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# THE EMPLOYMENT OF ONLINE COMMUNITIES OF PRACTICE FOR MANIFESTING FEMINIST BEHAVIORS AMONG EASTERN WOMEN

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## Abstract

*There is a growing body of literature on the concept of gender and women empowerment through information and communication technologies. However, there is no considerable effort to investigate how information technology affects feminism movements particularly in eastern countries. Drawn from the findings in the current body of literature and using activity theory, this paper postulates the significant moderating impact of online communities of practice in transforming feminist-related attitudes into feminist-related behaviours of eastern women. It then uses quantitative data from an eastern cultural context to check the applicability of the proposed proposition.*

*Keywords: Communities of Practice (CoP), Women empowerment, Feminism.*

## 1 Introduction

Substantial research studies have highlighted the crucial role of Information and Communication Technologies (ICT) in women empowerment all over the world (Torney-Purta, 2002, Huyer, 2005, Kwapong, 2007). In the pursuit of global knowledge sharing, information technology has opened up new possibilities for women to communicate and overcome geographical and traditional gender barriers through different means (Torney-Purta, 2002, Jain, 2006, Acharya et al., 2007). Online communities of practice (CoP) have acted as one of the major means of catalyzing the process of women empowerment by allowing women to voice their concerns, and express much freer than face to face interactions (Shahidian, 1998, Moghadam, 2002).

Feminism is an important indicator of women empowerment and is defined as ‘a state of wholeness and awareness toward women’s proper place, and challenging customary categories and meanings that constitute the existing knowledge of gender’ (White & Kowalski, 1994, Haines & Littler, 2004). Unlike modern feminist movements, women activism in eastern countries has been remained within the social frameworks and has not been successful enough to stretch many traditional gender barriers.

Based on the insights from activity theory, this study reclaims information and communication technologies for flourishing feminist-related behaviors in eastern societies. It integrates the extant literature on women activism in eastern societies with the existing literature on women empowerment through information and communication technologies. This is followed by proposing a conceptual basis that postulates the moderating impact of online communities of practice in manifesting feminist-related behaviors of eastern women. The remainder of the paper is laid out as follows. It checks the applicability of the proposed framework with quantitative data collected from 120 Iranian women. The paper concludes by discussing the contributions and the limitations of the study and suggesting research avenues for future studies.

## 2 Literature Review

Feminism refers to movements aimed at establishing and defending equal political, economic, and social rights and opportunities for women (Merriam-Webster). Feminist movements have acted as a voice for women to raise gender issues and gradually move into balancing social-related concerns. There is, however, a distinction between modern feminism and its antecedents such as struggles for suffrage and the rights to vote (Cott, 1987). For many countries the turning point for women has been when women could obtain the vote rights such as the United States in 1920 (1910–1930). These movements have been primarily about women as a universal entity and gradually transformed themselves into being concerned with social differentiation.

In alignment with the feminist movements in the western countries, the origins of feminism in many eastern countries also go back to the early decades of 20th century such as Indonesia in 1945 and Lebanon in 1952. Moreover, the extant literature states that eastern women have played a distinct role in the social movements of the period since the early decades of the twenties century (Afary, 1989). They have also articulated feminist and socialist demands as the movements progress (Afary, 1989, Tohidi, 2002). However, the feminist movements and struggles for suffrage in many eastern societies have not much flourished to transform themselves into social transformation and differentiation that feminist movements are basically about. However, in contrary to the feminists’ streams in Europe and North America, the participation of eastern women in social movements has not been in conflict with their traditional roles and responsibilities (Afshar, 1981). More specifically, the participation of eastern women has been remained within cultural and religious frameworks, which establish motherhood as the primary task of women, while at the same time women are receiving training to support the society, whenever it is necessary (Tabari, 1980).

The extant literature refers to a number of reasons for the limited feminist-related behaviors among eastern women. For example, Tabari (1986) points to economical difficulties in the third-world countries as an important factor, which limits the emergence of feminism behaviors. Tabari argues that when the very survival of the family is dependent on everyone's income, she has no image of herself as a separate individual in her own right. In such circumstances, there is little room for the growth of individualism for each member of the family, and particularly true for the women.

The ignorant hostility towards feminism among major segments of eastern countries is another very critical issue that limits the emergence of feminist-related behaviors. More specifically, apart from several aids of women activism during social and economic movements, there is still such an hostility that refers to feminism as "a deviation from women's nature" (Sherkat, 1993, Shahidian, 1998, Moghadam, 2002). As a result of such a viewpoint, feminism among both eastern men and women is mistakenly identified as endorsing a shunning of responsibility towards men and family members, and carelessly seeking occupation and social life. One of the major reasons of such hostility could be the lack of knowledge and awareness toward women's movements around the world as well as the origins and concepts of feminism in many eastern societies (Shahidian, 1998, Moghadam, 2002).

The extant literature also states that while eastern women might have significant feminist-related attitudes, these attitudes are not often transformed into feminist-related behaviors. For example, Kurzman (2008) attempted to investigate feminist-related attitudes and behaviors in a middle-eastern society such as Iran. His results showed that feminist-related attitudes among Iranian women are not consistently correlated with feminist-related behaviors such as delayed marriage and low numbers of children (Kurzman, 2008). Kurzman, however, did not explain the reasons behind the latter finding; instead, he focused on the increase of feminist-related attitudes among today's young Iranian generation. The main objective of this study is putting a step forward into answering the reason that eastern women fail to demonstrate feminist-related behaviors, particularly when they already have feminist-related attitudes. It employs activity theory to get insights for explaining the above process and suggesting the key motivating process factors.

### **3 Theoretical Background**

#### **3.1 Activity theory**

Activity theory has been regarded as a powerful socio-cultural lens through which most forms of human behaviors can be explained (Jonassen & Rohrer-Murphy, 1999). Activity theory is based on the work of the Russian psychologist Vygotsky during the first half of the 20th century (Crawford & Hasan, 2006). Vygotsky's proposed that consciousness is essentially subjective, community-based, and mediated by tools and languages (Vygotsky, 1978). The internalization of activity theory in the last decades of the nineteenth century has taken place in the midst of sweeping changes in the political and economic systems (Engeström, 1999). Engeström, Y. (1999) states that activity theory has the potential to be a path breaker in studies that help people gain power to control over their own performance and thus their own future.

According to activity theory, all human activities are embedded in a social matrix, composed of people and artifacts (physical tools and sign systems). Therefore, the proper analysis of human activities requires examining different dimensions such as the subject and object of the activity, tools, rules, behavioral norms, and the contextual communities in which human activities occur. Accordingly, the social basis of human activity and the embedded rules impose strong tacit and explicit conventions, which exist in communities within which individuals live and work.

The manifestation of feminist-related behaviors of eastern women should also happen in the context of tacit and/or explicit rules, customs, and belief of the society. Moreover, the collectivist culture of eastern societies signifies the critical impact of community in shaping individuals' activities. In

addition, individuals are simultaneously members of various communities (e.g., the communities in which they live and work). Therefore, they often need to continuously alter their beliefs to adjust to the expectations of different groups. The potential conflicts between roles in various communities often lead to transformational activities that aim at harmonizing contradicting expectations.

Activity theory proposes the significant role of social tools in expanding the possibility of manipulating activities. In other words, tools can be applied to lessen or increase the impact of community on the manifestation of any activity, such as the manifestation of feminist-related behaviors. Cultural-specific tools may also have strong influences on changing the nature of activity and shaping humans' mental development. For example, using online communities of practice can result in dramatically different outcomes than traditional communities of practice that can have limited geographical coverage. Notably, the nature and context of the activity can affect the applied tools. For example, not any tools can be identically applied in different contexts. Tools can also have significant impacts by letting the subjects to assess and re-estimate their performances. For example, communication technologies can be applied to gain new knowledge about feminist-related behaviors all over the world and whether the basis of their comparison is realistic or not. Therefore, tools alter the activity, and are, in turn, altered by the activity. Just as activity can be realized in the context of its embedded tools and signs, the nature of a tool can be understood by looking at the way that people use it, the needs it serves, and the history of its development (Crawford & Hasan, 2006).

### **3.2 Communities of Practice (CoP)**

The term 'communities of practice' was first coined by Etienne Wenger and Jean Lave to describe a group of people who share a concern, a set of problems or a passion about a topic, and who share, use, expand, develop and deepen their knowledge and expertise by interacting on an ongoing basis (Wenger, 1999, Gherardi & Nicolini, 2000, Wenger et al., 2002). Communities of practice borrow the strengths of social and institutional relationships to bring cultural shifts in the perceptions on the value of learning (Kilpatrick et al., 2003). According to Wenger (1999), learning in communities of practices is known as situated learning. This makes an important distinction between this type of learning and the formal education in which the authentic content is often separated from the real situation. In contrary, learning in communities of practice is participatory and separated from neither the activity nor the meaningful social arrangements in which the activity takes place. In these communities, new comers learn from old-timers by being allowed to participate in certain tasks relating to the community of practice. Over time, new comers move from peripheral to full participation in the community. Accordingly, learning in communities of practice is a legitimate peripheral participation rather than a narrow-situated learning.

The ability to use knowledge, reject it or improve upon it, makes communities of practice as powerful tools to create new knowledge that can be used for the benefit of the community as a whole and/or its individual members. It has been, therefore, recognized that building communities of practice creates an environment that can potentially advance a whole society. With regard to the participatory nature of communities of practice, they can create trustful relationships for the exchange and practice of ideas. They can, therefore, promote mutual learning and joint exploration of ideas via communication and knowledge sharing among members (Liedtka, 2000, Johnson, 2001, Buysse et al., 2003).

The growth of the internet as a forum for networking and collaboration has presented new opportunities for communication and learning in communities of practice. There are several collaborative technologies such as Listservs, electronic discussion groups, and chat facilities that that can be widely used as potential tools for online communities of practice (Johnson, 2001, Sharratt & Usoro, 2003). Web 2.0 presents social networking sites such as Facebook, MySpace, Blogs, and Wikis as possible forums for the growth of communities of practice (Oreilly, 2007). This progression has extended the possibilities of online communities of practice by allowing knowledge to be shared, discussed, and clarified through a variety of channels and contexts that are not typically found in face-to-face communication (Estephan, 2008). Though online communities of practice might lack the richness of

communication through offline communities of practice (Estephan, 2008), they offer several benefits such as the possibility of being anonymous members as well as the fact that online conversations may engender several responses, become accessible to the whole of the community and can be archived and accessed by other members (Ardichvili et al., 2006).

### 3.3 Manifestation of Feminist-Related Behaviors through Online CoP

There is a growing body of evidence on the use of communication technologies to empower women all over the world. It is believed that Information and communication technologies (ICT) have opened up new possibilities and empowered women to stretch traditional gender barriers and weave new ways of networking and sharing experience and knowledge (Torney-Purta, 2002, Huyer, 2005, Kwapong, 2007). Technology has also facilitated the emergence and rapid growth of learning communities whose members interact from remote corners of the globe to form online learning communities (Lave, 1991, Johnson, 2001, Pan & Leidner, 2003, Cousin & Deepwell, 2005, Lueg, 2007). These communities have provided women with the freedom of expression and censorship and the ease and flow of accessing and disseminating information. Many online communities have been employed to create continuity for formulating women ideas and demands (Shahidian, 1998, Moghadam, 2002) and to provide women with common goals, visions, moral support, and sense of solidarity (Morahan-Martin, 2000). Notably, the history and the origins of feminist-related behaviors in many countries has strong roots in traditional communities of practice (Afary, 1989).

With regard to the above discussions on activity theory and communities of practice, this study proposes that the use of women-related online communities of practice as a tool may significantly facilitate the manifestation of feminist-related attitudes into feminist-related behaviors. This is particularly true because eastern communities have not been open to providing an appropriate surface (community) for manifesting feminist-related behaviors. In other words, the employment of proper tools can affect the suppressing influences of community.

The next section attempts to develop a measurement model prior to testing the applicability of the above proposition through a quantitative study.

## 4 Measurement

In order to measure the feminist-related behaviors of women, many techniques might be appropriate including the analysis of formal and informal documentations, observations, interviewing, or psychoanalyses. This study applies the feminist-related activities checklist among participants to measure feminist-related behaviors (White, 2006). Going through the questions in White (2006), the questions were revised and categorized into two dimensions including: feminist-related works and feminist-related supports. Table 1 shows the questions for each dimension.

To tap individuals' stances toward feminism and measure their feminist-related attitudes, this study borrows indicators from General Social Survey (Davis et al., 1999, Bolzendahl & Myers, 2004) that define feminism by dimensional concerns including: (i) opinions on abortion, (ii) sexual behavior, and (iii) gender roles (in the public and family). Table 2 demonstrates a brief explanation for each dimension and the relevant questions to ask. 5 point Likert scales were used to measure feminist-related attitudes (1: strongly disagree, disagree, no-opinion, agree, 5: strongly agree) and behaviors (1: Almost Zero, low, average, high, 5: very high).

It should be noted that the above domains cannot provide a complete representation of the feminist concerns but they can capture a series of issues that have consistently been at the core of the feminist agenda for many years (Bolzendahl & Myers, 2004). A categorical variable was used to taking into account if the members are the members of any online women-related community of practice. Moreover, we decided to take into account a number of control variables including age, education, and the marital status of the respondents.

Dimensions	Questions
Feminist-related works	To what extent individuals: FB1: Engaged in discussions about women-related issues at local, national, or international level. FB2: Worked with others on local women-related concerns. FB3: Kept informed about women issues through literature. Informed others about women issues and concerns.
Feminist-related supports	To what extent individuals: FB4: Supported a women-related movement in the country. FB5: Attended meetings that addressed specific women issues.

Table 1. *Feminist-Related Behaviours*

Dimension	Questions
Abortion	To what extent individuals agree that: AB1: Legal abortion is justifiable. AB2: Sometimes, abortion is necessary thing to do.
Sexual Behaviors	To what extent the individuals agree that: SX1: Same-sex is justifiable. SX2: Premarital sex is justifiable
Gender Roles	To what extent the individuals agree that: G1: Women should run their homes and leave running the country to men. G2: Men are better suited for politics. G3: It is more important for a wife to help her husband’s career than have one herself. G4: It is better if the man is the achiever outside the home and the woman takes care of the home and the family.

Table 2. *Feminist-Related Attitudes*

## 5 Data Collection and Results

An interactive online portal was targeted for data collection. The language of the portal is Farsi as it acts as an online community of practice, which its purpose is sharing and expanding ideas on optimism and self-improvement among Iranians (men and women). We deliberately limited the boundary of data collection into one eastern culture (Iran) rather than generalizing the results to other cultures. This choice was partly because of the Iran’s cultural and religious environmental characteristics that have influenced women activism in the course of history. The portal is similar to common examples of online communities. The selection of this portal was because it represents a sample of Iranian with having a proper access to technology, as they are all active members of an online community of practice.

At the time of data collection, the community had 3853 members, which women consisted 37% of this population. The manager of the portal sent a message to the group asking female members to respond to an online survey, which its link was included in the sent message. The survey included the questions measuring the women feminist-related attitudes, behaviors, and demographic questions, as described in the previous section. The privacy and confidentiality issues were strictly guaranteed. The survey did not ask members’ identity; rather the primary questions and demographics were important to the researcher. In order to deal with missing data, the survey forced the answer for each question. This strategy resulted in no missing data. All together, 120 responses were gathered (9%). The characteristics of respondents indicate that almost 65% of respondents were in the age range of 25 to 35. 60% had postgraduate degrees and 35% had at least a bachelor degree. 60% of respondents were single, whereas 40% were married.

SPSS (versions 17) was used for routine statistical analyses, and AMOS versions 17 was used for structural equation modeling (SEM) with maximum likelihood used for discrepancy estimation and covariance analyzed. The reversed-items in the measurement model were transformed using SPSS

Version 17. The raw data was therefore reported for all analyses, except for transformed F2 and F6. For structural equation modeling, the goodness-of-fit for each model was assessed using multiple fit indices. Analyses were conducted using raw data, and transformed variables, when the variables violated assumptions of normality. We then performed exploratory factor analyses using SPSS 17 for each set of focal constructs to examine the reliability and validity of the measures. There were no problems with them. Figure 1 illustrates the tested model in Amos 17. This model treats feminist-related attitudes as a second order construct that is manifested by three dimensions. Second-order approach is believed to explain more parsimoniously the covariation among first-order factors.

We first evaluated the proposal model (Figure 1) on various indices such as GFI, CFI, IFI, RMSEA, as well as adjusted GFI (AGFI). The model proved to fit to the data, indicating that the model was a plausible causal model of the observed data ( $\chi^2 = 101.704$ ,  $Cmin/df = 1.393$ ,  $df = 73$ ,  $p = 0.009$ ;  $RMSEA = 0.05$ , goodness-of-fit ( $GFI = 0.89$ ), comparative-fit index ( $CFI = 0.95$ ), incremental fit index ( $IFI = 0.95$ )) (Hair et al., 1995).

The above results support the unidimensionality of the measures. The model was also assessed by R Square which indicated how well the antecedents explained an endogenous construct. Model explained a substantial amount of variance for F.Behaviors ( $R^2 = 0.60$ ), Abt ( $R^2 = 0.39$ ), Sxb ( $R^2 = 0.70$ ), and Role ( $R^2 = 0.48$ ), which are greater than the recommended minimum of 0.10.

We then computed Cronbach's alpha and composite reliability to assess the reliabilities for all scales. The alpha coefficients and the composite reliability values varied from 0.8 to 0.95, suggesting adequate reliability. Next, we assessed the convergent and discriminant validity of the measures. We first subjected the items to confirmatory factor analysis. All items had relatively high factor loadings, except G1 and G3 with 0.48 and 0.42. This indicated the convergence of the high factor indicators to their constructs. Due to low factor loadings of G1 and G3, these items were dropped from analyses. It was observed that dropping these items resulted in increasing RMSEA and decreasing the fit of the model: G1: ( $Cmin/df = 1.520$ ;  $RMSEA = 0.066$ ), G2: ( $Cmin/df = 1.461$ ;  $RMSEA = 0.062$ ). There is also a possibility that the loadings cannot be identified as significant in small sample sizes. Therefore, we decided to keep these items. Moreover, the average variance extracted (AVE) for the constructs all exceeded the 0.5 criterion suggested by Fornell and Larcker (Fornell & Larcker, 1981). Subsequently, we examined the construct discriminant validity. First, we compared the square-root of AVE of the individual constructs with the correlation between construct-pairs. We found that the square-roots of AVE exceeded the correlations in all cases and this confirmed the discriminant validity for the scales.

Further investigation of the path coefficients revealed that all the paths were all significant at  $p < 0.001$ . The analysis of the regression weights showed that feminist-related attitudes positively affect feminist-related behaviors ( $CR=4.327$ ). The first order constructs (Abt, Role, and Sxb) had significant associations with their second order construct, F.attitudes, at  $P < 0.001$ .

Multiple linear regressions were used to examine the moderating impact of being a member of woman-related communities of practice on the relationship between feminist-related attitudes and behaviors, respectively. The sample was therefore divided into two groups: those who are the members of an online women-related community of practice (21), and those who are not (99). In total, we tested 2 models, one for each possible interaction between the moderator variable and two other constructs. Figure 2 and 3 illustrates the two tested models.

The above analyses indicated that the measurement model met various reliability and validity criteria. Thus, these constructs could be used to test the proposed model and the hypothesized relationships between constructs.

Finally, the choice a single source for data collection might have made our results vulnerable to common method variance. Therefore, we followed the Harman's single-factor test procedure (Podsakoff et al., 2003) and conducted a CFA by loading all indicators on one factor. The assumption of this single-factor test was that a single factor should account for the majority of the covariance among measures if substantial amount of common method variance was present (Podsakoff & Organ,



1986). Our analysis showed that the one factor model did not fit the data well ( $C_{min}/df= 2.856$ ,  $RMSEA = 0.12$ ), while the four-factor model fit was significantly better ( $p < 0.001$ ). To further address the issue that common method variance may exist, we conducted a two-factor model by loading feminist-related attitudes and behaviors indicators on two factors. Our analysis showed that the two factor model did not fit the data well ( $C_{min}/df= 2.322$  ;  $RMSEA = 0.105$ ). Both tests provided evidences that the common method bias was not significant in our study.

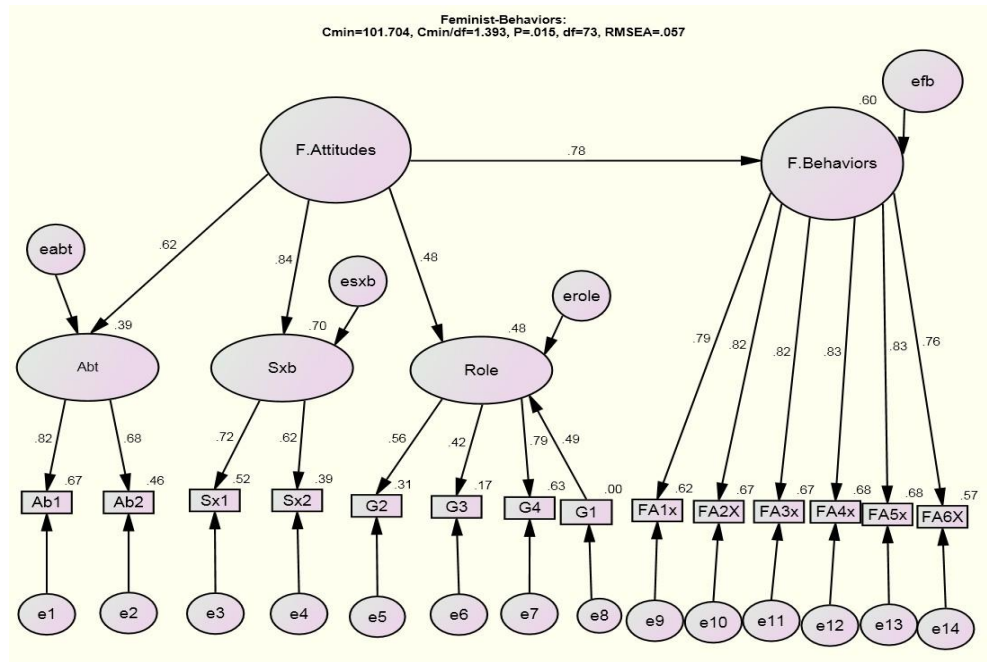


Figure 1. Model 1 (The Sample= members, n=99)

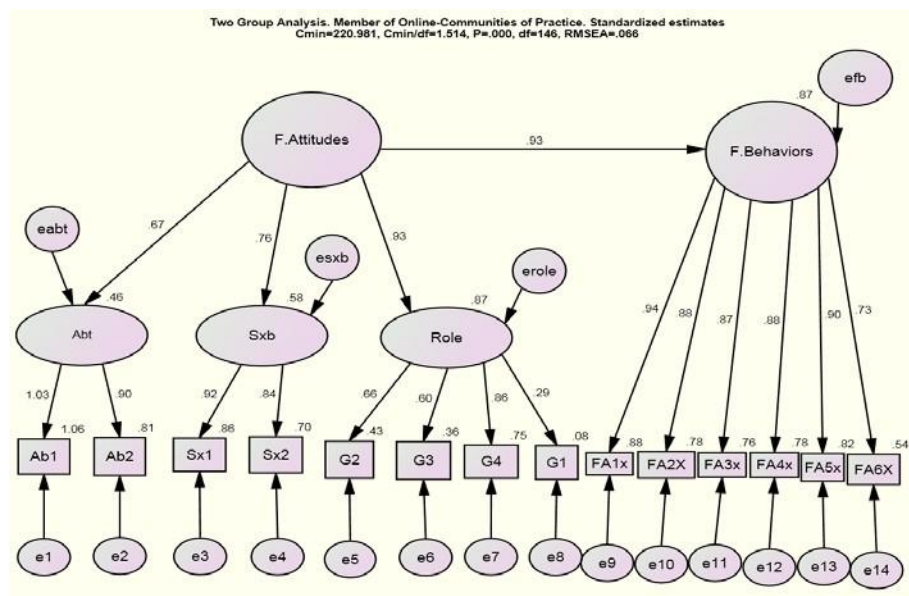


Figure 2. Members Model 2 (n=99)

Both models were proved to fit, indicating that the model was a plausible causal model of the observed data ( $\chi^2 = 220.98$ ,  $C_{min}/df= 1.514$ ,  $df = 146$ ,  $p = 0.00$ ;  $RMSEA = 0.064$ ). Further investigation on the two models proved the moderating impact of being in a member of an online women-related CoP. Specifically, the path between F.behaviors and F.attitudes is significant ( $t$  value= 3.46 in members compared to  $t$  value=2.271 in non members).

The proportion of the explained variance and the path coefficients are reported in Table 3, respectively. As shown, compared to the model for non-members, all the paths are significant in model for members except the path between G1 and Role with the  $t$  value=1.259. Therefore, we deleted this variable and again fitted the model. There were slightly differences in the chi-square and fit of the model ( $\chi^2 = 187.072$ ,  $C_{min}/df = 1.533$ ,  $df = 122$ ,  $p = 0.00$ ;  $RMSEA = 0.067$ ). However, with regard to the importance of the questions and the fairly small sample size, we decided to keep the path.

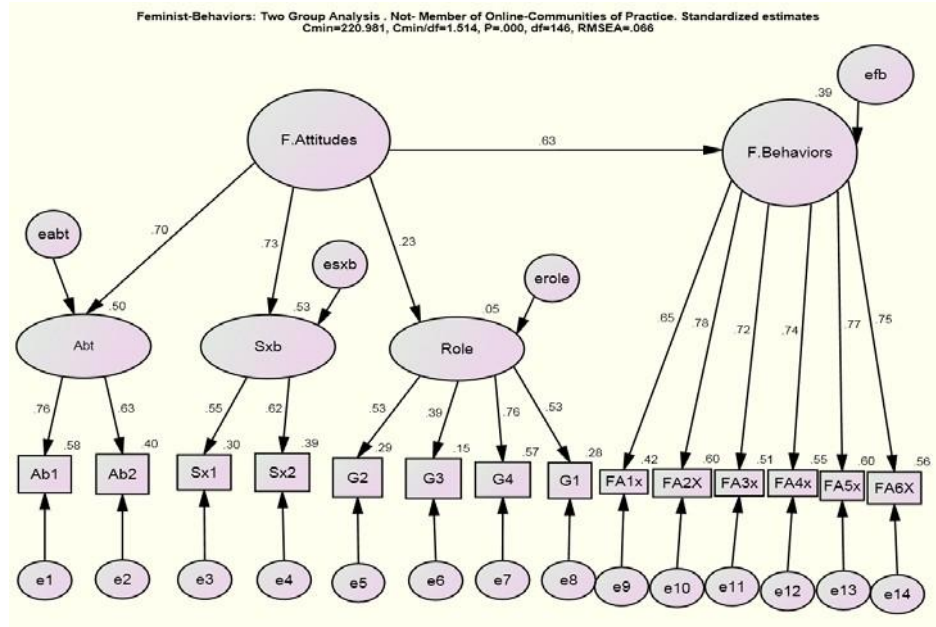


Figure 3. Non-Members Model 3 ( $n=21$ )

## 6 Discussion

To our knowledge, the current piece of research is the first study that investigates how technology can be applied to fasten the process of manifesting feminist-related behaviors of women, particularly eastern women. Getting insights from activity theory and the origins of feminism in eastern countries have enabled us to postulate the moderating impact of women-related online communities of practice in manifesting feminist-related behaviors in eastern societies.

A quantitative study was conducted to check the validity of the above proposition. The results demonstrated that in a sample of 120 educated Iranian women with regular access to internet, only 21 were the members of an online women-related CoP. This further highlights the limited use of online women-related communities of practice in these societies. The results also showed the significant impact of being a member of an online women-related community of practice for manifesting feminist-related behaviors. Specifically, the findings revealed that those women who have been the member of any online women-related Cop have shown feminist-related behaviours along with such attitudes. However, most of the non-members, have failed to manifest feminist-related attitudes to feminist-related behaviours. Further analysis of the data that is beyond the page limit showed that most of these women had high feminist-related attitudes, but not feminist-related behaviours.

The findings also provide an interesting thought that any women-related community might be helpful in this process, yet many eastern women have not been involved in their gender-based concerns and identities. This is consistent with the activity theory recognition of the significant impact of tools on mediating and expanding the possibility of activity manipulation.

Members				Not- Members			
		S.E.	C.R.	P	S.E.	C.R.	P
Abt	<--- F.Attitudes	.267	2.941	.003	.558	2.257	.024
Role	<--- F.Attitudes	.206	3.370	***	.304	1.278	.201
Sxb	<--- F.Attitudes				.451	2.271	.023
F.Behaviors	<--- F.Attitudes	.305	3.460	***	.023	7.407	***
FA6X	<--- F.Behaviors	.031	4.257	***	.124	7.379	***
FA5x	<--- F.Behaviors				.121	7.078	***
FA4x	<--- F.Behaviors	.171	6.192	***	.024	7.748	***
FA3x	<--- F.Behaviors	.159	5.987	***	.120	6.372	***
FA2X	<--- F.Behaviors	.026	6.212	***	.188	2.847	.004
FA1x	<--- F.Behaviors	.155	7.310	***	.214	3.453	***
G4	<--- Role				.475	2.595	.009
G3	<--- Role	.327	2.812	.005	.282	3.245	.001
G2	<--- Role	.224	3.171	.002	-		
Sx2	<--- Sxb	.141	4.208	***	.178	3.446	***
Sx1	<--- Sxb						
Ab2	<--- Abt	.127	6.879	***			
Ab1	<--- Abt		-				
G1	<--- Role	.243	1.259	.208			

Table 3. Regression Weights (Unconstrained)

Apart from the several aids of communication technologies in encouraging women to seek, share, and create knowledge, it should be noted that technology is a beginning step and not a democratizing or transformative tool by itself (Harcourt, 2000, Tadros, 2005). More specifically, information and communication technologies should reflect women’s value systems and address their needs, and this does not happen automatically. For example, substantial studies have explained how technology can hamper women efforts by inequality in access to the communication technologies (Harcourt, 2000).

Similarly, it is important to consider a number of economic, technological, and psychological set of barriers such as breaking the fear that many women have around technologies, creating safe cyber environments that provide committed support for women, and using technology in a far more strategic way than just data and information management (Morahan-Martin, 2000, Leiblum, 2001, Tadros, 2005). Feminism literature reveals that gender is a highly politically means of classification (Evans, 1994). For example, the traditional exclusion of women from the information sphere has happened deliberately or because of the limiting factors such as the lower levels of education as a result of social factors (Maass et al., Jain, 2006). In promoting online communities of practice, the above factors shall be carefully examined and considered.

## 7 Conclusion

Getting insights from activity theory and the literature on women improvement through information and communication technologies, this study demonstrated the significant impact of using proper tools such as online women-related communities of practice in lessening the impacts of community-related

customs, rules, or conventions on women behaviours. More specifically, online communities of practice were showed to moderate the process of transforming feminist-related attitudes into feminist-related behaviors of eastern women. This study, however, did not focus on how different types of online women-related communities of practice can help women reach social differentiation and potential outcomes. Future studies can explore the mechanisms of empowering women in women-related communities of practice in different cultural contexts, particularly eastern societies.

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