BALANCING CAREER AND MOTHERHOOD: PERSPECTIVE OF FEMALE ENGINEERS WORKING AS FULL-TIME UNIVERSITY FACULTY

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Abstract
Female engineers serving as full-time university faculty face challenges in balancing between the role of a mother and a professional academician. Career is important but so is their family. Obstacles encountered and consequently strategies adopted by them in order to strive for balance between both roles are discussed in this paper. It is a qualitative research based on Grounded theory approach. The results indicate that the responsibilities of a mother and that of a professional academician are overlapping in some cases. However, managing both the roles simultaneously is difficult and stressful. Hence, depending on their circumstances working mothers adopt diverse strategies to overcome the issues of reconciling motherhood and career.

Keywords: Female Engineers, Motherhood, Role Expectations, University Teachers, Work-Life Balance, Working Mothers

Introduction
Globally, engineering is considered to be an unconventional field for females as compared to males. In Pakistan, presence of females specifically in the field of science and technology has been noticeably low (Khan, Sadiq, Nadeemullah, Akhtar, & Khwaja, 2014). Females are often discouraged by their family, teachers and employers who assume engineering as a men’s field (Shabib-ul-Hasan & Mustafa, 2014). Education plays a central role in women's decisions of economic participation which generally increases with increase education level.

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Unfortunately, women have never been viewed as individual citizens in the real sense who have absolute rights endowed by the constitution. They are still required to fulfill traditional role expectations despite requirements of the modern economy (Knowles, Nieuwenhuis, & Smit, 2009). Access to higher education and participation in the workforce is a female’s constitutional as well as religious right in Pakistan and is absolutely crucial to the nation’s success in the modern economy (Khurshid, 2015). Considerably increasing number of females are opting engineering field now a days (Khan et al., 2014). Females constitute over half of Pakistan’s population and there is a dire need to preclude such technical competence from going to waste. (Shabib-ul-Hasan & Mustafa, 2014). When it comes to having a paid job, preferences of females usually change to adjust to the circumstances they find themselves in. Working mothers confronted with the dilemma of balancing the two inter-locked spheres of motherhood and paid work, perceives change in their identities as well (Bailey, 2000).

Society shapes the lives of human beings and inherently assigns different roles and responsibilities to its men and women. Out of numerous roles that a woman has, one of the prime roles is “being a mother” or “nurturing”. Motherhood is defined as per the social and cultural norms embedded in a particular society. Hence, concept of motherhood will be different for a woman in the east as compared to a woman belonging to the western society. Similarly, this role is perceived differently by rural versus urban women, women who are housewives or those who have a paid job. Mothers themselves also appear to recognize diversity in the ways they respond to work and family needs (Knowles et al., 2009).

Although numerous researches have been done in European countries on multiple role expectations and women’s responses to this but not much research data is available with regards to the experiences of female educators in the Pakistan. For this reason, it is deemed necessary to explore the experiences of the mother-educators in a specific social setting in Pakistan. This study attempts to identify the challenges working mothers face in reconciling the role of a mother and a professional academician and consequently what strategies they adopt to overcome various constraints. The guiding research questions are:

i. How does a working-mother perceive her role as a mother?
ii. How does a working-mother perceive her role as a university faculty?
iii. What issues do they face in balancing these roles?
iv. How do they reconcile or balance both these roles?
The study focuses on mothers working as full time engineering faculty in Higher Education Institutions of Pakistan.

**Literature Review**

Several transitions have taken place as far as the role of women in the society is concerned and changes are still taking place. Women are no longer assumed to be confined to home (Knowles et al., 2009).

Patriarchal family structures and values are common in Pakistan where men are considered to be the head of the family and bread winners whereas a woman’s role is confined to domestic responsibilities (Naqvi, Shahnaz, & Arif, 2002). Despite all odds, women have entered the labor market and they have prospects of having a productive and interesting life in the current era (Knowles et al., 2009). Marital status is one significant factor that influences the women’s decision of participating in the economic activities. Empirical research suggests that married women are less likely to participate in the labor force irrespective of their social class. On the other hand, widow or divorced women are more inclined to participate in the economic activities (Naqvi et al., 2002). However, due to family responsibilities and simultaneously having the urge to excel in professional lives, challenges of individuality and self-worth are often faced by educated and talented women (Knowles et al., 2009). Further, as reproductive, nurturing and other household responsibilities in home increases, women are more likely to defer or abandon participation in economic activities in order to balance household responsibilities and paid job. Women who do not participate in the economic activities attribute two major reasons with this decision. Either they are not allowed by their husbands or fathers to work outside the house or they are over occupied with the domestic responsibilities (Naqvi et al., 2002). Career aspirations, work and parenting commitments, career interruptions and many other paradoxes entails balancing multiple roles for especially for women (Knowles et al., 2009).

In the recent years, employment and motherhood have been at the vanguard of many social and political debates especially in Europe (Armstrong, 2006). Although several women accomplish professional appreciation and triumph but reconciling multiple roles is often difficult for some women. Coalescing job with motherhood is the predicament that these mothers mainly face. Mothers often confront great difficulties in managing both the spheres of employment and motherhood. And feel exhausted struggle to comprehend the acute division when trying to reconcile the two spheres. Balancing paid job and parental responsibilities is overwhelming for many mothers which leaves them feeling
emotionally, psychologically, and intellectually drained (Knowles et al., 2009). This had been the very reason of introducing flexible work policies in organizations in the early twenty-first century. Work-life balance policies promote to help employees to effectively handle their employment as well as parenting responsibilities (Rodrik, 2004).

A serious concern that has not been given due importance and which is usually sidelined is the gender inequality that exist in the society (Chaudhry & Rahman, 2009). This raises many questions like that when it comes to balancing motherhood and employment why it is mostly women who need to juggle and what resources they utilize while juggling. Women are the ones who generally continue childcare and other domestic responsibilities for which they are neither paid nor recognized. Their efforts to manage all this are often taken for granted by assuming this as part and parcel of being a female. Many at times these multiple role expectations are unrealistic but they cannot be questioned (Armstrong, 2006). Bailey (2000) in his study investigated the discourses of employment and motherhood for women belonging to the middle class of Bristol, UK. In this study he identifies that conflicts might arise due to the discursive relationship between the two spheres of motherhood and employment. And further many relationships could be recognized between motherhood and employment identities. An important finding of the study was how women negotiate between these two interlocking roles of their lives. This was introduced through the concept of `inter-spatiality’ (Bailey, 2000). The personal and professional lives of working mothers are very much interconnected. Women usually follow a non-liner pattern of life where numerous changes in the lives are influenced greatly by circumstances like nature of husband’s work. Yet they still make conscious and deliberate decisions at different stages of their lives. However, it cannot be denied that employment and motherhood are not two completely separate spheres rather they are closely interconnected and overlapping (Garey, 1999).

When confronted with conflict between work and personal life, often women prefer to reduce their working hours irrespective of the origin of the conflict may it be home or work and choose to shift to informal employment. Women usually do a greater chunk of household chores than men. Due to greater domestic responsibilities, especially having school going children, women are constrained to spend lesser hours at workplace (Reynolds, 2005).

Knowles et al. (Knowles et al., 2009) in his study of professional female educators, argues that mothers often have their own perceptions regarding what expectations a society has from them and this is reality for these women which
can’t be challenged. These perceptions later on become parameters that the society aspires and use to gauge the performance of a woman in mother’s role.

Since the role of a mother is often dictated by the social and cultural norms existing in a particular society, concept and expectations of motherhood also vary accordingly (Hand & Hughes, 2004). Cultural values, beliefs and assumption were shared significantly influence mother-educators. Mother-educators are quite anxious about failing for themselves as well as for ‘others’ as these mothers are prone to set very high standards and expectations for themselves. They even perceive the world of work as being against them which is possibly a manifestation of a faltering self-image and linked to feelings of inadequacy. (Knowles et al., 2009).

Research shows substantial diversity in decisions of mothers about paid job and mothering. Numerous factors influence decision making. These include beliefs about expectation of others, available support, access to childcare, employment opportunities and the compatibility of paid work and “good parenting”. The diversity in how mothers respond to professional and family responsibilities is recognized and experienced by mothers themselves. Working mothers do realize that there are numerous possible ways to practicing motherhood and paid work together and in fact none of these ways can be declared as right or wrong as it is all based on the personal decision and circumstances of a particular mother (Hand & Hughes, 2004).

There are several direct and indirect work-related penalties of motherhood. Pay cuts are often associated with motherhood but the reasons behind it are not clear and well understood (Nomaguchi, Milkie, & Bianchi, 2005). Working mothers might earn lesser than other working women because childcare responsibilities many at times lead to be less productivity at work, inability to gain possible job experience, trade off well paid jobs for mother-friendly jobs, or at times employers discriminate against them. Wage penalty is greater for married women as compared to unmarried ones. Similarly, Women often have to trade off job experience against child rearing (Budig & England, 2001).

2. Research Methodology
This study is a qualitative research based on interpretive paradigm which allows exploring a phenomenon by probing the participants. Qualitative research is preferred when one wish to study interpretive, material practices to explore the world and make it more visible though the meaning people give to them (Denzin & Lincoln, 2008). Grounded theory approach is adopted for this study. Grounded
The Government theory is all about developing a theory from data. Such theory helps in explanation and prediction of behavior (Creswell, 2013).

a. Sampling and Data Collection

Purposive (theoretical) sampling is used for the study. Purposive sampling is based on theoretically relevant constructs and includes participants who can provide rich data for the study. The subjects are selected considering that maximum information and as many dimensions as possible related to the phenomenon can be discovered through them (Glaser & Strauss, 2009). Twenty married women were selected through purposive sampling belonging to middle socioeconomic class who met the requirements of this study. Seventeen working mothers agreed to participate in the study. Data was collected through semi-structured in-depth one-to-one interviews over a 2-months period. All 17 participants of the study were aged between 25 to 40 years, serving as full-time faculty members as Lecturers and Assistant Professor at various public and private higher education institutions of Pakistan. Participants have at least 1 year of work experience as permanent faculty, have 1-3 children who are either school going or younger than that. Husbands of participants work as full time employees and are the primary breadwinners. All participants continued their education after marriage and kids except for one.

During in-depth interviews, participants shared their views and experiences regarding motherhood, teaching responsibilities, issues faced by them in balancing multiple roles and the strategies to handle them. The experiences specifically included the ‘felt’, ‘undergone’ and ‘lived’ experiences of participants. The interviews not only focused the experiences and perceptions of the participants but also their actions and gestures as well. Each interview lasted approximately half an hour and were audio-taped. Note taking was done for the rest of the interviews. The interviews were pre-scheduled as per the availability and convenience of the participants. The interviews took place in a natural setting in the participant’s office. All participants were taken on board before recording about the purpose, scope and process of the interview. A brief interview protocol was developed and shared with the participants before the interview. The participants were introduced to broad and open-ended questions to congregate as much information as possible. Thus avoid guiding the interviewee in any specific direction. The recorded interviews were transcribed (just the gist) to generate open codes and the answers were evaluated for content. The content was analyzed and patterns were identified keeping in mind the research objectives. Participants were asked for clarifications wherever required. The interview questions were refined and some were added in subsequent interviews to gain more insights on
the issue from the participants. Data collection was stopped at the point when no new categories were emerging from the data.

b. Data Analysis and Reporting:
According to Glaser and Strauss (Glaser & Strauss, 2009) collection, analysis, and interpretation of data are done simultaneously in the grounded theory approach. Field notes of interviews, observations, emerging categories, relationships were recorded manually during interviews, followed by a review of the audiotape recordings and field notes before subsequent interviews. Concepts that emerged through interviews were clarified and converged. Initial categories were identified using open codes. Subcategories were identified and these were related to initial categories through axial coding. Case-based, analytical and theoretical memos were developed during data analysis that provided thick descriptions. These memos were then used to connect the relational statements, grounded in the data. Concepts were considered completely defined when the categories became saturated and new data stopped emerging. The emerging categories and the relationships amongst them were investigated through systematic constant comparison of the evolving data. The theory is finalized using theoretical memo and operational notes.

c. Ethical Considerations
Participants were requested to sign the consent form for voluntarily participating in the study. Interviews were audio recorded with prior permission of the participants. Confidentiality of data was ensured throughout data collection and reporting of the findings. Also, the names of the participants of the study and their institutions have not been disclosed to maintain the confidentiality.

Data Analysis
The following four categories emerged as result of the in-depth analysis of interviews of female engineering faculty at various universities.

A. Motherhood
Participants defined ‘motherhood’ as a very broad concept that encompasses numerous responsibilities. One participant defined it as “a beautiful relationship but full of responsibilities”. Every woman naturally possesses a motherly instinct. A mother has to take care of the physical and intellectual growth of children. Helping children in studies and their academic performance is on the shoulders of mothers. Inculcating moral and ethical values in children and disciplining them are also part and parcel of being a mother. Overall a mother is responsible for nurturing and basic grooming of children. When probed about the source of
information regarding these responsibilities, most of the participants were of the view that there are multiple sources from which they have come to know the responsibilities of a mother for example society, religion, elders, media and their own mothers.

b. Teaching Profession
Mostly participants were of the view that there are lots of similarities between role of a mother and a teacher. Just like a mother, a teacher is also responsible for intellectual growth of students, have to conscious of needs of every student, provide adequate skills and information and prepare them for the outside. A teacher’s prime responsibility is not personal or moral development of students rather a teacher has to have grasp of the subject, impart knowledge to the students, deliver lectures, update course, cater individual learning needs of students, evaluate their performance, make course interesting, share application of concepts with students, and skill development. And there is a “side role” to present themselves as role models for the students to follow. Besides these, attending official meetings, updating curriculum, continuing education and research are also part and parcel of being associated with higher education teaching.

c. Issues Encountered in balancing Motherhood and Teaching Profession
It was unanimously agreed by all participants that managing both the roles simultaneously is difficult and stressful. Children need time as well as your profession where you have to prove yourself. Work related activities are sometimes unstructured where one is required to do things on urgent spontaneous basis and can’t afford to delay them. Kids time is also not always planned and they might require extra time as well. Teaching profession not only improves the financial wellbeing of a woman and that of the family too but it also demands a lot of time and effort. At times it is difficult to prioritize and more intricate is to decide where to compromise.

It is hard for children to understand the nature of their mother’s full time job at this tender age. They just want moms to be around them like a normal housewife mom. According to one participant “my daughter asks me that why I am not like other moms who stay at home with their kids”. So that is another stress for working mothers. Responsibilities of a mother do suffer because of work. Nature of work commitments are such they can’t be ignored and tend to take priority over domestic responsibilities. It is quite a relief if one has good domestic help. Yet monitoring and controlling the servants is not an easy job. It is a generally
accepted perception that with all boys, discipline is an issue. Poor law and order situation, increase in kidnapping and rape incidence in the city, has added a lot to the mothers’ responsibility as now they are expected to accompany their children while they commute and socialize. Personal life of a mother suffers a lot as she is unable to find time for herself. They become very irritable at home and lose my temper easily.

d. Strategies to overcome obstacles in reconciling both roles
When it comes to deciding priorities, in majority cases the motherly instinct takes the charge and children are given priority over others. Having discipline in personal life and being organized is instrumental in balancing personal and professional life. Family plays a major role. You need to have an understanding family. Husband plays a very important role that understands you and empathizes with you. Without husband’s support you cannot balance these two roles. Besides husband, support of extended family is also important like in-laws, mother, sister, brother and so on. So, living in a joint family and having that kind of support is very good. But it works both ways, it is not one sided. If you play your role well, you will definitely get something in return. A mother is a house keeper but it doesn’t mean that her role is only restricted to cooking, cleaning and all that. It has not been dictated by Islam or anywhere in the world. This is a role that can be easily shared with others. Without domestic staff, there would be imbalance due increase in struggles, stress and pressure.

Kids want to see their moms around which can be accomplished to some extent through availing flexible working hours’ policy (if available), trying to be at home specially when kids return from school or make them feel you are around by staying in touch through phone. To keep children engaged, various indoor and outdoor activities can be designed for them. Reserve weekends / off days for kids. Some of the participants also made it a rule for themselves not carry burdens of one sphere to another. One should have a mentor to get good piece of advice when confronted with multiple challenges. Also manage to take out time for your own self.

e. Theoretical Model
From the above results, theoretical model is developed for balancing motherhood and teaching profession (see fig 1). There are certain similarities between motherhood and teaching profession along with some differences. This balance between these two roles is easier to achieve if one lives in a joint family system, elder children who can help in looking after the younger siblings and / or have domestic help available in the form of maids, cook, and driver. Maintaining this
balance would be impossible with husband’s moral support and organizational family-friendly policies like flexible working hours. If children are grown up, they understand and share the responsibilities of working mothers. If a mother has all sons then usually disciplinary issues are more.

Scarcity of time is the major constraint in balancing both the roles. Due excessive workload, the due time of children is compromised. Unplanned professional commitments, overly competitive environment, lack of organizational support add to the woes of working mothers. An additional burden these days is the poor law and order situation.

Efficient time management, proper prioritizing and self-discipline are the most commonly used strategies to overcome the constraints in balancing motherhood and teaching profession. Saying ‘No’ without guilt to additional work whenever possible, asking for help from family, effective communication with children and at work, use of cell phone to stay connected to the children throughout the day, having a mentor to advice whenever there are excessive conflicting demands and ability to avoid interference of one role with other can be some other ways to balance both the roles. In case where the organization is not supportive, working mothers at times adopted unethical means like serving less than the designated hours, sneaking out from the workplace during working hours and falsifying which they called as “white lies”.

Some of the consequences of striking a balance between motherhood and teaching profession include sacrificing personal life, reduced patience level, irritability at home job dissatisfaction and a guilt feeling as if you are not able to do justice with any particular or both the roles. Job dissatisfaction at times the pressure increases to an extent that women feel that they are left with no other choice but to sacrifice their career.
Discussion
Although some literature is available on what problems working mothers face and how they overcome them but this inquiry is distinctive in nature because of its research approach. Using in-depth interviews for data collection and continuous
data analysis a theoretical model has been worked out illustrating the issues and strategies adopted by the thirteen participants of the study. Firstly, motherhood and teaching profession are not dichotomous in nature as there are many similarities in both the roles as highlighted by the participants. For example, in terms of intellectual and moral development, participants are expected to fulfill this responsibility in both roles. They have to assert themselves at times, guide students and be a mentor and friend for them both as a mother and as an academician.

 Mothers realize that children want them to be around and expect their physical presence when they come home from school, attend their school functions and other social activities besides school. Due to scarcity of time, mothers ensure their presence using a number of strategies like making themselves accessible through phone, Skype, utilizing the flexible working hours policy, effective time management, prior planning of home and office work, setting priorities, giving up their personal life and sleep, reduced socialization with own friends and extended family, spending quality time with children, planning and designing indoor and outdoor activities to engage children in productive things instead of letting them watch television or play all the time. In majority cases the motherly instinct takes the charge and children are given priority over other issues. The question is how to organize job and family life so that none of these two realms take such a heavy toll when combined. Mothers who are full time faculty members and also involved in doing the major chunk of work at home as well, manage their overwhelming responsibilities often by giving up their sleep. Further, the ability to balance conflicting demands of both the roles are directly linked to the amount of support working mothers receive. Husband’s moral support is considered as a vital imperative for balancing motherhood and full time teaching profession. If he understands your immense responsibilities, empathize with you, and gives a helping hand in taking care of children then the task of balancing becomes much easier. Whether women live in a joint family system or independently, support of family is also important in terms of understanding and helping working mothers. However, there are pros and cons of living in a joint family system as pointed out by three of the participants who have experienced living in such a system. For instance, there is extra pressure on working mother if other females in family are not working. Also at times children do not like interference of other family members in their life especially getting scolded by grandmother or aunty who are living with them.

 Most of the participants suffer from a sense of guilt as they personally feel that despite of all their effort and personal sacrifice, they are not able to give due time
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and attention to their children. The expectorations from both the roles are overwhelming and it is in fact beyond the reach of working mothers to fully satisfy either their children or their students. One participant contended by emphasizing the typical expectations from a mother to cook for the house and clean it, this has not been dictated by Islam or anywhere in the world. This is a role that can be easily shared with others like hiring domestic staff (cook, maid, driver etc) and family members (husband, in-laws, maternal relatives). All participants accepted that without domestic staff, there would be an imbalance and increase in the struggles, stress and pressure of working mothers. One needs to make it a rule that not carry burdens of one sphere to another. Though it seems difficult but it is not impossible.

It is worth mentioning that all the four participants of the study were of the view that usually discipline is an issue with sons as compared to daughters. Boys are aggressive and stubborn in nature while girls are cooperative and behave sensibly most of the times. As one participant mentioned that, “my daughter helps me in taking care of my youngest son. She makes him have his lunch when he returns home from school. Whenever they have a fight between them, it is usually my daughter who compromises.” Another participant argued that “Discipline is a major issue when you have all boys. My son’s school teacher and other mothers often ask me; how do you handle disciplinary issues of your three sons at home? I think it is universally accepted that there are issues related to discipline in case of boys.” Hence we can say gender of children also influences the issues faced by working mothers and consequently ensure that they use appropriate strategies to tackle with them.

Conclusion and Policy Implications

The responsibilities of a mother and that of a professional teacher are overlapping in some cases. However, managing both the roles simultaneously is difficult and stressful. Scarcity of time is the major constraint in balancing both the roles. Maintaining this balance would be impossible with family’s moral support and organizational family-friendly policies like flexible working hours, daycare facility etc. Due excessive workload, the due time of children is compromised. Unplanned professional commitments, overly competitive environment, lack of organizational support add to the woes of working mothers. Some of the consequences of striking a balance between motherhood and teaching profession include sacrificing personal life, reduced patience level, irritability at home and a guilt feeling when it is perceived that they are not able to do justice with any particular or both the roles.
Considering the colossal economic challenges faced by a developing country like Pakistan, keeping women out of productive workforce would be detrimental to nation’s success in the modern era. Most importantly, it is comparatively more difficult for females to compromise on their career who have invested considerable amount of time and effort in acquiring an unconventional degree like engineering. Therefore, the main challenge is to change the mindset of the society that allows more women to be involved in paid employment in Pakistan so that they become part of the productive labor force in the country. At the same time the challenge for the policy makers and human resource professionals is to take into account the various concerns and difficulties that women face in balancing motherhood and paid job and to create an enabling environment for women by providing required organizational support.

References

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