

Gender-Based Stereotypes and Managerial Careers in Diverse Socio-Economic Environments: The Cases of Greece and Nigeria

Dimitrios M. Mihail

Professor
Business Administration Department
University of Macedonia
Thessaloniki
Greece

Christiana O. Ogbogu

Senior Lecturer
Public Administration Department
Obafemi Awolowo University
Ile-Ife
Nigeria

Abstract

This study investigates business students' attitudes towards women's ability to lead as managers in two countries with diverse socio-economic environments (Nigeria and Greece). It also identifies the factors that shape such attitudes. A structured questionnaire was administered on 310 business students from Nigeria and 305 from Greece. Results of the ANOVA, MANOVA and univariate F tests analyses performed revealed that male students in both countries expressed negative stereotypic attitudes towards women as managers compared to their female counterparts. Gender was dominant and emerged as the most significant source of stereotypic attitudes towards women's ability to take up managerial responsibilities. The study submits that 'think manager-think male' is a global phenomenon which is consistent with gender-centered perspective. Given the dearth of research on stereotyping and women's career prospects in Greece and Nigeria, this study contributes to debates in the academia on the issue of analyzing empirically stereotypic attitudes toward women as managers.

Keywords: *Gender-based stereotypes, managerial careers, glass-ceiling, Greece, Nigeria*

Introduction

1. Introduction

In most parts of the world, the work place remains a decidedly unequal arena plagued by persistent gender segregation, wage inequality, sex discrimination, sexual harassment and under-representation of women in key management positions (Kimmell, 2011). The last has emerged most saliently as the heated issue of the 'glass ceiling' in gender and business studies over the last decade (Wirth, 2001; ILO, 2004; Catalyst, 2005; Desvaux et al., 2010; Hausmann et al., 2012). Although there has been an improvement in recent years in women's attainment of higher levels of education that opens the path to gaining access to management positions, they still occupy the lower rungs of most organizations' career structure in most parts of the world. This implies that corporate invisible 'ceilings' do not allow qualified women to advance up the managerial ladder.

The incidence of the glass ceiling has attracted a great deal of attention since it is not only an issue of sex discrimination in the workplace but also a problem of business efficiency. Simply put, women represent a relatively untapped source of talent in the labour market, and business leaders do not take full advantage of it (Joy et al., 2007; Carter and Wagner, 2011; Barsh and Yee, 2012).

An increasing volume of research in advanced and developing economies has documented the fact that advancement of women into management has not kept pace with the astonishing increase of highly skilled women in corporations across globe (ILO, 2004; European Commission, 2005; European Commission, 2011; European Commission, 2012; Okurame, 2006; Hewlett and Rashid, 2010). A very recent McKinsey study (Barsh et al., 2012) reports that women in the most advanced economy, the United States, hold only 15 per cent of the seats on corporate boards and 14 per cent of those on executive committees. In Germany the relevant statistics are 16 per cent and 3 per cent respectively and in France 20 per cent and 8 per cent respectively, indicating a problematic situation for the highly celebrated European 'social model'.

Whereas the corresponding data on both boards and executive committees are even lower, in fact, less than 10 per cent, in China and India. By contrast, countries in Scandinavia that have persistently implemented policies enhancing gender diversity at work over decades have a massively suppressed 'glass ceiling' phenomenon compared to their European counterparts. Not accidentally, according to a recent *Economist* report, adopting a culture of open and egalitarian society tends to outperform on economic competitiveness and innovation any modern economy (*Economist*, 2013).

Among the reasons for the glass ceiling phenomenon such as the lack of role models, mentoring, networking options and the complexities of the dual role as a working woman and homemaker (Crampton and Mishra, 1999), literature has singled out society's stereotypes and prejudices against women in positions of power (Catalyst, 2002; Catalyst, 2005). Indeed, a variety of characteristics about women such as their sexuality, family responsibilities, responsibility in procreation, breastfeeding and child-care are used as grounds for control and exclusion from occupying key positions in corporate organizations. Catalyst (2005) documented that gender bias is alive and well in corporate America. It surveyed nearly 300 business leaders from the Fortune 500 and smaller businesses nationwide, including 100 chief executives. Nearly across the board, the respondents judged women more negatively than equally skilled men, particularly in male-dominated professions regardless of actual results verified by more than forty different studies. In another major survey, Catalyst and Conference Board Europe found that gender bias thrives in corporate Europe as well (Catalyst, 2002). This study questioned nearly 700 men and women in 20 countries and found that stereotypes and preconceptions of women's roles and abilities are the top barriers for female managers' promotion in Europe across regions and countries.

Given the pervasiveness of gender-based stereotypes at work and the dearth of empirical studies on this issue, especially in less advanced and developing countries such as Greece and Nigeria, in this paper we attempt to measure and contrast gender-based attitudes of business students towards women in the above-mentioned countries. The novelty of the present study lies in the fact that it seeks to uncover the dominant force of stereotypes in shaping women's careers in two of the most diverse social, political, and economic environments, those of Greece and Nigeria. More specifically, this research tries to shed light on gender-based stereotypes exploring their relative impact on the formation of attitudes toward women as managers in the two countries.

The study is organised in five parts. Following the first that serves as an introduction, the second presents the theoretical framework of the research and stipulates the research hypotheses. The third discusses the research design providing information on the method and data collection of the survey. The fourth presents the main findings of the empirical research. In the last part the most important conclusions of the empirical investigation are summarized.

2. Context and research hypotheses

2.1 Women's careers and gender stereotypes: the case of corporate Greece

In Greece, companies have been recruiting an increasing number of women in recent years, but in most cases have kept them in contingent job positions and within the lower-managerial ranks (Ntermanakis, 2003; European Foundation, 2002). Young Greek women, in large numbers, have been enrolling in business administration programs in order to attain all the necessary skills and knowledge to advance in business as managers (Kottis, 1996; Kotsilieri and Marshall, 2004; Mavridis, 2002). Still, among the graduates of 10 years ago the percentage of women who have obtained managerial positions in the upper echelons is much lower than that of their male counterparts. It has been estimated that males' ability to infiltrate positions as corporate managers after their studies is overwhelmingly higher than that of their female counterparts. In fact, the infiltration rate for male graduates is 87% compared to 13% for well-educated females (Mavridis, 2002).

On average only 11% of the board members among the 280 largest Greek firms were women, whereas the corresponding portion in all subsidiaries of multinationals was zero (Kottis, 1996; European Commission 2005). A more recent European survey estimated the pertinent women's participation even at the lower level of 7% (European Commission, 2012). In the same vein, Mavridis (2002), taking into account the number of females that are family members of company owners, estimates that the share of non-family female managers accounts for only 10.4% in the managing board of directors in Greek firms. Greek women's under-representation not only in high managerial posts but in power positions, in general, has been documented by international organisations. The International Labor Office has reported data on the position of women in the labour markets of 60 countries.

According to these data, the Greek women's share as legislators, senior officials and managers was 26% while their share in the total employment was 38% (ILO, 2003, Table 2C; European Commission, 2005). Numerous studies tend to attribute the finding that males are promoted more frequently and rapidly than equally qualified females to the influence of gender-based stereotypes (Owen and Todor, 1993; Cordano et al., 2002; Tomkiewicz et al., 2004; Schein, 2007). Hence, according to the gender-role stereotyping perspective women have been socialized to adopt attitudes and behaviour that are in conflict with the demands of a successful managerial career (Schein, 1973, 1975, 2007; Terborg, 1977; Terborg et al., 1977). The job of manager is seen as "male" thus requiring an achievement-oriented aggressiveness and an emotional toughness, which are typically masculine traits. On the other hand, the stereotype continues: women just do not have the personality traits commonly assumed to be characteristics of managers.

In general, pursuing a managerial career requires skills and competencies imparted to men as a social group. Employees and managers holding this type of stereotypic view are likely to perceive women as ineffective managers in job positions incongruent with females' more traditionally passive gender role (Schein, 1973, 1975, 1978; Rosen and Jerdee, 1974a; Powell and Butterfield, 1979; Brenner, Tomkiewicz, and Schein, 1989; Schein, Mueller, and Jacobson, 1989; Schein and Mueller, 1992; Schein et al., 1996; Heilman, Block, and Martell, 1995; Powell, Butterfield, and Parent, 2002; Schein, 2007). Such stereotyping is detrimental to women's advancement in the workplace, since negative stereotypes of women influence how their employees perceive them, how other managers perceive their work, how they are selected for further training and development, and, finally, how rapidly they advance. Regarding the Greek case, gender stereotyping of women as managers seems to persist in Greek culture and may explain, at least partially, the well-documented fact that women are still under-represented in the Greek business community (European Commission 2005; Papalexandris and Bourantas, 1991; Kottis, 1996).

2.2 Women's careers and gender stereotypes: the case of Nigeria

Although the twentieth century witnessed a consistent increase in the labour force participation of women across the globe: they are still concentrated in the lower rung of the career structure of most corporations, (Lindsey, 1997). In Nigeria, women constitute 49.9 percent of the entire population and make up half of the total population, yet they constitute 39 percent of the total labour force (Ogbogu, 2010). Majority of the women in Nigeria are in the agricultural and informal sectors of the economy accounting for about 60 percent of the domestic food supply. Although in recent times educated women are entering the paid labour force, the segregation of sexes across occupation and the under representation of women in managerial and decision-making positions persist (Aina, 2009).

A lot of work has been done in Nigeria to document the under representation of women in the workplace as well as the limited progress they make in advancing to managerial positions. For instance, Aina (2012) revealed that men dominate the wage/ salary employment except in sales and services, with the proportion of men to women in administrative and managerial positions being 3 to 1.5 percent respectively. Also, the composition of the workforce in the Federal Civil Service, which is the largest single entity employer in Nigeria, is inclined in favour of men, as 76 percent of the workforce are men whilst women comprise 24 percent. Women hold less than 14percent of total management level positions in the Federal Civil Service (FMWA and SD, 2008).Furthermore, the extractive industry with annual business volume of over USD 42m has almost zero level participation of women. Men are mostly employed in the extractive industry, while women bear the social costs of environmental degradation and social disruption which occasioned mining and exploration activities in the oil region (Ukeje et al., 2002).

Several key factors are linked to the poor representation of women in managerial positions and sex differentials in employment in Nigeria. Olowe (2007) and Kimmel (2011) affirm that a variety of characteristics about women such as their sexuality, responsibility in procreation, breastfeeding and childcare are used as grounds for controlling and excluding them.

Kimmel (2011) further identified sexual harassment as a major barrier to women's advancement in the workplace. According to him sexual harassment creates a hostile and offensive environment for working women which makes them feel compromised, threatened and unsafe. He added that men who sexually harass women do so to scare them off the male preserve. Sexual harassment consequently leads to increased absenteeism, higher rates of turnover, greater job-related stress and poor productive level. Alper (1993) linked women's exclusion from managerial positions to institutional personnel practices which have their origin in prejudice or may be the by-products of administrative rules and procedures.

For instance, management determine who among alternative employees should be promoted to fill vacancies and how quickly. Furthermore, he opined that some informal processes within organizations that tend to strengthen the fraternity of men reinforce the exclusion of women. This is because women's exclusion from informal networks in which information is shared and alliances develop has implications for their learning and performing their jobs and their chances for advancement. This evidence suggests that gender is considered in deciding whether to promote women to higher managerial levels. Traditional gender stereotypic ideologies not only prevent women from entering certain professions, but also prevent them from moving upwards. According to Peterson and Gravette (2000), such stereotypic ideologies are not only detrimental to women's advancement and progress in their workplace but also influence how their contemporaries and managers perceive their work and nominate them for skill acquisition programmes in the workplace. Olojede (2004) reported that in Nigeria, gender role stereotyping socializes women to be less competitive than their male counterparts. This ideology is entrenched in Nigeria because it is a highly patriarchal society, where social relations and activities of men and women are governed by socialization and cultural practices which favour the interest of men above those of women (Olowe, 2007).

Consequently, women who enter the labour force struggle to climb up the ladder and are confronted with strongly held negative gender stereotypes. Since men are stereotypically assumed to be more competent relative to women, they are those most considered for managerial positions (Ogbogu, 2010). Despite many changes and advancement, the age-old myths about women and men's capacities remain largely unchanged (Okafor, 2011). Okurame (2006) affirms that sex discrimination and the existence of the 'glass ceiling phenomenon' in the workplace impede women's advancement. In support, Crampton and Mishara (1999) argue that the glass ceiling and sticky floor phenomenon are structural barriers within organizations that prevent qualified women from advancing into management positions. For instance, Hartman (1976) and Lindsey (1997) reported that men tended to be placed in managerial positions rather than women with comparable education and were more likely to be promoted compared with women. A more recent study revealed that while differences in experience and education translated into promotion to higher ranks for men, women remain concentrated in the lower ranks in which returns to increases in human capital were restricted (Kimmel, 2011).

2.3 Research hypotheses

It is evident from our literature review that gender-based stereotypes tend to affect career shaping. Indeed, stereotypes, particularly those conditioning attitudes toward women as managers, seem to operate as 'signals' in decision-making concerning women's access to managerial positions and career advancement. Managerial outcomes often have few quantifiable measures of success and thus stereotype-based bias is apt to creep into performance evaluations. In such situations, stereotypes can 'provide structure and meaning to otherwise ambiguous data, and therefore are likely to weigh heavily in evaluations' (Heilman, 1997, 882). Considering that women are under-represented in corporate Greece and Nigeria along with the fact that there is a lack of updated empirical research on this issue for these countries, the need for measuring and analysing gender-based attitudes of business students as tomorrow's corporate leaders becomes evident. Drawing heavily on the gender-centred perspective literature presented above, this study conducts an empirical investigation of the relative importance of gender in forming perceptions of business students toward women as managers. Hence the objective of the present study is twofold: first, the measurement of working people's attitudes toward women as managers and second, the identification of the main factors that shape business students' pertinent attitudes.

For this reason the current study advances two hypotheses: a) significant attitudinal differences persist among the sexes of students indicating the presence of gender stereotypes in highly diverse economic and social environments such as those that characterise Greece and Nigeria, and b) compared to personal characteristics such as age, education, work experience and working under female supervision, gender emerges as the primary source of stereotypic attitudes toward women as managers.

3. Methodology

3.1 Research Design

The research design commonly used to test the gender-centred perspective includes gender and other personal characteristics such as age and education as independent variables and behavioural and attitudinal measures as the dependent variables. The responses on the dependent variables (i.e., attitudes toward women as managers) are typically elicited from the men and women who participate in a survey.

In this study the *Women as Managers Scale* (WAMS) is the dependent variable. Independent variables are the personal and organizational characteristics of the working people surveyed. Having constructed all the variables, factor analysis and multivariate analysis of variance (MANOVA) allow assessing the relative impact of respondents' characteristics on the formation of attitudes towards women as managers.

3.2 Instrument

The WAMS developed by Peters, Terborg and Taynor (1974) is the measurement device used in this study. It is a three-dimensional instrument, comprised of a set of twenty-one attitude statements that measures respondents' perceptions of female managers in general. The dimensions focus on respondents' (a) acceptance of women as managers, (b) negative stereotypes concerning women managers, and (c) personality traits or managerial attributes generally believed to be descriptive of successful managers. The WAMS has been used in a broad range of studies in the United States, in developing countries and in cross-cultural empirical research (Papalexandris and Bourantas, 1991; Owen and Todor, 1993; Chow, 1995; Ng, 1995; Adayemi-Bello and Tomkiewicz, 1997; Cordano, Scherer and Owen, 2002; Tomkiewicz et al., 2004; Cortis and Cassar, 2005). The scale has been employed with a broad range of samples, including employees of an industrial distributing company (Terborg, et al., 1977) and library and information science master's degree candidates (Murgai, 1991).

Even though the scale has been criticized as being transparent and easily falsified (Rosen and Jerdee, 1975), supportive validity data have been reported (Terborg, et al., 1977; Garland and Price, 1977), and Ilgen and Moore (1983) verified its reliability and dimensionality. Hence, the questionnaire of the present survey consisted of eleven items worded to favourably describe women as managers and ten items worded unfavourably. Using a Likert-scale format from 1 (strongly disagree) to 7 (strongly agree), scale scores were obtained by summing all twenty-one statements. The negatively worded items were reverse scored so that high scale score was associated with a favourable attitude toward women as managers. Thus the possible score ranges from 21 (highly unfavourable attitude) to 147 (highly favourable).

3.3 Samples

The study, which adopted the survey research design, was carried out in Nigeria and Greece, representing countries with very diverse socio-economic environments. Nigeria is a Federal Republic located in West-Africa and shares borders with the Republic of Benin in the West, Chad and Cameroun in the East, Niger in the North and the Atlantic Ocean in the South. In contrast, Greece is a European Union country located in southern Europe. The study sought to survey business administration students. Use of students in empirical research about perceptions of women as managers is useful to assist in understanding the phenomenon of stereotyping managerial roles and tasks (Schein et al., 1989; Schein and Mueller, 1992; Owen and Todor, 1993; Ng, 1995). Business administration students tend to possess one additional quality: pursuing management careers and advancing on the corporate ladder over a period of time, they are destined at some point to take decisions concerning career paths of their fellow managers including women. That is the main reason business student samples have been used consistently in a broad range of relevant studies, with the present study staying in course with this tradition.

(Schein et al., 1996; Cordano et al., 2002; Tomkiewicz et al., 2004; Cortis and Cassar, 2005). In Nigeria, the purposive sampling technique was adopted in selecting two federal universities from Nigeria that are of high repute with well-established and longstanding Business Administration Executive Programmes.

The survey was used in administering questionnaires to 350 students. Some of them had some level of work experience and had also worked under female supervisors. A total of 310 questionnaires were retrieved from both the male (164) and female (146) respondents. The respondents were between 18-32 years of age. In Greece, structured questionnaires were distributed to 343 business administration students at an urban university in northern Greece. The sample was comprised of 187 women and 118 men, totalling 305 usable questionnaires.

Some of the Greek respondents had some level of work experience and fewer had worked under female supervisors. The respondents were between 18-27 years of age. The positive retrieval rate of the questionnaires in both countries was due to the fact that the researchers were permitted by the lecturers to administer the questionnaires to the students who filled them out in the lecture rooms just before the commencement of their lectures.

4. Results

The scale of students' attitudes towards women as managers (WAMS) was tested by using Cronbach's alpha. This is a measure of internal consistency, based on the average inter-item correlation. For the present study of 305 Greek students, the scale had a reliability coefficient of 0.90, while the corresponding statistic for the 310 Nigerian students was 0.86, both values being considered highly satisfactory. It is worth noting that in remarkably diverse economically and culturally countries such as Greece and Nigeria, the WAMS score is practically the same (112.2 and 111.2 respectively). It is another indication that gender-based stereotypes are dominant in societies across borders and continents.

First, in our statistical analysis we employed one-way analysis of variance (ANOVA). The means of WAMS were compared to determine if any statistically significant differences existed between attitudes toward women managers for female and male students in both countries. For this goal, ANOVA was used to investigate the relationship of gender and other personal characteristics to attitudes. Results of this analysis, shown in Table 1, indicate that female students in both countries expressed much more favourable attitudes toward women as managers than did male students, a finding that supports the validity of the first research hypothesis. Specifically, female students in Greece and Nigeria scored in WAMS 122 and 120 respectively whereas their male counterparts 97 and 103.

Table 1: Analysis of variance of attitudes towards women as managers (WAMS) among Greek and Nigerian business students

Source of Variance	Students	WAMS	SD	F statistic	Significance
	Greek (N= 305)	112.2			
Gender ***				215.5	.000
Female	187	122.06	10.9		
Male	118	96.61	19.3		
Age*				4.5	.033
18-20 years	226	113.60	18.1		
21-	79	108.25	21.6		
Work				.000	.993
Work experience	125	112.21	16.7		
No work experience	180	112.23	20.8		
Supervision**				8.1	.005
Female	66	116.15	14.7		
Male	59	107.84	17.7		
	Nigerian (N=310)				
Gender ***				62.61	.000
Female	146	119.84	18.1		
Male	164	103.42	18.3		
Age*				3.39	.067
18-31 years	156	113.22	19.9		
32-	154	109.06	19.9		
Work				.023	.879
Work experience	308	111.17	20.0		
No work experience	2	109.00	0.0		
Supervision***				21.28	.000
Female	266	113.19	19.9		
Male	42	88.33	16.2		

Note: ***significant at 0.001 level, ** significant at 0.01, * significant at 0.05

Indeed, the differences in attitudes between female and male students were significant at the .001 level for both countries. Age is another dimension that was investigated. Differences in attitudes between younger and older students in Greece are found to be hardly significant (at the .05 level), whereas the same source of variance was found not statistically significant for the Nigerian students. Work experience did not make a difference in attitudes either. This holds true for both countries, as shown in Table 1. By contrast, working under female supervision as source of difference in attitudes towards women as managers seems to be important.

Indeed, this source of variation is found statistically significant in Greece at the 0.01 level and in Nigeria at the 0.001 level. Greek and Nigerian students having worked under female supervision have much more positive attitudes compared than those who did not have the same experience (8 and 25 points difference in WAMS for Greece and Nigeria respectively).

Since the effect of gender on attitudes towards women as managers emerges as dominant among other potential sources of difference, we sought to investigate this ANOVA finding further. We applied factor analysis for detecting possible underlying factors. Then using multivariate analysis of variance (MANOVA), we examined the relative impact of students' personal characteristics on the formation of attitudes across the detected underlying factors. Table 2 shows the results of the factor analysis that has been conducted to determine underlying factors among the WAMS items. This table presents the factors obtained, the items that compose each factor, and the factor loadings. Factor analysis was performed with varimax rotation on the 21 items from the WAMS reports. Tests for appropriateness, including the Bartlett Test of Sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy were performed and all indicated the factor analysis was an appropriate technique for both the Nigerian and Greek surveys (KMO= 0.86 and 0.92 respectively). Two factors were extracted from the Nigerian survey and three factors from the Greek sample.

All factors were internally consistent and well-defined by the variables with Cronbach-alpha scores ranging from 0.80 to 0.84 for the Nigerian sample and from 0.64 to 0.85 for the Greek one, with a 0.6 cut-off (Eisenhardt 1988, p. 510). Scores represent significant factor loadings (i.e., above 0.5) of individual scale items on each of the detected factors (Finkelstein 1992, pp. 519-20). Thus, the WAMS statements 11 to 15 were dropped for both Nigerian and Greek responses by using item loading higher than 0.5. Apart from factor loadings for each single statement, the mean for each single factor (as the average scores of the means of its constituent items) is illustrated in Table 2. It is worth noting that the calculated means indicate that female students hold more favourable attitudes than their male counterparts to each single factor in both countries.

Table 2: Factor analysis for Nigerian and Greek Students

WAMS statements and factors for Nigerian students Keiser-Meyer-Olkin measure of Sampling Adequacy (KM0=0.86)	Factor loadings	Wams Mean(SD)
Factor I. (Cronbach's alpha = 0.84) Q6. On the average, <i>women managers are less capable</i> of contributing to an organization's overall goals than are men. Q16. Women <i>are less capable</i> of learning <i>mathematical and mechanical skills</i> than are men. Q17. Women <i>are not ambitious</i> enough to be successful in the business world. Q18. <i>Women cannot be assertive</i> in business simulations that demand it. Q20. <i>Women are not competitive</i> enough to be successful in the business world. Q21. <i>Women cannot be aggressive</i> in business situations that demand it.	.572 .622 .751 .752 .786 .718	Female Male 5.60 4.78 (1.46) (1.46) F = 24.4 Sign =.000
Factor II. (Cronbach's alpha = 0.80) Q4 Men and <i>women should be given equal opportunity</i> for participation in management training programs. Q5 Women have the <i>capability to acquire the necessary skills</i> to be successful managers. Q8 The business community should someday <i>accept women in key managerial</i> positions. Q9 Society should <i>regard work by female managers</i> as valuable as work by male managers. Q10 It is <i>acceptable for women to compete</i> with men for top executive positions. Q19 Women possess the self confidence required of a good leader.	.647 .650 .777 .670 .603 .569	5.31 3.43 (.91) (1.27) F = 16.2 Sign =.000
WAMS statements and factors for Greek students Keiser-Meyer-Olkin measure of Sampling Adequacy (KM0= 0.92)		
Factor I. (Cronbach's alpha = 0.77) Q1. It is less desirable for women than men to have a job that <i>requires responsibility</i> . Q6. On the average, <i>women managers are less capable</i> of contributing to an organization's overall goals than are men. Q16. Women <i>are less capable</i> of learning <i>mathematical and mechanical skills</i> than are men. Q17. Women <i>are not ambitious</i> enough to be successful in the business world. Q18. <i>Women cannot be assertive</i> in business simulations that demand it.	.493 .594 .590 .624 .727	Women Men 5.79 4.56 (.85) (1.22) F= 105.85 Sign. = .000
Factor II. (Cronbach's alpha = 0.85) Q4 Men and <i>women should be given equal opportunity</i> for participation in management training programs. Q5 Women have the capability to acquire the necessary skills to be successful managers. Q8 The business community should someday <i>accept women in key managerial</i> positions.	.765 .715 .634	6.59 5.40 (.46) (1.25)

Q9 Society should regard work by female managers as valuable as work by male managers.	.719	F= 140.40 Sign. = .000
Factor III. (Cronbach's alpha = 0.64)		
Q2. Women have <i>the objectivity required</i> to evaluate business situations properly.	.532	5.89 4.44
Q3. <i>Challenging work is more important to men</i> than it is to women.	.547	(.69) (1.00)
Q13. Problems associated with <i>menstruation</i> should not make women less desirable than men as employees.	.576	
Q14. To be a successful executive, a woman does not have to <i>sacrifice some of her femininity</i>	.643	F= 221.81 Sign. = .000

Based on these factor analysis findings, it is important to investigate the differences between female and male respondents from both countries on all the WAMS factors simultaneously, performing MANOVA. Information presented in Table 3 includes tests of each main effect on the different groups of attitudes. The intercept refers to the remaining variance (usually the error variance). As shown in Table 3, F tests indicate that only the students' gender among their main characteristics seems to be statistically significant. Indeed, gender as independent variable is found to be statistically significant at the 0.001 level for Greek and at the 0.01 level for Nigerian business students. Female supervision is hardly statistical significant (significant at 0.05 level) only for the Nigerian sample. Equally interesting are the results of the effect-size measure (partial eta squared). This statistic indicates how much of the total variance is explained by each main effect. In this case, the respondents' gender accounts for an awesome 50% of the variance in the three WAMS factors for Greeks, an illustration of the relatively high importance of gender in explaining attitudes' variation. By the same token, the Nigerians' gender accounts for the 4.4% of the variance in the two WAMS factors detected in the Nigerian sample. By contrast, each of the remaining independent variables has no impact on the detected dimensions of attitudes toward women as managers for both Greeks and Nigerians.

Table 3: Multivariate analysis of WAMS factors - stereotypes for Greek and Nigerian business students

Effect for Greek Students	F	Significance	Partial Eta Squared
<i>Intercept</i>	3634.67	.000	.990
<i>Gender (Woman=1, Man=0)***</i>	38.29	.000	.500
<i>Age (18-20years=1, 21 years older =0)</i>	.698	.555	.018
<i>Female supervisor (Working under female supervisor=1)</i>	1.396	.248	.035
Effect for Nigerian Students	F	Significance	Partial Eta Squared
<i>Intercept</i>	1693.16	.000	.919
<i>Gender (Woman=1, Man=0)**</i>	6.832	.001	.044
<i>Age (18-28years=1, 29 years older =0)</i>	.012	.989	.000
<i>Female supervisor (Working under female supervisor=1)*</i>	4.074	.018	.027
<i>Note: ***significant at 0.001 level, ** significant at 0.01, * significant at 0.05</i>			

For a more detailed analysis of the impact of individual characteristics on attitudes towards women as managers, we conducted simple univariate F tests on each of the detected WAMS factors for both samples. The main findings are illustrated in Table 4.

Table 4: Univariate WAMS factors-tests on each of the stereotypes.

Source / Greeks	Dependent Variables	F	Significance	Partial Eta Squared
<i>Gender</i>	FACTOR 1***	25.991	.000	.182
	FACTOR 2***	34.931	.000	.230
	FACTOR 3***	80.970	.000	.409
<i>Age</i>	FACTOR 1	.319	.573	.003
	FACTOR 2	.080	.778	.001
	FACTOR 3	1.982	.162	.017
<i>Female Supervisor</i>	FACTOR 1	1.034	.311	.009
	FACTOR 2*	4.087	.045	.034
	FACTOR 3	.082	.776	.001
Source / Nigerians	Dependent Variables	F	Significance	Partial Eta Squared
<i>Gender</i>	FACTOR 1**	7.921	.005	.026
	FACTOR 2***	10.844	.001	.035
<i>Age</i>	FACTOR 1	.022	.883	.000
	FACTOR 2	.008	.928	.000
<i>Female Supervisor</i>	FACTOR 1**	7.839	.005	.025
	FACTOR 2	.275	.600	.001
<i>Note: ***significant at 0.001 level, ** significant at 0.01, * significant at 0.05</i>				

The F tests indicate that students' gender among the personal independent variables is found to be dominant. In the Greek survey, all three WAMS factors are affected significantly by gender (level of significance 0.001). Female supervision seems to be associated only with the second group of WAMS attitudes at the 0.05 level. Based on the effect-size measure (partial eta squared), it was estimated that the only source of variation for each single group of attitudes towards women as managers is students' gender. Respondents' gender explains from 18% to 41% of variation in Greeks' attitudes, while any other characteristic have no measurable influence on any single dimension of attitudes. Similar results we have for the Nigerian survey. In this case F tests indicate that gender is found to exert influence on both WAMS factors at the 0.01 level of significance. Female supervision seems to be associated only with the first group of WAMS attitudes at the 0.05 level. The partial eta squared statistics for the Nigerian students are not as robust as the Greek ones though. They range from 2.5% to 3.5%. Overall, MANOVA and univariate F tests provide evidence that supports the validity of the second research hypothesis of the present study. Based on the above empirical analysis, one could argue that *gender* emerges as the dominant source of stereotypic attitudes toward women as managers among important personal characteristics such as age, education, work experience and working under female supervision.

5. Discussion and Conclusions

The first task of this study was to investigate future business leaders' attitudes towards women's ability to lead in management. To this aim we surveyed business administration students from two highly diverse socio-economic environments, Greece and Nigeria, and we detected the existence of gender-based stereotypes in assessing women's ability to take managerial responsibilities and power. More specifically, using WAMS, it was found that across continents, well-educated males, compared to their female counterparts, persistently underestimate women's competence to advance and fill key corporate positions. Indeed, female students in Greece and Nigeria scored much higher in WAMS than their male counterparts (25 and 17 points of difference respectively). The gender difference that existed in the scores was expected, since in studies using the WAMS instrument, female respondents tended consistently to provide higher scores than did males (Owen and Todor, 1993; Tomkiewicz et al., 2004, Cortis and Cassar, 2005). This may not be unconnected with the sex-role socialization process prevalent in Greek and Nigerian societies which starts early and continues throughout life.

It accentuates the difference between males and females and is used as a basis for judging women more negatively by their male counterparts than equally skilled men in the workplace. In case attitude differences in women's managerial abilities between sexes were detected, our second task was to measure gender's relative contribution in shaping such attitudes. To this aim we performed ANOVA, MANOVA and univariate F tests analyses.

Analysis of variance indicates that respondents' personal characteristics, such as age and work experience seem not to be associated to differences in attitudes toward women as managers. By contrast, it has been estimated that attitudes differ in a profound way when the students' characteristic is *gender*. The result lends credence to the assumption that gender emerges as the primary source of stereotypic attitudes towards women as managers as indicated in the second hypothesis advanced for this study. Gender is thus a category of differentiation that influences the behaviour and responses of the male respondents.

In addition, MANOVA and univariate F tests confirmed the main finding of the ANOVA analysis, namely, that there is a clear indication that key personal characteristics such as age and work experience do not account for the stereotypic attitudes towards women as managers for both Greeks and Nigerians. However, students from both countries who have worked under female supervisors tend to have more positive attitudes towards women as managers than those who did not have such an experience. Gender was found to be dominant and significant for both Greek and Nigerian students, while the other characteristics did not significantly shape the attitudes of the student. In sum we maintain that the main findings of the study are consistent with the gender-centred perspective. Women who aspire to managerial careers in corporate Greece and Nigeria are likely to face intense attitudinal barriers. This study employing the WAMS instrument attempted to measure full-time students' attitudes toward women in management across two continents. As was hypothesized, male students in both Nigeria and Greece are found to hold relatively negative stereotypic attitudes compared to their female counterparts.

More importantly, the central finding of the study that gender was by far the most influential factor among personal traits, in accounting for the difference in attitudes is in agreement with the gender-centred perspective. Thus, this study, in keeping with previous empirical studies for the Greek and Nigerian cases (Papalexandris and Bourantas 1991; Kottis, 1996; Ogbogu, 2010; Okafor, 2011), lends support to Schein's argument that 'think manager-think male' is a global phenomenon. The finding of this study is not without limitations. In this exploratory investigation, even though the geographical coverage of the samples is impressive extending from Europe to Africa, conclusions must be drawn with caution. Further research surveying more students across Nigeria and Greece would lead to more reliable findings. Furthermore, the findings of this paper may not be easily applied to other samples in addition to business students. Hence, research to extend the present analysis to other groups of respondents besides students, such as full-time employees and entry-level managers, seems necessary for an understanding of the main sources of influence on sex-role stereotyping in diverse socio-economic environments across countries.

Such knowledge regarding gender-based stereotypes toward women is of utmost importance, since it is economically imperative for countries, both developed and developing ones, to encourage well-educated women to pursue their career advancement in the business world. Empowering both males and females to aspire to managerial positions as well as sharing power and resources serves to increase job satisfaction, commitment, effectiveness and productivity. It breaks the circle of patriarchy and promotes innovativeness by turning employees' into wellsprings of novel ideas. Research shedding light on the dominant role of gender-based stereotyping helps to highlight the inherent contradiction between deeply-rooted stereotypes of patriarchal societies and their need to fully utilize the skills and talents of *all* its citizens. It is hoped that this, in turn, might stimulate an overdue public discussion about the economic irrationality and limitations of gender-based stereotypes among political, cultural, and business elites across the globe.

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