
Section A: Data Colle	ected from MTurk Participants in US (Study 1)		
Feminine Stereotype			
M	4.14 <sup>a</sup>	3.91 <sup>a</sup>	
N	80	70	
SD	0.63	0.69	
Masculine Stereotype	e Endorsement		
M	4.08	4.05	
N	59	46	
SD	0.72	0.7	
No Gender Stereotyp	e Endorsement		
M	3.72	3.52	
N	61	86	
SD	0.8	0.89	
Section B: Data Colle	cted from Students in Iran (Study 2)		
Feminine Stereotype	Endorsement	,	
M	$4.14^{\rm b}$	$3.85^{\rm b}$	
N	47	50	
SD	0.57	0.67	
Masculine Stereotype			
M	4.23°	3.68 <sup>c</sup>	
N	46	41	Table 2.
SD	0.43	0.75	Means and standard
No Gender Stereotyp	e Endorsement		deviations for cognitive evaluations
M	3.79	3.91	scores in different
N	71	77	conditions of
SD	0.61	0.62	entrepreneurial
Note(s): Means with	n the same letter superscript differ from each o	other at the 0.05 alpha level	characteristics

an omnibus 2 (feminine stereotype endorsement: no vs yes)  $\times$  2 (entrepreneurial characteristic: masculine vs feminine) analysis. The results suggested that age did not show a significant effect on cognitive legitimacy (F(1,212) = 0.42, ns,  $\eta^2 = 0.11$ ). However, the sex of the respondents was found to have a significant effect on cognitive legitimacy (F(1,212) = 4.07, p < 0.05,  $\eta^2 = 0.11$ ), with female respondents perceiving a new venture owned by a woman entrepreneur as more legitimate than male respondents (Ms = 4.04 and 3.79, respectively), t(211) = 2.63, p < 0.01.

Results indicated main effects for feminine stereotype endorsement, F(1, 212) = 12.41, p < 0.01,  $\eta^2 = 0.11$ . Those who endorsed feminine stereotypes perceived a new venture owned by a woman entrepreneur (m = 4.04, sd = 0.67) as more legitimate than those who did not endorse feminine stereotype (m = 3.64, sd = 0.68), LSD = 0.35, p < 0.01. No main effects were found for entrepreneurial characteristics, F(1, 212) = 0.82, ns,  $\eta^2 = 0.11$ . The interaction of feminine stereotype endorsement and entrepreneurial characteristics was also not significant, F(1, 212) = 1.67, ns,  $\eta^2 = 0.11$ . However, mean differences indicate that when a customer's endorsement of feminine stereotype exists, the new venture owned by a woman entrepreneur with feminine characteristics receives higher cognitive legitimacy than one that is owned by a woman entrepreneur with masculine characteristics (Ms = 4.14 and 3.91, respectively), t(148) = 2.12, p < 0.05. Accordingly, hypothesis 1 is supported.

The second analysis was an omnibus 2 (masculine stereotype endorsement: no vs yes)  $\times$  2 (entrepreneurial characteristics: masculine vs feminine) analysis. Age was not found to have a significant effect on cognitive legitimacy (F(1, 200) = 0.50, ns,  $\eta^2 = 0.06$ ). However, the sex of the respondents was found to have a significant effect on cognitive legitimacy (F(1, 200) = 9.96, p < 0.05,  $\eta^2 = 0.06$ ), with female respondents perceiving a new venture owned by a woman entrepreneur as more legitimate than male respondents (Ms = 4.30 and 3.98, respectively), t(200) = 3.38, p < 0.01.

Results indicate no main effects for masculine stereotype endorsement, F(1, 200) = 0.83, ns,  $\eta^2 = 0.06$  and no main effects for entrepreneurial characteristics, F(1, 200) = 0.28, ns,  $\eta^2 = 0.06$ . The interaction of masculine stereotype endorsement and entrepreneurial characteristics was also not significant, F(1, 200) = 0.21, ns,  $\eta^2 = 0.06$ . The mean differences indicate that when a customer endorses masculine stereotype, there is no difference in the cognitive legitimacy of the new venture owned by a woman entrepreneur with feminine characteristics and one that is owned by a woman entrepreneur with masculine characteristics (Ms = 4.08 and 4.05, respectively), t(103) = 0.15, ns. Accordingly, hypothesis 2 is not supported.

To test hypothesis 3, we used the data from respondents with no endorsement of masculine or feminine stereotypes. The results indicated that when the endorsement of gender stereotypes is absent (either masculine or feminine), there is no significant difference in cognitive legitimacy of a new venture owned by a woman entrepreneur with masculine characteristics than the venture owned by a woman entrepreneur with feminine characteristics (Ms = 3.52 and 3.72, respectively), t(145) = 1.40, ns. Accordingly, hypothesis 3 is supported.

Study 2 (Iran) results. Comparing participants on the control measures, respondents with low and high feminine stereotype endorsement did not differ significantly in age (Ms = 20.6 and 21.6 years, respectively). However, we found that respondents with and without masculine stereotype endorsement did differ significantly in age. Those who endorsed masculine stereotypes were significantly older than those who did not endorse masculine stereotypes (Ms = 20.1 and 21.4 years, respectively). The result of the Chi–Square test reveals no sex differences in feminine stereotype endorsement either ( $\chi^2_{2df} = 0.104$ , ns). However, the result of the Chi–Square test reveals sex differences in masculine stereotype endorsement ( $\chi^2_{2df} = 19.26$ , p < 0.001). More men endorsed masculine stereotype than women did (n = 57 vs 30).

Table 2 (section B) presents the cognitive legitimacy means and standard deviation by condition for study 2. To test hypotheses, we conducted two sets of analysis of covariance

(ANCOVA) with cognitive legitimacy as the dependent variable and the age and sex of the respondents (potential customers) as covariates. The first analysis was an omnibus 2 (feminine stereotype endorsement: no vs yes)  $\times$  2 (entrepreneurial characteristic: masculine vs feminine) analysis. Age had a significant effect on cognitive legitimacy (F (1, 171) = 5.04, p < 0.05,  $\eta^2$  = 0.10). Younger respondents reported higher cognitive legitimacy. The sex of the respondent (F (1, 171) = 0.81, ns,  $\eta^2$  = 0.10 did not have a significant effect on cognitive legitimacy.

Results indicate main effects for feminine stereotype endorsement, F (1, 171) = 8.01, p < 0.01,  $\eta^2 = 0.10$ . Those who endorsed feminine stereotypes had higher cognitive legitimacy perceptions of the woman-owned business (m = 4.00, sd = 0.63) than those who did not endorse feminine stereotypes (m = 3.73, sd = 0.70), LSD = 0.27, p < 0.01. No main effect was found for the entrepreneurial characteristics, F(1, 171) = 1.05, ns,  $\eta^2 = 0.10$ . The interaction of feminine stereotype endorsement and entrepreneurial characteristics was not found to be significant, F (1, 171) = 1.98, ns,  $\eta^2 = 0.10$ .

However, the mean differences indicate that when a customer endorses feminine stereotypes, a new venture owned by a woman entrepreneur with feminine characteristics receives higher cognitive legitimacy than one owned by a woman entrepreneur with masculine characteristics (Ms = 4.14 and 3.85, respectively), t(95) = 2.30, p < 0.05. As a result, hypothesis 1 is supported.

The second analysis was an omnibus 2 (masculine stereotype endorsement: no vs yes)  $\times$  2 (entrepreneurial characteristic: masculine vs feminine) analysis. Age was not found to have a significant effect on cognitive legitimacy (F(1, 157) = 1.23, ns,  $\eta^2 = 0.21$ ). The sex of the respondent (F(1, 157) = 14.92, p < 0.01,  $\eta^2 = 0.21$ ) was found to have a significant effect on cognitive legitimacy. Female respondents reported higher cognitive legitimacy than male respondents.

Results indicate no main effects for masculine stereotype endorsement, F(1, 157) = 0.41, ns,  $\eta^2 = 0.21$ . No main effect was found for the entrepreneurial characteristics, F(1, 157) = 1.67, ns,  $\eta^2 = 0.21$ . However, the interaction of masculine stereotype endorsement and entrepreneurial characteristics was significant, F(1, 157) = 11.75, p < 0.01,  $\eta^2 = 0.21$ . The mean differences indicate that when a customer endorses masculine stereotype, a new venture owned by a woman entrepreneur with feminine characteristics receives higher cognitive legitimacy than one that is owned by a woman entrepreneur with masculine characteristics (Ms = 4.23 and 3.68, respectively), t(85) = 4.18, p < 0.001. As a result, hypothesis 2 is supported.

To test hypothesis 3, respondents with low endorsement of masculine and feminine stereotypes were combined. The results indicated that when customers do not endorse gender stereotypes (either masculine or feminine), there is no significant difference in cognitive legitimacy of a new venture owned by a woman entrepreneur with masculine characteristics than the new venture owned by a woman entrepreneur with feminine characteristics (Ms = 3.91 and 3.79, respectively), t(146) = -1.20, ns. Accordingly, hypothesis 3 is supported.

In summary, all the 3 hypotheses were supported in the study done in Iran but only hypotheses 1 and 3 were supported in the study done in US. In other words, in both countries, when a customer endorsed feminine stereotypes, the new venture owned by a woman entrepreneur who displayed feminine characteristics received higher cognitive legitimacy than the new venture owned by a woman entrepreneur who displayed masculine characteristics. Also, in both countries when a customer did not endorse gender stereotypes, there was no differences between the cognitive legitimacy of a new venture owned by a woman entrepreneur with masculine characteristics and the cognitive legitimacy of the new venture owned by a woman entrepreneur with feminine characteristics. In Iran, when a customer endorsed masculine stereotypes, the new venture owned by a woman entrepreneur with masculine characteristics received lower cognitive legitimacy than the new

venture owned by a woman entrepreneur with feminine characteristics. However, this was not the case in US.

#### Discussion

Even though women entrepreneurs are often criticized for failing to conform to the "male norms of success" (Mirchandani, 1999, p. 228), our research suggests that the evaluation of feminine versus masculine characteristics of women entrepreneurs varies depending on the evaluator's (in this case the customer's) endorsement of gender stereotypes and the country's culture. Our research contributes to the literature on cognitive legitimacy and women's entrepreneurship by unveiling the cultural conditions and factors that allow women entrepreneurs to benefit from acting in a stereotypically feminine way. Consistent with previous research on stereotypes (e.g. Schminke, 1997; Sapiro, 1981), our research emphasizes the role that gender stereotypes play in the evaluation of others. Specifically, we found that a new venture owned by a woman entrepreneur who displays feminine characteristics is perceived as more legitimate when the customer endorses feminine stereotypes, regardless of the country.

Given that previous research suggests a backlash toward women leaders who displays masculine characteristics (Rudman and Glick, 1999, 2001), one may assume that the favorable evaluation of women entrepreneurs with feminine characteristics is the result of this backlash. However, since the preference for women entrepreneurs with feminine characteristics was not present when the customer did not endorse feminine stereotypes, our results indicate that it is the evaluator's endorsement of gender stereotypes that plays a key role in the evaluation of women entrepreneurs, rather than the backlash toward women who display masculine characteristics.

Our study reveals that doing business in a feminine way is also beneficial for the new venture owned by a woman entrepreneur when the customer endorses masculine stereotypes and the country's culture has low gender egalitarianism (i.e. our experiment in Iran). This finding suggests that in a culture where there is less gender equality, new ventures owned by women who act in stereotypically feminine ways are perceived more positively when the evaluator perceives masculine characteristics as less suitable for women. Thus, our research not only highlights the role of gender stereotype endorsement in the evaluation of women entrepreneurs, but also points out the influence of culture on the perception of gender differences and the consequent evaluation of women entrepreneurs.

We also found differences in how strongly feminine and masculine stereotypes are endorsed across the two countries. Feminine stereotype endorsement was higher in Iran than in the US, but masculine stereotype was endorsed equally across the two cultures. This contrast may be the result of the feminine nature of the Iranian culture. The feminine nature of the culture combined with the low gender egalitarianism levels perhaps contributes to the higher endorsement of feminine stereotypes in Iran. This suggests that in addition to gender egalitarianism, other cultural factors such as the femininity versus masculinity nature of the culture, contributes to endorsement of gender stereotype endorsement in a society.

Our research also contributes to the general entrepreneurship literature by shedding light on the customers' perspective in the evaluation of a new venture. As predicted, the characteristics that the entrepreneur displays contribute to the customer legitimacy of a new venture. Results suggest that customers favor women-owned new ventures when the entrepreneur displays stereotypical characteristics consistent with their expectations. This result is consistent with the evidence of Zimmerman and Zeit (2002) and Becker-Blease and Sohl (2015) and supports the argument that the observable characteristics of a new venture are related to legitimacy in the eyes of stakeholders such as customers.

Our study also reveals several noteworthy results in terms of the gender and age of the customer. In both countries, men endorsed masculine stereotypes more than women did. This

suggests that, regardless of culture, men seem to attribute masculine characteristics to male entrepreneurs more than women do. Women seem to believe that men and women entrepreneurs possess a relatively equal number of masculine characteristics. Moreover, regardless of the characteristics of the woman entrepreneur, we observed the phenomenon of similarity-attraction based on the gender of the customer and the gender of the entrepreneur in both countries. The fact that female customers evaluated female entrepreneurs more favorably than male customers challenges the notion of a significant backlash toward women managers and leaders by female evaluators (Garcia-Retamero and Ló pez-Zafra, 2006). This contrast suggests that this form of backlash is either not present in the entrepreneurship context or that the perceptions about women entrepreneurs are shifting.

In terms of age, the experiment in Iran indicates that those who endorse masculine stereotypes were older than those who did not endorse masculine stereotypes. However, we did not observe the same relationship in the US. In fact, previous research conducted in the US (e.g. O'Keefe and Hyde, 1983) suggests that stereotyping decreases with age. This indicates that culture plays a role in how age and stereotyping are related. It appears that in cultures with lower levels of gender egalitarianism, older individuals tend to endorse stereotypes to a higher degree. Further investigation is needed to determine the role culture plays in the relationship between age and stereotype endorsement.

The results of this study also have important implications for marketing in entrepreneurship research. Marketing is an essential business function which an entrepreneur must appropriately use to successfully launch and develop a new venture (Hisrich, 1992) and an important aspect of marketing is understating customer values and beliefs (Collins *et al.*, 2007). However, despite the recognition that "marketing as a business function is universally important to new business creation and growth' (Hills and LaForge, 1992, p. 33), relatively little research concerning the theoretical connection between marketing in entrepreneurship has been conducted (Lam and Harker, 2015; Webb *et al.*, 2011). In our study, we built the theoretical argument that the legitimacy of a new venture which is crucial in success of that venture is dependent on the customer's endorsement of gender stereotypes. By making a connection between customer values (a marketing concept) and cognitive legitimacy of a new venture (an entrepreneurship concept), our study adds to the understanding of marketing in entrepreneurship research. We encourage future studies to continue to investigate various interactions of marketing and entrepreneurship concepts.

## Limitations and future research recommendations

Research suggests that the effect of stereotype endorsement on perceptions and behavioral outcomes is moderated by gender role identity (Guillet et al., 2006). A primary limitation of this study is that we were unable to include the gender role identity of the customers. Thus, we recommend that future studies further examine the influence of the evaluator's gender role identification in the evaluation of women entrepreneurs. In this study, we use a binary approach to gender to align with the bulk of research that indicates that most customers' stereotypical expectations derive from a "binary essentialist account of male and female" (Galloway et al., 2015, p. 5). Future research should extend our model and findings to also include a non-binary approach that more precisely aligns with gender identity. Further, with the booming emergence of social media networks and digital outlets directing customers' attention to marketing ads and paid influencers, future research could incorporate findings from the emergent field of entrepreneurial marketing. Combined with gender role identity as discussed above, this approach would unveil the influence of marketing vectors on customer legitimacy motives and their relationship to the entrepreneur and the firm.

Another limitation is the cross-sectional design of our study, which limits our understanding of how gender stereotype endorsement emerges over time as customers have more interactions with women entrepreneurs. Future research could use longitudinal approaches to examine how such relationships evolve over time. Future studies can also extend the current research beyond the evaluation of the woman entrepreneur by customers. Although customers' perceptions play an important role in the context of a new venture (Nagy and Kacmar, 2013; Schroeder *et al.*, 2002; Shepherd and Zacharakis, 2003; Suchman, 1995; Wang *et al.*, 2014; Yli-Renko *et al.*, 2001; Zimmerman and Zeitz, 2002), we believe that additional research is necessary to explore other stakeholders' perspectives on stereotypes, including that of the woman entrepreneur herself, the investors, suppliers, employees, etc.

Finally, future studies could examine the implications of the gendered nature of the industry in the context of the evaluation of female entrepreneurs. Our study selected scenarios that involved a gender-neutral industry; however, it is likely that female entrepreneurs would be evaluated differently based on the gendered nature of the industry presented in the scenario.

#### Conclusions

This study contributes to the literature on cognitive legitimacy and women's entrepreneurship by highlighting the conditions in which women entrepreneurs benefit from displaying feminine characteristics. Indeed, our results suggest that a new venture owned by a women entrepreneur who displays feminine characteristics is perceived as more legitimate when the customer endorses feminine stereotypes, regardless of the cultural context (country level in this study). Moreover, our research indicates that the evaluation of feminine versus masculine characteristics of women entrepreneurs does indeed vary depending on the evaluator's (in this case the customer's) endorsement of gender stereotypes. In practice, this result is noteworthy for women owning and running a business because identifying the circumstances under which women entrepreneurs benefit from displaying feminine characteristics can encourage other women to join and grow their ventures.

It is important to note that, until recently, scholars have limited their attention almost exclusively to the masculine elements of entrepreneurship. Consequently, the lack of attention to the feminine side of entrepreneurship may have prevented women entrepreneurs and other stakeholders from recognizing the benefits that femininity can offer. Additional research on specific characteristics such as perceptivity, social adaptability, flexibility and affection in the field of entrepreneurship is warranted to further explore the advantages of feminine characteristics for both men and women entrepreneurs.

#### **Notes**

- 1. Other relevant studies include Baron and Tang (2011); Bacq and Alt (2018); Haynie et al. (2012); Podoynitsyna et al. (2012); Ruskin et al. (2016); Uy et al. (2017).
- Gaucher et al. (2011) developed a measure of gendered wording based upon previous measures (e.g. Bem, 1974; Rudman and Kilianski, 2000; Hoffman and Hurst, 1990), listing "affection" and "empathy" as feminine words. Based on Rosedale dictionary, "adaptability" is the synonyms for "submissive" which is also listed as a feminine term in the measure.
- Stereotype threat is a situational predicament in which individuals find themselves to be at the risk of conforming negative stereotypes about their social group (Steele, 1997).
- 4. Based on Shapiro (2012), the interplay between target and source of stereotype threat results in six qualitatively different forms of threat: (a) self-target, self-source; (b) self-target, in-group other source; (c) self-target, out-group other source; (d) group-target, self-source; (e) group-target, in-group other source; and (f) group-target, out-group other source. The focus of our study is on forms (e) and (f) which have received limited empirical attention compared to other forms.
- Total early-stage Entrepreneurial Activity (TEA) Rate is the percentage of 18–64 population who are
  either a nascent entrepreneur or owner-manager of a new business (Global Entrepreneurship
  Monitor, 2021).

- 6. The degree to which a collective minimizes gender inequality (GLOBE, 2020).
- MTurkers perceive researchers as unfair when there is lack of a process to communicate with researchers, inaccurately stated time requirements, and unavailability of disability access features (Aguinis et al., 2020).
  - and were ne of the students,

Gender

stereotype

endorsement

- 8. The conditions and measures for the Iran study were similar to those used in the US study and were translated to Farsi. A typical Iranian female name (Maryam) was used for the name of the entrepreneur in the Iranian survey. Also, since the Iran data was collected from college students, instead of asking the respondents about their highest level of education, they were asked to report the level of their college level.
- For review purposes, the names and affiliations of the researchers and IRB information have been removed from the consent letter.

#### References

- Aaboen, L., La Rocca, A., Lind, F., Perna, A. and Shih, T. (Eds), (2017), Starting-up in Business Networks, Why Relationships Matter in Entrepreneurship, Palgrave McMillan, London.
- Aguinis, H., Villamor, I. and Ramani, R.S. (2020), "MTurk research: review and recommendations", *Journal of Management*, Vol. 47 No. 4, pp. 823-837.
- Ahl, H. and Marlow, S. (2012), "Exploring the dynamics of gender, feminism and entrepreneurship: advancing debate to escape a dead end?", *Organization*, Vol. 19 No. 5, pp. 543-562.
- Ahl, H. (2006), "Why research on women entrepreneurs needs new directions", Entrepreneurship: Theory and Practice, Vol. 30 No. 5, pp. 595-621.
- Ashforth, B. and Gibbs, B. (1990), "The double-edge of organizational legitimation", Organization Science, Vol. 1 No. 2, pp. 177-194.
- Babakus, E. and Yavas, U. (2008), "Does customer sex influence the relationship between perceived quality and share of wallet?", *Journal of Business Research*, Vol. 61 No. 9, pp. 974-981.
- Bacq, S. and Alt, E. (2018), "Feeling capable and valued: a prosocial perspective on the link between empathy and social entrepreneurial intentions", *Journal of Business Venturing*, Vol. 33 No. 3, pp. 333-350.
- Balachandra, L., Briggs, T., Eddleston, K. and Brush, C. (2019), "Don't pitch like a girl!: how gender stereotypes influence investor decisions", Entrepreneurship: Theory and Practice, Vol. 43 No. 1, pp. 116-137.
- Baron, R.A. and Tang, J. (2011), "The role of entrepreneurs in firm-level innovation: joint effects of positive affect, creativity, and environmental dynamism", *Journal of Business Venturing*, Vol. 26 No. 1, pp. 49-60.
- Baron, R.A., Markman, G.D. and Hirsa, A. (2001), "Perceptions of women and men as entrepreneurs: evidence for differential effects of attributional augmenting", *Journal of Applied Psychology*, Vol. 86 No. 5, pp. 923-929.
- Batchelor, J.H. and Burch, G.F. (2011), "Predicting entrepreneurial performance: can legitimacy help?", Small Business Institute Journal, Vol. 7 No. 2, pp. 30-45.
- Baum, J.A. and Oliver, C. (1991), "Institutional linkages and organizational mortality", Administrative Science Quarterly, pp. 187-218.
- Becker-Blease, J.R. and Sohl, J.E. (2015), "New venture legitimacy: the conditions for angel investors", Small Business Economics, Vol. 45 No. 4, pp. 735-749.
- Bem, S.L. (1974), "The measurement of psychological androgyny", *Journal of Consulting and Clinical Psychology*, Vol. 42 No. 2, pp. 155-162.
- Berkowitz, L. and Donnerstein, E. (1982), "External validity is more than skin deep: some answers to criticisms of laboratory experiments", *American Psychologist*, Vol. 37 No. 3, p. 245.

- Branscombe, N.R. and Smith, E.R. (1990), "Gender and racial stereotypes in impression formation and social decision-making processes", Sex Roles, Vol. 22 Nos 9-10, pp. 627-647.
- Chatard, A., Selimbegović, L., Konan, P. and Mugny, G. (2008), "Performance boosts in the classroom: stereotype endorsement and prejudice moderate stereotype lift", *Journal of Experimental Social Psychology*, Vol. 44 No. 5, pp. 1421-1424.
- Christensen, C.M. and Bower, J.L. (1996), "Customer power, strategic investment, and the failure of leading firms", *Strategic Management Journal*, Vol. 17 No. 3, pp. 197-218.
- Collins, C.M., Steg, L. and Koning, M.A. (2007), "Customers' values, beliefs on sustainable corporate performance, and buying behavior", Psychology and Marketing, Vol. 24 No. 6, pp. 555-577.
- Colquitt, J.A. (2008), "From the editors publishing laboratory research in AMJ: a question of when, not if", *Academy of Management Journal*, Vol. 51 No. 4, pp. 616-620.
- Dahlmann, F. and Grosvold, J. (2017), "Environmental managers and institutional work: reconciling tensions of competing institutional logics", Business Ethics Quarterly, Vol. 27 No. 2, pp. 263-291.
- Dastmalchian, A., Javidan, M. and Alam, K. (2001), "Effective leadership and culture in Iran: an empirical study", Applied Psychology, Vol. 50 No. 4, pp. 532-558.
- De Bruin, A., Brush, C.G. and Welter, F. (2006), "Introduction to the special issue: towards building cumulative knowledge on women's entrepreneurship", *Entrepreneurship: Theory and Practice*, Vol. 30 No. 5, pp. 585-593.
- Díez-Martín, F., Prado-Roman, C. and Blanco-González, A. (2013), "Beyond legitimacy: legitimacy types and organizational success", Management Decision, Vol. 51 No. 10, pp. 1954-1969.
- Engel, Y., Ramesh, A. and Steiner, N. (2020), "Powered by compassion: the effect of loving-kindness meditation on entrepreneurs' sustainable decision-making", *Journal of Business Venturing*, Vol. 35 No. 6, p. 105986.
- Eriksson, K. and Simpson, B. (2010), "Emotional reactions to losing explain gender differences in entering a risky lottery", *Judgment and Decision Making*, Vol. 5 No. 3, p. 159.
- Fagenson, E.A. and Marcus, E.C. (1991), "Perceptions of the sex-role stereotypic characteristics of entrepreneurs: women's evaluations", Entrepreneurship: Theory and Practice, Vol. 15 No. 4, pp. 33-48.
- Farhat, J., Matusik, S., Robb, A. and Robinson, D.T. (2018), "New directions in entrepreneurship research with the Kauffman firm survey", *Small Business Economics*, Vol. 50 No. 3, pp. 521-532.
- Fisher, G., Kotha, S. and Lahiri, A. (2016), "Changing with the times: an integrated view of identity, legitimacy, and new venture life cycles", *Academy of Management Review*, Vol. 41 No. 3, pp. 383-409.
- Galloway, L., Kapasi, I. and Sang, K. (2015), "Entrepreneurship, leadership, and the value of feminist approaches to understanding them", Journal of Small Business Management, Vol. 53 No. 3, pp. 683-692.
- Garcia-Retamero, R. and López-Zafra, E. (2006), "Prejudice against women in male-congenial environments: perceptions of gender role congruity in leadership", Sex Roles, Vol. 55 Nos 1-2, pp. 51-61.
- Gaucher, D., Friesen, J. and Kay, A.C. (2011), "Evidence that gendered wording in job advertisements exists and sustains gender inequality", *Journal of Personality and Social Psychology*, Vol. 101 No. 1, p. 109.
- Geroski, P.A., Mata, J. and Portugal, P. (2010), "Founding conditions and the survival of new firms", Strategic Management Journal, Vol. 31 No. 5, pp. 510-29.
- Global Entrepreneurship Monitor (2021), "Definitions", available at: https://www.gemconsortium.org/wiki.
- GLOBE Project (2020), "Globe 2020", available at: https://globeproject.com/.
- Goel, S., Voordeckers, W., Van Gils, A. and van den Heuvel, J. (2013), "CEO's empathy and salience of socioemotional wealth in family SMEs-The moderating role of external directors", Entrepreneurship and Regional Development, Vol. 25 Nos 3-4, pp. 111-134.

- Goffman, E. (1976), "Gender display", Studies in the Anthropology of Visual Communication, Vol. 3, pp. 69-77.
- Grégoire, D.A. and Shepherd, D.A. (2012), "Technology-market combinations and the identification of entrepreneurial opportunities: an investigation of the opportunity-individual nexus", *Academy* of *Management Journal*, Vol. 55 No. 4, pp. 753-785.
- Guillet, E., Sarrazin, P., Fontayne, P. and Brustad, R.J. (2006), "Understanding female sport attrition in a stereotypical male sport within the framework of Eccles's Expectancy–Value model", Psychology of Women Quarterly, Vol. 30 No. 4, pp. 358-368.
- Gupta, V.K., Turban, D.B., Wasti, S.A. and Sikdar, A. (2009), "The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneur", *Entrepreneurship: Theory and Practice*, Vol. 33 No. 2, pp. 397-417.
- Gupta, V.K., Turban, D.B. and Pareek, A. (2013), "Differences between men and women in opportunity evaluation as a function of gender stereotypes and stereotype activation", Entrepreneurship: Theory and Practice, Vol. 37 No. 4, pp. 771-788.
- Gupta, V.K., Javadian, G. and Jalili, N. (2014), "Role of entrepreneur gender and management style in influencing perceptions and behaviors of new recruits: evidence from the Islamic Republic of Iran", *Journal of International Entrepreneurship*, Vol. 12 No. 1, pp. 85-109.
- Hamilton, D.L. (1981), "Stereotyping and intergroup behavior: some thoughts on the cognitive approach", in Hamilton, D.L. (Ed.), Cognitive Processes in Stereotyping and Intergroup Behavior, Lawrence Erlbaum Associates, Hillsdale, New Jersey, pp. 333-353.
- Haynie, J.M., Shepherd, D.A. and Patzelt, H. (2012), "Cognitive adaptability and an entrepreneurial task: the role of metacognitive ability and feedback", Entrepreneurship: Theory and Practice, Vol. 36 No. 2, pp. 237-265.
- Heilman, M.E., Wallen, A.S., Fuchs, D. and Tamkins, M.M. (2004), "Penalties for success: reactions to women who succeed at male gender-typed tasks", *Journal of Applied Psychology*, Vol. 89 No. 3, p. 416.
- Hills, G.E. and LaForge, R.W. (1992), "Research at the marketing interface to advance entrepreneurship theory", *Entrepreneurship: Theory and Practice*, Vol. 16 No. 3, pp. 33-59.
- Hisric, R.D. (1992), "The need for marketing in entrepreneurship", Journal of Consumer Marketing, Vol. 7 No. 3, pp. 53-57.
- Hoffman, C. and Hurst, N. (1990), "Gender stereotypes: perception or rationalization?", Journal of Personality and Social Psychology, Vol. 58 No. 2, pp. 197-208.
- Horton, J.J., Rand, D.G. and Zeckhauser, R.J. (2011), "The online laboratory: conducting experiments in a real labor market", *Experimental Economics*, Vol. 14 No. 3, pp. 399-425.
- Hsu, D.K., Simmons, S.A. and Wieland, A.M. (2017), "Designing entrepreneurship experiments: a review, typology, and research agenda", Organizational Research Methods, Vol. 20 No. 3, pp. 379-412.
- Inbar, Y., Pizarro, D.A. and Cushman, F. (2012), "Benefiting from misfortune: when harmless actions are judged to be morally blameworthy", *Personality and Social Psychology Bulletin*, Vol. 38 No. 1, pp. 52-62.
- Kirmani, A. and Rao, A.R. (2000), "No pain, no gain: a critical review of the literature on signaling unobservable product quality", *Journal of Marketing*, Vol. 64 No. 2, pp. 66-79.
- Ko, I., Kotrba, L. and Roebuck, A. (2015), "Leaders as males?: the role of industry gender composition", Sex Roles, Vol. 72 Nos 7-8, pp. 294-307.
- Lam, W. and Harker, M.J. (2015), "Marketing and entrepreneurship: an integrated view from the entrepreneur's perspective", *International Small Business Journal*, Vol. 33 No. 3, pp. 321-348.
- Malik, M. and Abdallah, S. (2019), "Sustainability initiatives in emerging economies: a socio-cultural perspective", *Sustainability*, Vol. 11 No. 18, p. 4893.
- Malmström, M., Johansson, J. and Wincent, J. (2017), "Gender stereotypes and venture support decisions: how governmental venture capitalists socially construct entrepreneurs' potential", *Entrepreneurship Theory and Practice*, Vol. 41 No. 5, pp. 833-860.

- Marlow, S. (2002), "Women and self-employment: a part of or apart from theoretical construct?", *The International Journal of Entrepreneurship and Innovation*, Vol. 3 No. 2, pp. 83-91.
- Mason, W. and Suri, S. (2012), "Conducting behavioral research on Amazon's Mechanical Turk", Behavior Research Methods, Vol. 44 No. 1, pp. 1-23.
- Meyer, J.W. and Rowan, B. (1977), "Institutionalized organizations: Formal structure as myth and ceremony", American Journal of Sociology, Vol. 83 No. 2, pp. 340-363.
- Mirchandani, K. (1999), "Feminist insight on gendered work: new directions in research on women and entrepreneurship", Gender, Work and Organization, Vol. 6 No. 4, pp. 224-235.
- Murnieks, C.Y., McMullen, J.S. and Cardon, M.S. (2019), "Does congruence with an entrepreneur social identity encourage positive emotion under environmental dynamism?", *Journal of Small Business Management*, Vol. 57 No. 3, pp. 872-890.
- Murphy, P.J., Kickul, J., Barbosa, S.D. and Titus, L. (2007), "Expert capital and perceived legitimacy: female-run entrepreneurial venture signalling and performance", *The International Journal of Entrepreneurship and Innovation*, Vol. 8 No. 2, pp. 127-138.
- Nagy, G.B. and Kacmar, M.K. (2013), "Increasing customer satisfaction in the new venture context", Journal of Research in Marketing and Entrepreneurship, Vol. 15 No. 2, pp. 143-159.
- Nagy, B.G., Pollack, J.M., Rutherford, M.W. and Lohrke, F.T. (2012), "The influence of entrepreneurs' credentials and impression management behaviors on perceptions of new venture legitimacy", Entrepreneurship: Theory and Practice, Vol. 36 No. 5, pp. 941-965.
- Ogbolu, M.N., Singh, R.P. and Wilbon, A. (2015), "Legitimacy, attitudes and intended patronage: understanding challenges facing black entrepreneurs", *Journal of Developmental Entrepreneurship*, Vol. 20 No. 1, pp. 155007-1-155000-19.
- O'Keefe, E.S. and Hyde, J.S. (1983), "The development of occupational sex-role stereotypes: the effects of gender stability and age", *Sex Roles*, Vol. 9 No. 4, pp. 481-492.
- Paolacci, G., Chandler, J. and Ipeirotis, P.G. (2010), "Running experiments on amazon mechanical turk", Judgment and Decision Making, Vol. 5 No. 5, pp. 411-419.
- Podoynitsyna, K., Van der Bij, H. and Song, M. (2012), "The role of mixed emotions in the risk perception of novice and serial entrepreneurs", *Entrepreneurship: Theory and Practice*, Vol. 36 No. 1, pp. 115-140.
- Poggio, B. (2006), "Editorial: outline of a theory of gender practices", *Gender, Work and Organization*, Vol. 13 No. 3, pp. 225-233.
- Pollack, J.M., Rutherford, M.W. and Nagy, B.G. (2012), "Preparedness and cognitive legitimacy as antecedents of new venture funding in televised business pitches", *Entrepreneurship: Theory* and Practice, Vol. 36 No. 5, pp. 915-939.
- Ramaswami, A., Dreher, G.F., Bretz, R. and Wiethoff, C. (2010), "Gender, mentoring, and career success: the importance of organizational context", *Personnel Psychology*, Vol. 63 No. 2, pp. 385-405.
- Rudman, L.A. and Glick, P. (1999), "Feminized management and backlash toward agentic women: the hidden costs to women of a kinder, gentler image of middle managers", *Journal of Personality* and Social Psychology, Vol. 77 No. 5, p. 1004.
- Rudman, L.A. and Glick, P. (2001), "Prescriptive gender stereotypes and backlash toward agentic women", Journal of Social Issues, Vol. 57 No. 4, pp. 743-762.
- Rudman, L.A. and Kilianski, S.E. (2000), "Implicit and explicit attitudes toward female authority", Personality and Social Psychology Bulletin, Vol. 26 No. 11, pp. 1315-1328.
- Ruskin, J., Seymour, R.G. and Webster, C.M. (2016), "Why create value for others? An exploration of social entrepreneurial motives", *Journal of Small Business Management*, Vol. 54 No. 4, pp. 1015-1037.
- Sapiro, V. (1981), "If US Senator Baker were a woman: an experimental study of candidate images", Political Psychology, Vol. 3 Nos 1/2, pp. 61-83.

- Schein, V.E. (2001), "A global look at psychological barriers to women's progress in management", Journal of Social Issues, Vol. 57 No. 4, pp. 675-688.
- Schmader, T., Johns, M. and Barquissau, M. (2004), "The costs of accepting gender differences: the role of stereotype endorsement in women's experience in the math domain", Sex Roles, Vol. 50 Nos 11-12, pp. 835-850.
- Schminke, M. (1997), "Gender differences in ethical frameworks and evaluation of others' choices in ethical dilemmas", Journal of Business Ethics, Vol. 16 No. 1, pp. 55-65.
- Schroeder, R., Bates, K. and Junttila, M. (2002), "A resource-based view of manufacturing strategy and the relationship to manufacturing performance", *Strategic Management Journal*, Vol. 23 No. 2, pp. 105-117.
- Shapiro, J.R. and Neuberg, S.L. (2007), "From stereotype threat to stereotype threats: implications of a multi-threat framework for causes, moderators, mediators, consequences, and interventions", Personality and Social Psychology Review, Vol. 11 No. 2, pp. 107-130.
- Shapiro, J.R. (2012), "Types of threats: from stereotype threat to stereotype threats", in Inzlicht, M. and Schmader, T. (Eds), *Stereotype Threat: Theory, Process, and Application*, Oxford University Press, Oxford, pp. 71-88.
- Shepherd, D.A. and Zacharakis, A. (2003), "A new venture's cognitive legitimacy: an assessment by customers", *Journal of Small Business Management*, Vol. 41 No. 2, pp. 148-167.
- Spencer, S.J., Logel, C. and Davies, P.G. (2016), "Stereotype threat", Annual Review of Psychology, Vol. 67, pp. 415-437.
- Spencer, S.J., Zanna, M.P. and Fong, G.T. (2005), "Establishing a causal chain: why experiments are often more effective than mediational analyses in examining psychological processes", *Journal of Personality and Social Psychology*, Vol. 89 No. 6, p. 845.
- Steele, C.M. (1997), "A threat in the air: how stereotypes shape intellectual identity and performance", American Psychologist, Vol. 52 No. 6, p. 613.
- Suchman, M.C. (1995), "Managing legitimacy: strategic and institutional approaches", Academy of Management Review, Vol. 20 No. 3, pp. 571-610.
- Swab, R.G., Javadian, G., Gupta, V.K. and Pierce, C.A. (2021), "Stereotype threat theory in organizational research: constructive analysis and future research agenda", *Group and Organization Management*, in press.
- Tinkler, J.E., Whittington, K.B., Ku, M.C. and Davies, A.R. (2015), "Gender and venture capital decision-making: the effects of technical background and social capital on entrepreneurial evaluations", Social Science Research, Vol. 51, pp. 1-16.
- Uy, M.A., Sun, S. and Foo, M.D. (2017), "Affect spin, entrepreneurs' well-being, and venture goal progress: the moderating role of goal orientation", *Journal of Business Venturing*, Vol. 32 No. 4, pp. 443-460.
- Wang, T., Song, M. and Zhao, Y.L. (2014), "Legitimacy and the value of early customers", Journal of Product Innovation, Vol. 31 No. 5, pp. 1057-1075.
- Wang, T. (2009), "Does legitimacy really matter for new ventures?", Frontiers of Entrepreneurship Research, Vol. 29 No. 13, p. 18.
- Webb, J.W., Ireland, R.D., Hitt, M.A., Kistruck, G.M. and Tihanyi, L. (2011), "Where is the opportunity without the customer? An integration of marketing activities, the entrepreneurship process, and institutional theory", *Journal of the Academy of Marketing Science*, Vol. 39 No. 4, pp. 537-554.
- West, C. and Zimmerman, D.H. (1987), "Doing gender", Gender and Society, Vol. 1 No. 2, pp. 125-151.
- Yang, T. and Aldrich, H.E. (2014), "Who's the boss? Explaining gender inequality in entrepreneurial teams", American Sociological Review, Vol. 79 No. 2, pp. 303-327.
- Yli-Renko, H., Autio, E. and Sapienza, H.J. (2001), "Social capital, knowledge acquisition, and knowledge exploitation in young technology-based firms", Strategic Management Journal, Vol. 22 Nos 6-7, pp. 587-613.

Zimmerman, M.A. and Zeitz, G.J. (2002), "Beyond survival: achieving new venture growth by building legitimacy", *Academy of Management Review*, Vol. 27, pp. 414-431.

#### Appendix

#### Instrument Used for US Study

Dear respondent.

As you know, starting a business is becoming a common career choice for many Americans. You are invited to participate in a study to better understand entrepreneurs.

If you decide to participate, all information collected will be kept strictly confidential. I will only report group level results. Individual responses will NOT be reported and no one but I and my research team will have access to your information.

Thank you in advance for participating in this study [9].

# Condition 1a: Feminine Stereotype Endorsement, Women entrepreneur with Masculine Characteristics

Please read the following statements about entrepreneurs (those who start and run their own business) and indicate your level of agreement with each statement (1: Strongly Disagree, 5: Strongly Agree).

- (1) I think women entrepreneurs have more compassion about their customer needs compared to male entrepreneurs
- (2) I think women entrepreneurs have better understanding of their employees than male entrepreneurs
- (3) I think women entrepreneurs are more enthusiastic about their business than male entrepreneurs
- (4) I think women entrepreneurs are more excited about their business than male entrepreneurs
- (5) I think women entrepreneurs are more attentive when it comes to their business than male entrepreneurs'

Please read the information below about an entrepreneur and indicate your level of agreement with the following statements (1: Strongly Disagree, 5: Strongly Agree):

Judy has started an insurance agency business in your neighborhood 3 years ago. She is a risk taker and is very aggressive about her business goals. Judy is a competitive business owner and very decisive in uncertain situations. Judy is planning to achieve all her business goals

- (1) I envision Judy's business receiving high-profile endorsements in the future
- (2) I envision Judy's business receiving favorable press coverage in the future
- (3) Because of Judy's characteristics, this business has a founder who benefits the organization
- (4) I believe this business has a leader who can make it successful in its industry

# Condition 1b: Feminine Stereotype Endorsement, Women entrepreneur with Feminine Characteristics

Please read the following statements about entrepreneurs (those who start and run their own business) and indicate your level of agreement with each statement (1: Strongly Disagree, 5: Strongly Agree).

 I think women entrepreneurs have more compassion about their customer needs compared to male entrepreneurs

- (2) I think women entrepreneurs have better understanding of their employees than male entrepreneurs
- (3) I think women entrepreneurs are more enthusiastic about their business than male entrepreneurs
- (4) I think women entrepreneurs are more excited about their business than male entrepreneurs
- (5) I think women entrepreneurs are more attentive when it comes to their business than male entrepreneurs'

Please read the information below about an entrepreneur and indicate your level of agreement with the following statements (1: Strongly Disagree, 5: Strongly Agree):

Judy has started an insurance agency business in your neighborhood 3 years ago. She has great compassion for customer needs and has high levels of understanding of her employees. Judy is excited about her business goals and is very enthusiastic about the future of her business

- (1) I envision Judy's business receiving high-profile endorsements in the future
- (2) I envision Judy's business receiving favorable press coverage in the future
- (3) Because of Judy's characteristics, this business has a founder who benefits the organization
- (4) I believe this business has a leader who can make it successful in its industry

# Condition 2a: Masculine Stereotype Endorsement, Women entrepreneur with Masculine Characteristics

Please read the following statements about entrepreneurs (those who start and run their own business) and indicate your level of agreement with each statement (1: Strongly Disagree, 5: Strongly Agree).

- (1) I think male entrepreneurs are willing to take more risks compared to female entrepreneurs
- (2) I think male entrepreneurs are more aggressive about their business goals than female entrepreneurs
- (3) I think male entrepreneurs are more competitive than female entrepreneurs
- (4) I think male entrepreneurs are more achievement oriented than female entrepreneurs
- (5) I think male entrepreneurs are more decisive when it comes to their business than female entrepreneurs

Please read the information below about an entrepreneur and indicate your level of agreement with the following statements (1: Strongly Disagree, 5: Strongly Agree):

Judy has started an insurance agency business in your neighborhood 3 years ago. She is a risk taker and is very aggressive about her business goals. Judy is a competitive business owner and very decisive in uncertain situations. Judy is planning to achieve all her business goals

- (1) I envision Judy's business receiving high-profile endorsements in the future
- (2) I envision Judy's business receiving favorable press coverage in the future
- (3) Because of Judy's characteristics, this business has a founder who benefits the organization
- (4) I believe this business has a leader who can make it successful in its industry

Gender stereotype endorsement

# **IIGE**

# Condition 2b: Masculine Stereotype Endorsement, Women entrepreneur with Feminine Characteristics

Please read the following statements about entrepreneurs (those who start and run their own business) and indicate your level of agreement with each statement (1: Strongly Disagree, 5: Strongly Agree).

- (1) I think male entrepreneurs are willing to take more risks compared to female entrepreneurs
- (2) I think male entrepreneurs are more aggressive about their business goals than female entrepreneurs
- (3) I think male entrepreneurs are more competitive than female entrepreneurs
- (4) I think male entrepreneurs are more achievement oriented than female entrepreneurs
- (5) I think male entrepreneurs are more decisive when it comes to their business than female entrepreneurs

Please read the information below about an entrepreneur and indicate your level of agreement with the following statements (1: Strongly Disagree, 5: Strongly Agree):

Judy has started an insurance agency business in your neighborhood 3 years ago. She has great compassion for customer needs and has high levels of understanding of her employees. Judy is excited about her business goals and is very enthusiastic about the future of her business

- (1) I envision Judy's business receiving high-profile endorsements in the future
- (2) I envision Judy's business receiving favorable press coverage in the future
- (3) Because of Judy's characteristics, this business has a founder who benefits the organization
- (4) I believe this business has a leader who can make it successful in its industry

#### **Demographic Questions:**

What is your sex?

- Male
- Female

What is your year of birth?

Choose one or more races that you consider yourself to be:

- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander
- Other

What is the highest level of school you have completed or the highest degree you have received?

- · Less than high school degree
- High school graduate (high school diploma or equivalent including GED)
- Some college but no degree
- Associate degree in college (2-years)

• Bachelor's degree in college (4-years)

- · Master's degree
- Doctoral degree
- Professional degree (JD, MD)

Gender stereotype endorsement

## Corresponding author

Golshan Javadian can be contacted at: golshan.javadian@morgan.edu