

## FACTORS AFFECTING SYRIAN FEMALE RESEARCHERS' EXPERIENCE DURING CRISIS: INDUCTIVE APPROACH

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**Abstract. Purpose** – The purpose of this research is to explore factors influencing Syrian female academic researchers' experience in academic research in the field of business and economics studies.

**Research Methodology** – The research methodology follows a qualitative approach. The methodology is based on conducting focus groups with female academic researchers selected from Syrian public and private universities, to clarify any potential factors, which may be influencing women researchers' experience. Subsequently, a semi-structured interview protocol is designed to be applied to this target group. A judgement-sampling technique is selected at Syrian public and private universities.

**Findings** – The research findings indicate that personality traits, passion for research, marital and maternal status are important micro-level factors are influencing female researchers' experience. Academic work overload, an organisational culture of the institution, need for networking support with the business sector, are identified as meso factors. Finally, social culture and norms of the Middle Eastern societies, stereotyping and interpretation of religion are crucial factors at a macro-level. The research develops a theoretical framework of dimensions, which may be influencing female academic researchers in the field of business and economics.

**Research Limitation/Implications** – The research limitation is associated with sampling size and geographical scope. Future studies could investigate a larger sample with representative geographical scopes, and employs theory testing approaches. Future research could also extend its investigation to examine further disciplines including science, mathematics, engineering and technology.

**Practical Implications** – The study provides practical advice to decision and policymakers examining employment and hiring structure and suggests evaluating policies associated with support with childcare providing on-campus childcare. The study advises introducing support mechanisms for improving the reward system and compensations schemes for academic researchers, encouraging the development and production of scientific research.

**Originality/Value** – There is no prior research on women researchers in Syria. This research is considered as a new perspective of women researchers in Syria during a sensitive time, which characterises Syria. The study provides a theoretical contribution associated with experiences of female researchers at faculties of business and economics in Syrian higher education.

**Keywords:** female researchers, inductive approaches, qualitative analysis, Semi-structured interviews, Higher Education, Faculties of Business and Economics.

**JEL Classification:** J12, J16, I24.

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## Introduction

The status of female academic researchers is increasingly becoming a subject of interest as it is still under-researched and the subject of female academic presence and influence in the Middle East is still unexplored topic (Alberti-alhtaybat & Aazam, 2018; Kaw & Ahmad, 2014). Prior academic research indicates challenges associated with social, cultural, economic and gender issues which generally impair women from pursuing career advancement (Sidani et al., 2015; Al-Lamky, 2007; Tlaiss & Kausar, 2010, 2011; Karam & Afiouni, 2014; Moghadam, 2013; Dalati, Raudeliuniene, and Davidaviciene, 2020). The situation of female academics in the Middle East requires further exploration where research gap clearly exists (Karam & Afiouni, 2014; Alberti-alhtaybat & Aazam, 2018; Al-Asfour et al., 2017).

The purpose of this study is to develop an understanding of factors, which may be affecting Syrian female academic researchers' experience and attitudes at the faculties of business and economics in Syrian universities. However, there exists a research gap on the topic of women researchers in Higher Education, as there is no adequate research investigation on Syrian women in academia. This study aims to bridge the literature gap, which has not been investigated previously investigated.

Syrian women academic researchers can play an essential role in the implementation of sustainable development goals and creating creative solutions for problems in different aspects (Dalati et al., 2020). Syrian female researchers have significant roles in transforming and lifting research higher Education in Syria, and in so doing, they would be lifting up Syria as a whole. Understanding the factors which influence Syrian women academic researchers' experience, both positively or negatively will enable higher education experts, policy and decision-makers to develop rewards, incentives and policies supporting the advancement of female academic researchers and boosting a culture of achievement and egalitarianism at Syrian higher education.

The examination of this study is not only specific to the Middle East; instead, it is a general phenomenon, under investigation in both developed and developing regions. The UNESCO Institute for Statistics (UIS) presents facts sheets on the status of women in science, indicating that women are identified as a minority of the world's researchers in the field of research and development (UNESCO, 2017). A study, which is conducted on female researchers in Kashmir, which was a conflict zone between India and Pakistan, emphasises that women researchers have faced many obstacles and challenges in the pursuit of their research path, mainly surrounded by male-dominated environments (Kaw & Ahmad, 2014).

Although there is a growing demand for cross-national statistics on female researchers, at a national level, the statistics indicate lower percentages. The UNESCO Fact Sheet (2017) indicates that the regional averages of the percentages of female researchers based on available data only for 2014 are 28.8% for the world, 39.9% for Arab states, 39.6% for Central and Eastern Europe, 47.2% for Central Asia, 22.9% for East Asia and the Pacific, 44.7% for Latin America and the Caribbean, 32.2% for North America and Western Europe, 19.0% for South and West Asia and 30.4% for Sub-Saharan Africa.

As indicated earlier, Arab states account for 39.6% for female researcher representation, and this is considered as an adequate comparison with other regions. Tunisia accounts for

53.9%, Egypt 42.2%, Sudan 40.0%, Algeria 34.8%, Morocco 32.1%, Libya 24.8%, Bahrain 39.0%, Iraq 37.50%, Kuwait 37.3%, Jordan 22.5%, Qatar 21.9%, Saudi Arabia 4.0%, and no available data on Syria, Lebanon and Yemen. Turkey has 36.9% of female researchers.

## **1. Women in research and career advancement**

Challenges and barriers affecting women in academic research have been studied. These challenges include individual, demographic, institutional and socio-cultural factors inhibiting women in the academic sector from pursuing a research career. Studies have been developed in the US, EU and Australia on women researchers and research productivity across gender (Cole & Zuckerman, 1987; Hensel, 1991; Davis & Astin, 1987; Menges & Exum, 1983; Sax et al., 2002; Blättel-Mink, 2008; Ramsay, 2001). However, and to the best of the researchers' knowledge, there is little research examining female academic researchers in the Middle East Region.

### **1.1. Individual and demographic factors**

Prior studies on women career advancement emphasise the importance of individual factors including personality traits, maternal, marital status and family responsibility (Lobel & Clair, 1992; Greenhaus & Parasuraman, 1993; Aycan, 2004). Personality traits include self-efficacy, self-confidence, strong desire to excel, outstanding career identities, contrasted with family identities, internal attribution to success and positive attitudes to mobility. Individual and demographic factors explore how marital, and maternal status are implicated in the research process (Frost & Holt, 2014). A female researcher maternal status as a mother or non-mother is affecting research choice and methodology.

Female researcher's ability to create a balanced life between work and family and household responsibility, making a difference to the society and passion for academic work, are factors under examination (Reynolds et al., 2018). In countries where women are expected to work and participate in public life, these women were not relieved of their traditional duties as wives and mothers; and consequently, they faced a double burden of being an employee and household manager (Adler, 1993).

Studies in the US reveal different examinations on the effect of marriage, motherhood, and family, on female academic's productivity and career advancement (Cole & Zuckerman, 1987; Hensel, 1991; Davis & Astin, 1987; Menges & Exum, 1983; Sax et al., 2002).

Whereas Cole and Zuckerman (1987) indicate that US women researchers are generally less productive than male counterparts, marriage and family obligations do not generally account for the gender disparity. The study argues that married women researchers with children, publish as frequently as single women researchers no children. In contrast, Davis and Astin (1987) found that there are no differences in productivity between male and female US researchers in the quality or quantity of work. Sax et al. (2002) examined the effect of marriage, children, and ageing parents on faculty research productivity on a sample selected from 57 universities in the US and found no significant difference in factors affecting faculty research productivity between men and women. The study reveals that family-related variables exhibit little or no effects on research productivity.

A strong argument is that research on women or by women is underestimated by male counterparts, and women's family and child care responsibilities may account for female academics' lower levels of promotion and career advancement (Hensel, 1991; Kaw & Ahmad, 2014).

### **1.2. Institutional factors**

Institutional factors which may impair women researchers from career advancement and academic representation in top-level professorship positions include lack of networking abilities, absence of informal training, the limited process of modelling on a successful and experienced career, and a lower level of research development, as compared to their male counterparts (Gardiner, 2005; Reynolds et al., 2018; Kaw & Ahmad, 2014). The existence of gender inequality at higher education is denoted in US and EU studies, indicating that higher education institutions have been dominated by male perspective in developing policy and performance evaluation (Hensel, 1991; Blätzel-Mink, 2008). Barriers associated with Australian female researchers development are associated with research scholarship programs and financial support, lack of female role models and mentors, lack of supportive research environment, problems with supervision, and higher education institutions' inflexibility to accommodate part-time research degrees (Ramsay, 2001).

### **1.3. Socio-cultural factors**

Aycan (2004) examined the causes of women underrepresentation at senior organisational levels in Turkey and indicated the effect of socio-cultural factors, identifying gender-role stereotypes and perceptions towards women career advancement. At Middle Eastern Culture, there exist societal practices institutionalising negative discrimination concerning women, often codified in laws that prohibit women from participating in much of public life or fully competing in the labour market. This zone is characterised by the low status of women in general, high fertility rates coupled with low age at first marriage, high maternal and infant mortality rates, higher rates of female illiteracy, lower levels of female educational enrolment, low female labour force participation, and the lack of women's political participation and political rights (Moghadam, 2003; Caldwell, 1982, 2004; Littrell & Bertsch, 2013; Afiouni et al., 2019).

## **2. Research context of Syria during crisis**

Syria is in the Middle East nearby the Mediterranean Sea, surrounded by Turkey, Lebanon, Jordan and Iraq. The Middle Eastern and Arabic culture is examined as based on high power distance and gender inequality which stems from a patriarchal and tribal Arabic society (Hofstede, 1994; Bjerke & Al-Meer, 1993; Caldwell, 1982, 2004; Littrell & Bertsch, 2013, Moghadam, 2013). The patriarchal society is examined in prior research as culture, which fundamentally supports the practice of arranged marriages, dutiful daughters and obedient wives. These values and practices are also emphasised in Islamic traditional values and practices. The

patriarchal society expects women to play the role of housewives maintaining the household, taking care and bring up the children and accommodate the needs of husbands (Littrell & Bertsch, 2013). The prevalent social culture, which characterises Arabic nations, is based on high power distance and gender inequality (Littrell & Bertsch, 2013; House et al., 2004).

The turbulent political environment in Syria, which goes back approximately to the past ten years, has created a catastrophic situation on different levels. The population of Syria, which was about 22.1 million in 2010, is estimated to have decreased by at least 20% since March 2011. More than 250,000 people have been killed as a result of the fighting (Gobat & Kostial, 2016). The prevalent organisational environment of Higher Education sector in Syria could be generally characterised by traditional management approaches with strong bureaucratic and male-dominated environment, application of traditional methodologies, lack of individual recognition and effective encouragement of outstanding performance, limited collaboration with international partners and networks, and lack of effective empowerment program schemes dedicated to research development (Dalati & Al Hamwi, 2016; Dalati, 2016; Dalati et al., 2017; Azmeh, 2019).

The turbulent political environment in Syria has created a threat and an opportunity for Syrian women academics to endeavour to take significant roles in various fields of both academic and administrative features at universities in Syria. Many Syrians lost their jobs, properties and in the worst cases their lives. Many people left Syria, including students and academics seeking safer zones and better standards of life (Dalati & Alchach, 2018).

### **3. Research problem and objectives**

The purpose of this research is to explore factors affecting Syrian female academic researcher's perceived experience in scientific research development in the scope of business and economics. The study examines the following research question: "What are the factors which are affecting female Syrian academic researchers' experience in academic research in the field of business and economics?" The original motivation for exploring factors influencing the situation of Syrian women researcher's experience in academia is associated with the minimal representation of Syrian female researchers who exist on the international research map. A national study illustrates that only 8% of top Syrian international researchers are women (Khalifa et al., 2015, p. 23). Understanding factors related to women researchers' attitudes and experience in the field of business and economics would enable us to develop organisational mechanisms and policies to empower and support them to develop their capacities as academics and researchers. For example, networking abilities and experiences have been highlighted by the literature as an important factor, which represents an area of further development for women in academia. In the business field, this dimension represents a crucial success factor for academic researchers establishing networks with the business sector and linking academia to business. To the best of the researcher knowledge, there is little research developed on Syrian women in academia in the field of business and economics. It would be very interesting to explore the research question in Syrian academic women researchers' lenses.

#### 4. Research methodology

The research methodology follows a qualitative approach, aiming to develop a theory of Syrian female academic researchers experience at faculties of Business and Economics. Exploring research problem, a qualitative research approach is employed, particularly because the researcher seeks to develop a thoughtful understanding of a phenomenon through the detailed description (Zikmund et al., 2013; Yin, 2018; Bryman & Bell, 2015; Cooper & Schindler, 2014). An inductive approach was employed performing interviews with individuals involved with the problem and its possible solution. An inductive approach starts with observation and findings, assumes, and infers the implication of their findings that introduced the theory. The findings of the research are fed back to the theory. With the inductive approach, the theory is the outcome of the research (Bryman & Bell, 2015). Figure 1 clarifies inductive approaches.

##### 4.1. Research sampling strategy

A judgment sampling technique is applied based on the researcher's judgment about the appropriate characteristics required of a sample unit of analysis to satisfy a specific purpose (Zikmund et al., 2013). In this research, a judgment sample is selected to realise a specific purpose. A judgment sampling is a non-probability sample technique, where the researcher selects units based on their knowledge and personal judgement. A non-probability sampling strategy is an approach where the sample is gathered in a process that does not allow all elements in the population equal chances of selection (Cooper & Schindler, 2014).

Sampling strategy identified main public and private Syrian universities operating in Damascus, Syria. The sample unit of study is a female academic researcher who is a PhD holder and who has conducted at least one research work or on the process of working a research work. The number of women researchers at faculties of business and economics at Damascus, Syria is limited. Therefore securing a larger sample size is challenging taking into consideration the scope of study and the geographical location, which is business and economics.

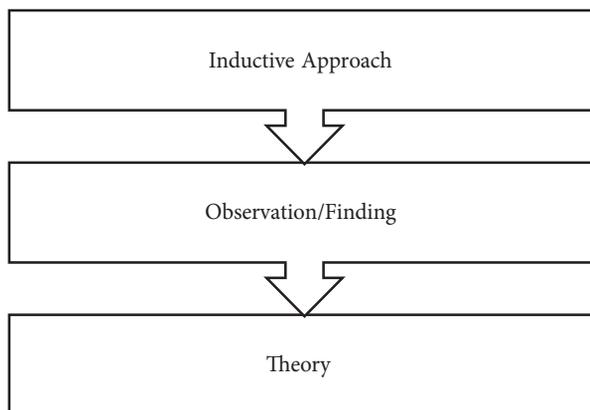


Figure 1. Deductive and inductive approaches (source: Bryman, 2013)

The difference between public and private universities in Syria is crucial, in terms of size, governance, legal nature and organisational structure. However, many female academics who are employed in public universities have also part-time teaching work in private universities. Faculties of business and economics were identified, and female academic researchers were selected based on PhD degree and field of academic study. The reason for identifying a female academic researcher as PhD holder is related to characteristic qualities of a PhD holder as an individual experienced with research philosophy, activities, process, fieldwork and ethics. Research participants were identified taking into account gender, marital and maternal status, the field of research, type of institution, and religion. The sampling approach is best described as judgement sampling strategy. In one occasion, a female participant recommended another female colleague who worked at the same institution. Consequently, this individual academic researcher was interviewed later. This approach is associated with snowball sampling (Cooper & Schindler, 2014; Zikmund et al., 2013). Semi-structured interviews were conducted with ten female participants selected from public and private universities located in Damascus, Syria. The interviews were conducted between May and June 2017.

#### **4.2. Research instrument and data collection design**

Research instrument and data collection design comprise of two stages. The first stage is based on conducting focus groups with female participants selected from universities operating in Damascus, Syria. The second stage is based on conducting semi-structured interviews with Syrian female researchers selected from public and private institutions operating in Damascus, Syria.

The purpose of the focus group is to clarify potential factors, which may be influential. The reason and justification of this stage are to explore the potential factors which may be significant to include when designing the interview protocol. The group consisted of five female academics, two fulltime staff at a private university, and three full-time staff at a public Higher Education Institution. Participants identified individual and demographical factors, including marital and maternal status, personality traits, motivation, empowerment within the family and spousal support. Institutional factors are also identified, including academic workload, time pressure related to hours of teaching, financial incentives, regulations, networking with stakeholders and socio-cultural factors. The abovementioned factors were employed as the foundation for developing designing a research framework and instrument for understanding factors, which may be influencing Syrian female researcher's experience. The focus groups were documented by voice recording. Participants' informed consent was obtained. The focus groups are conducted in the Arabic language.

The second stage is based on developing a semi-structured interview protocol and conducting semi-structured interviews with Syrian female researchers selected from public and private higher education institutions operating in Damascus, Syria. Semi-structured interview protocol is developed to explore factors which may be influencing female researchers' perception and experience. Open-ended questions were designed to explore themes developed in the focus group. Individual in-depth interviews were performed with 12 female participants, investigating three levels of examination. Consequently, ten interviews were employed. The

first set of factors corresponds to the micro-level identifying individual, demographical and family-work related questions. At this level personality traits, motivation for research, family background, and family responsibilities were identified for exploration. The second set of factors corresponds to the meso-level identifying institutional and regulation questions. At this level, factors associated with organisational culture, networking with business sectors, and regulation factors were identified for examination. The third set of factors correspond to macro-level identifying socio-cultural dimensions. At this level, factors associated with the social perception of women, stereotype issues concerning the role of women, and the perspective of religion were identified for scrutiny. Figure 2 illustrates research process applying a specific-general approach which starts with a research question, leading research to exploration and observation applying research instrument, and analysis procedure, to infer implication of findings to introduce a theory.

### 4.3. Semi-structured interview protocol

An interview protocol is a list of questions, which are designed to clarify research topics and themes. The interview protocol guideline was designed identifying broad themes and categories investigated in the interview process, and the questions relevant to each of the outlined categories. The interview protocol is designed according to the following structure.

1. Demographical factors questions about participants' date of birth, marital status, maternal status, religion, faculty, department, the field of research and institution were listed in the interview protocol.
2. Personality and motivation factors questions on personality traits and motivators for female researchers. An example of a question in this category is what motivates you to develop research?
3. Work-Family responsibilities factor questions on the perspective of the researcher's family and possible inhibitors, which may impair female researcher from pursuing an academic researcher career.
4. Institutional Factors questions about networking with research business sector. An example of a question in this category is "What barriers and challenges associated with networking with research business sector?"

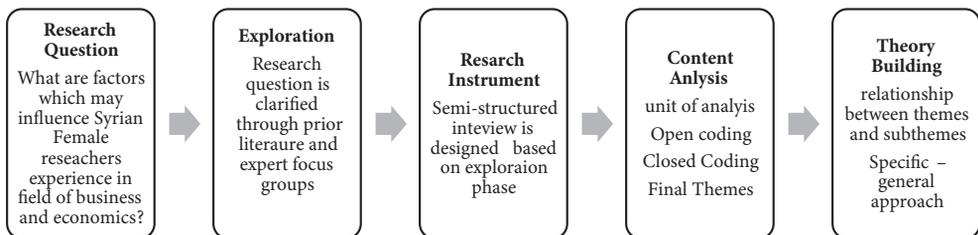


Figure 2. Research process

5. Socio-cultural factors are listing questions on Socio-cultural perception of female gender- role stereotypes and perceptions towards women career advancement, the perspective of religion towards women playing a role in academic research fields. An example of a question on this factor is “What is the perspective of religion towards women playing a role in the academic research fields?”

The interview protocol comprised of essential questions, extra questions, throw away questions and probing questions (Berg, 2001). Developing interview protocol is a dynamic process, which enables the researcher to improve the interview protocol guidelines during the interviews process. The research identifies the following female researchers, which are assigned pseudo names for anonymity and confidentiality issues. Table 1 illustrate participants profile identifying their age, marital status, religion, the field of research, and type of sector.

The semi-structured interviews were conducted in Arabic and were documented by voice recording. Consequently, the interviews were written following a verbatim format. Since the interviews were in the Arabic language, the original verbatim report was prepared in Arabic. Consequently, the direct quotes employed in the research analysis were translated from Arabic to English by the researcher who is proficient in English.

Interview data were analysed by performing content analysis identifying keywords, themes and subthemes, examining concepts, collecting examples of the concepts, and analysing them to research commonalities. The interviews transcripts are broken to data sections, performing a sentence-by-sentence analysis. The second stage of analysis comprises of open coding phase where researcher allocates codes for each sentence, eventually making a list of all codes. The third stage of analysis comprises closed coding, where the researcher identifies primary sub-themes, which categorises the open codes. Finally, final themes are identified reflecting relationships between themes and subthemes and quotes from the interview transcript.

Table 1. Female research participants Profile in Semi-structured interviews (source: compiled by author)

Code name	Age group	Marital and Maternal Status	Field of research	Institution
Lisa	50–55	Single / Child Free	Economics	Public
Sally	50–55	Widow / mother	Organization Development	Public
Brooklyn	40–45	Married / mother	Human Resources Management	Public
Maya	40–45	Married / mother	Human Resources Management	Private
Harriet	40–45	Married / mother	Marketing	Public
Rachel	40–45	Married / mother	Applied statistics	Public
Pamela	40–45	Divorced /mother	Accounting	Public
Sandi	40–45	Married / mother	Finance	Public
Amy	35–40	Single / Child Free	Economics	Public
Sabrina	35–40	Single / Child Free	Marketing	Private

## 5. Research results

A set of factors at different levels were identified as maybe influencing Syrian female researchers' experience in the field of business and economics. These factors are derived from the conceptual structure of the semi-structured protocol and are identified and classified as micro, meso and macro levels. Direct quotes from interviews narrative are employed.

### 5.1. Micro-level

At the micro-level, personality traits, motivation for research, family and social background, spousal support, education, marital and maternal status and work-family responsibility, are emphasised as crucial factors.

Female researchers emphasised a number of personality traits including self-independence, self-esteem, self-confidence and acceptance of constructive criticism. The importance of family background and education has been emphasised. The discussion indicates that social and family background and childhood upbringing are crucial shapers of personality. Sally emphasises that her family background, the primary and secondary education she received is the strong shaper of personality and career:

*I studied at American and British schools until the tenth grade, and then I acquired my Syrian baccalaureate. My parents' work was at the UN, and we changed locations and countries due to my parents' work; that is why my primary and secondary schooling was mainly at American schools. I always felt different from others. Our British and American teachers always encouraged us to express ones' opinion. I was brought up in a liberal family and schooling environment where I would express my view freely. I think this affected my personal abilities and personality in developing analytical skills.*

Both intrinsic and extrinsic motivation for developing research is highlighted by research participants. Motivational factors considered social esteem, self-esteem, self-actualisation, passion for research, field and innovation for research. When asked on the motives for research, Sandi reflects on two motivational factors, which she believes are the main source of motivation to do research:

*There are two factors, which cause motivation for research, one it is a passion for my field of academic work, as I have followed a field of expertise I have passion for. I always believed that passion for work is a major prerequisite for success. I find myself in academic research [for business and economics]. Two, it is a sense of belonging to the institutions I work for. We have a very good organisational environment at my institution. We have a very good research infrastructure. I do not distinguish the great difference in quality between the research LAB at the EU institution where I studied and our present institution. It is a similar environment. When I read an article in my field of expertise, I spend hours without sense the passing of time. Time passes so quickly. Reviewing one article would lead to another, and so on. In addition, my field of research is applied where the practical application is feasible. For example, with microeconomics application is a very practical discipline, whereas with macroeconomics, in as much as it is an interesting discipline, I cannot find myself in the direct application of it.*

Maya, on the other hand, discussed the nature of motivation for research indicating both intrinsic and extrinsic motivators, related to financial rewards and academic promotion.

*There are two types of motivation for academic research: intrinsic and extrinsic. Extrinsic research is related to financial rewards allocated by our institution accordingly taking into consideration the budget and time allocated for research. Intrinsic motivation is associated with the academic promotion and academic ranking of academics.*

Marital and maternal status are considered as significant factors shaping female researcher experience. The majority of participants interviewed indicated that marital situation affects female researcher productivity taking into account the social environment in Syria, which is male-dominated and stereotypical assigning gendered roles and responsibilities to men and women.

When asked about the condition of combining research with family responsibility, Maya indicated the importance of time management and creating a balance between academic research and social life.

*Definitely, marriage and family responsibility have an effect on female researcher productivity as it can consume the time available for research. However, if a women researcher can organise and manages time and give up on social activities, she could succeed.*

Sandi also emphasises the importance of spousal support and work affiliation:

*Had my husband not been in the same work domain of higher education, my marriage would have never lasted. I finish work at 4:00 PM, I take my work home with me, I have students' senior projects and thesis, I work late, and I have to prepare for next morning lectures. All this, cannot be understood or appreciated by someone out of the higher education sector, particularly in a patriarchal society, which places men in the first place. There are household and family responsibilities. Comparing single and married women researchers, single women would be more creative and successful.*

Harriet also emphasised marriage and family responsibility as one of the barriers of woman researcher abilities and career advancement:

*I lock myself in my bedroom. I work on my academic work sometimes for 5 or 6 hours nonstop. My daughter asks me "Mom, when are you going to finish and join us?" My daughter is six years old. This is stressful. Especially if we want to compare roles of men and women across cultures. In western societies, there is better flexibility in allocating roles of men and women. In our society, it is demanding and obligatory for a mother to spend time with children, but a father does not experience the same obligation and stress.*

Lisa reflects on combining work with household and family responsibilities indicating the question of gender equality at work in Syria:

*Women have more duties than men taking into consideration household work and family responsibility. In Syria, we are discussing that women have achieved gender equality at work outside the house. However, what about equality in the house? She has achieved equality outside the household, but inside they are not equal, as he [husband] is not working inside the house.*

Whereas the micro-level factor explores individual dimensions emphasising personality traits, attitudes and motivation for research, the next level will explore organisational factors, which will be categorised under the meso-level.

## 5.2. Meso level

There immerses a set of factors on an organisational level, influencing the female experience researchers and creating barriers on female academic researcher productivity. These factors are associated with academic work overload, the organisational culture of the institution, need for networking training with business sector and stakeholder.

As for academic work overload, 9 out of 10 female participants emphasised academic teaching overload as a factor, which is impairing them concentration on scientific research, particularly for female academic at private universities.

Amy reflects on this topic:

*In private universities, we teach for 14 hours on weekly bases, as directed by ministry of higher education in Syria, which could be an overwhelming number of teaching hours. This teaching overload requires extensive work and academic preparation. This extensive time and work overload should have been employed in academic research[instead]. Academic teaching overload in private universities in Syria is a major factor, which impairs the production of research.*

Maya also emphasises teaching overload as a major barrier impairing her from performing research:

*I teach for five sections in one course. There are 30 students on average at each section. This means marking paper quizzes, midterm, and final exams. I started working on research then stopped because I could not cope, as there is a lack of time, and it is exhausting. I take my work at home with me. I have to prepare for lectures; I have to update the course curriculum. My academic work does not end at work; I have to take it with me at home.*

Clearly, there is overlap between academic work overload and family and household responsibility for a female academic researcher. The effect of academic teaching work overload is interrelated with combing household work and family responsibility with academic work responsibility. Although teaching overload is a barrier, which could be impairing both men and women from producing and engaging in research, women academics are more vulnerable to this factor, as they are also confronted with family and household work, mainly at Arabic and Middle Eastern societies.

Lack of networking with business sector and stakeholders is emphasised as a challenging factor, which impairs women researchers from achieving their full potential. In addition, the need for networking training is emphasised. Female networking with the business sector and stakeholders is limited due to the nature of the business, which is male-dominated in Syria.

Lisa reflects:

*The majority of Syrian businesses are male-dominated. In Syria, business [networking] is not based on institutions and corporations in as much as it is on personal efforts, and networking. The problem is the lack of institutionalisation and much emphasis on personal networking. In our society, women have limitations with regard to networking. Apart from a problematic reputation for a woman who is behaving outside the frame of social stereotype, I am personally incapable of engaging with businessmen networking environment in Syria, which advocates late business dinners or meetings. Women are very venerable when it comes to their reputation and interaction in the social environment.*

Male-dominated organisational cultures are one of the factors at a meso level, which is stressed in the interviews. A general belief by research participants is that there is a deliberate covert attitude of excluding women from senior management positions and career advancement. This is due to woman femininity (marriage, maternity), and to male perception and stereotyping of women as incompetent, and less effective than men as managers.

Pamela who is a Head of Department argues that she often is exposed to such expression as “it is a woman way of management” indicating stereotypical perception men academics hold of women in management positions in the higher education sector. This attitude towards women in academia leads to a situation where female academics face lower status positions of responsibility and earning lowers financial income. Therefore, higher education institution leadership is male-oriented because female influence over important academic and institutional approaches is very limited.

While organisational dimensions, including academic work overload, need for networking and organisational cultures, are explored at the meso-level, the next section explores, socio-cultural factors and interpretation of religion.

### 5.3. Macro-level

At a macro-levels, there immerses a set of factors creating influencing barriers for women. These barriers stem from the social culture and norms, which characterise the general perception of women and perceived roles and responsibilities and assigned to both men and women in the frame of Middle Eastern and patriarchal societies. These factors are identified as the social perception of women, and religion and its interpretation.

Social perception of women is discussed by all-female participants and is reflected in the perception of women as wives and mothers whose primary duty is to become a housewife, bring and raise children. Therefore, women’s primary role and responsibility are becoming a wife and a mother, not pursuing a professional or academic career or becoming an academic researcher.

Harriet reflects:

*The perspective of [Arabic] society would favour perceiving women as wives and mothers spending the majority of their time raising their children.*

Maya discusses the effect of social perception of women and its impact on their career advancement:

*We are a Middle Eastern society, which you could also define as a patriarchal society. Therefore, women are perceived with negative and inferior thoughts, whether she is a researcher or an ordinary woman. The patriarchal society expects women to be assigned in certain roles and responsibilities, which do not exist in other societies. For example, in Syria, women are expected to play different roles and responsibilities in addition to their work as a professional. Married women have duties and responsibilities as wives and mothers, in addition to their roles in the extended family.*

Brooklyn reflects on her personal experience emphasising the effect of social environment and perception:

*I finished my undergraduate study in 1997 and travelled for my PhD study in 2001. My mother’s wish has always been to finish my PhD studies. “That is enough” she would say, “You should get married and make a family!”*

*They [Our parents] are concerned about a girl who travels abroad on her own. Maybe they are concerned about a girl ageing in the sense that studying for Postgraduate courses and PhD would require time and dedication, and a girl might lose her chances of marriage.*

Sabrina also reflects on the same notion:

*Some families in our society do not encourage female education, as ultimately girl's final destiny and purpose is marriage and family. We hear this notion around us that girls are ultimately destined for marriage, no matter how she advances in her education, ultimately she will end up in marriage [as a housewife and mother].*

Religion and its interpretation is another factor influencing women and their progression and advancement. The majority of research participants that the interpretation of religion by social norms is creating barriers for women advancement. There is no clear verse in the holy books, which discourages women from pursuing knowledge. On the other hand, female mobility is directed under specific restriction under strict religious laws; in the sense that she is not allowed to travel on her own, rather she is to be with a company a "mahram" (brother, son, uncle, nephew), husband, or female counterparts. With the modernisation of Arabic societies and cultures, women in Middle Eastern are travelling with flexibility and not being restricted to this rule.

Racheal, for example, says that, that she was not allowed by her parents and family to travel abroad to pursue postgraduate studies:

*I was not allowed [by my parents and family] to travel abroad on my own. After I got married, my husband said, if I had known your wish I would have accompanied you. I do not have a problem with you pursuing your PhD study'.*

## 6. Theory building approach

This study suggests a theory based on the multi-levels theoretical framework. The micro-level presents individual factors influencing women researchers exploring both intrinsic and extrinsic motivation particularly higher needs (social esteem and self-esteem, self-actualisation). For the majority of female participants interviewed in this study, passion for research, social esteem, self-esteem, and self-actualisation are important dimensions. Researcher's personality traits is emphasised identifying self-independence, self-esteem, self-confidence and acceptance of others' opinion and constructive criticism. Family background, education and support are also suggested as a crucial dimension in shaping female academic researcher personality and experience.

Academic work overload, limited networking with business stakeholders, and male-dominated organisational cultures are emphasised as critical elements, at higher education environment in Syria. The need for empowering and training women researchers on how to network and create professional is critical for female researcher success.

Factors associated with social culture in Syria is highlighted. Syrian culture is mainly Arabic and influenced by patriarchal values, which assign roles and responsibilities for women as well as men. Women are still perceived and favoured as wives and mothers, rather than high-

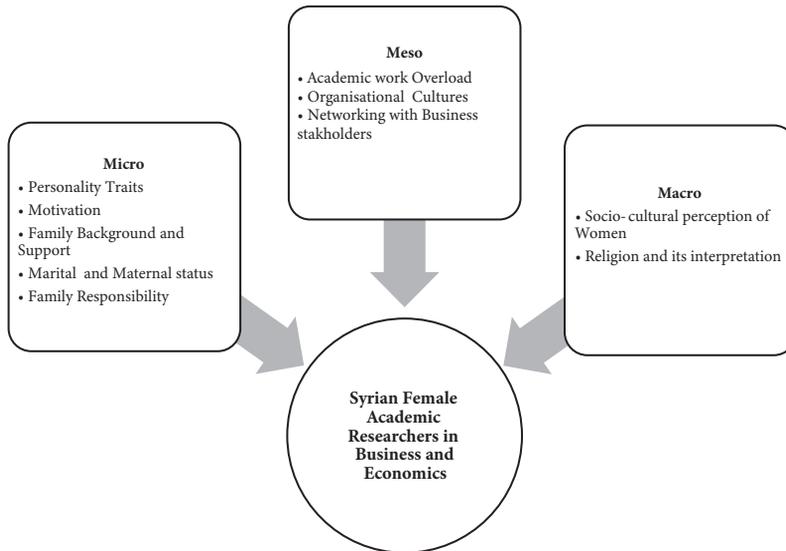


Figure 3. Theory of female academic researchers in business and economics in Syria

level professional and academic researchers. The interpretation of religion is also interesting and problematic as it goes back to more than 1400 years when male religious scholars who existed in that era interpreted the Holy book. It is interesting to note that different interpretation and understanding of religion exist and reflect crucial differences in understanding. Figure 3 illustrate

## 7. Discussion

The current research study explored multiple dimensions studied as affecting female academic researchers at universities in Syria. The study identifies micro-level factors emphasizing personal characteristics and traits as self-independence, self-esteem and openness to constructive criticism. Attitudes and values demonstrated by participants include high self-esteem, desire for achievement, and positive attitudes towards excellence. The research findings are consistent with prior research which identified the importance of individual factors influencing women career advancement (Tharenou & Conroy, 1994; Aycan, 2004; Greenhaus & Parasuraman, 1993).

The study emphasises the importance of parental and spousal support and family-work responsibility. These situational factors are strongly emphasised in this study are either motivators or barriers for academic research career advancement. For example, parental support, particularly mother, was strongly highlighted as a motivator, as well as the role of supportive and understanding spouse. On the other hand, family and household responsibilities, combined with work, create serious conflict in an academic researcher's career advancement. This research finding is also consistent with previous studies which highlighted the significance of family – work factors (Davidson & Cooper, 1987; Aycan, 2004).

At the meso-level, the study emphasises on the existence of male-dominated organisational cultures, which undermines the success of women through the stereotypical perception of women as incompetent, less effective and subservient, rather than competent and independent. The current study indicates the existence of networking challenges, which impair women from achieving their full potential in male-dominated cultures. The research finding is consistent with results by previous research which indicated male-dominated cultures is an obstacle to women success (Adler, 1993). The findings of the study are consistent with previous research emphasising barriers female professionals experienced in communicating and networking in male-dominated organisational cultures (Aycan, 2004).

At a macro-level, research study findings indicate the existence of socio-cultural highlighting social norms and gender roles as factors shaping attitudes towards women pursuing a professional career. There are undeniably social barriers shaping women academics researchers' career advancement and success. These barriers stem from a social culture which perceives women primary role and sacred duty as wives and mothers while putting lesser importance on the role of women as professionals, or equal work partners. The research findings are strongly consistent with previous research studies which studied the effect of socio-cultural norms on women career advancement and the effect of patriarchal societies on women career advancement and effective professional participation (Caldwell, 1982, 2004; Littrell & Bertsch, 2013; Moghadam, 2013; Tlaiss & Kauser, 2010; Sidani et al., 2015; Aycan, 2004).

The research findings indicate the significance of religion and its interpretation by social norms. Wherein the teachings and communications of prophet Mohammad of Islam, there is an emphasis on seeking knowledge and learning for both men and women, the interpretation of religion by traditional male Muslim scholars is causing limitation for women's career advancement. Female mobility is restricted under traditional Islamic Sharia, which could create constraints for Muslim women to pursue their studies abroad, for example. Previous studies conducted in the Middle East indicate that whereas the original values of Islam are viewed as supportive of women taking part in the different aspect of life, cultural practices impair Arab women to function as freely as their male counterparts (Naguib & Jamali, 2015; Sidani, 2005). However, as indicated previously, with women education, modernisation of Middle Eastern societies and with a comprehensive and flexible understanding of Islam, women are pursuing their personal, educational and career goals.

## **8. Research limitation and future research**

The main research limitation is related to sampling size and geographical scope. With the size and geographical scope of the sample, research results could not be generalised. However, research findings provide an adequate basis for building theory, which requires testing in future research. Future studies could investigate a larger sample with representative geographical scope examining further Syrian cities, employing the same qualitative methodology. Future studies could also employ a theory-testing approach. Quantitative approaches could be developed to examine empirical evidence and statistical approaches to factors affecting Syrian female researchers in the fields of business and economics. Future research could also extend its investigation to examine further fields including science, medicine, engineering and technology.

## Conclusions and recommendation

In conclusion, this research develops a theory examining factors, which may be influencing Syrian female academic researchers in business and economics. The theory is based on a multi-level study examining micro, meso and macro levels.

This current research study should be beneficial to female academics exploring factors affecting their research experiences and career prospects and advancement in academia. The study provides practical advice to decision and policymakers at higher education institutions and the ministry of higher education. The study examines a set of recommendations and policy advice examining employment and hiring structure at higher education institutions to investigate any direct or indirect inequality. The study suggests evaluating policies related to providing parents support related to childcare to eliminate factors causing conflict between family and work. The study also suggests examining the possibility of providing on-campus childcare. Universities are capable of providing childcare facility, as this service is challenging for parents. Higher education institutions in Syria could also play a significant role through establishing strategic focus for building capacity and improving the performance of female researchers. Syrian universities could support mechanisms for improving the reward system and compensations schemes for academic researchers, encouraging the development and production of scientific research. Intrinsic and extrinsic rewards could be introduced to improve the quality and quantity of research publication. Policy reform could also include introducing a carefully scrutinised academic workload, which would introduce a balance between teaching and conducting research. With an academic work overload, which is predominantly dedicated for teaching, especially for private universities, higher education institutions could take the decision to reduce the number of teaching hours in favour or dedicating time for research. Combining research and teaching load is a challenging process for any academic regardless of gender. However, with household and family responsibilities creating job-family conflict, female academics face additional pressure to achieve good research record and productivity.

The study advocates a change from a patriarchal to a new egalitarian approach. The research study indicates a transformational approach from a traditional higher education environment into an organic, equal and equitable working environment, which would enable women to thrive as researchers, and professionals should be established.

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