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knowledge sharing through WhatsApp: Does it promote EFL teachers' reflective practice

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Abstract

Purpose: Reflective practice can greatly improve teachers' professional development. Accordingly, the present study was conducted to examine the effect of knowledge sharing in a population line forum-WhatsApp- on EFL (English as Foreign Language) teachers' reflective practice. It was also aimed to probe the challenges the teachers faced to share information in their daily practice.

Design/methodology/approach: The experimental study was pre-test and post-test. To do so, 60 available EFL teachers were chosen as the participants. They were randomly assigned to experimental and control groups. Both groups received the English language teaching reflection inventory as the pre and post-test. As the treatment, the online discussion among the teachers regarding their daily practice took around 1 hour and lasted two weeks.

Findings: The result of the post-test revealed that the experimental group outperformed the control group in their reflective practice. The results of the interview revealed that among other factors the EFL teachers' lack of awareness regarding the importance of knowledge sharing, sticking to conventional methods of teaching, and considering authorities' views as more trustworthy were the barriers which impede their knowledge sharing.

Originality/value: Some studies have argued that knowledge sharing may contribute to the promotion of EFL teachers' reflectivity. There are also studies that have reported that teachers' involvement in sharing of knowledge does not have a significant effect on their reflective practice. Accordingly, contradictory results have been reported regarding the effectiveness of knowledge sharing in promoting teachers' reflection. In addition, it seems that exploring the impact of knowledge sharing on EFL teachers' reflectivity via WhatsApp deserves more attention.

Keywords: knowledge sharing, reflective practice, EFL teachers, challenges to knowledge sharing

Introduction

Information sharing is a process that can be found in any community. Likewise, in a community of practice, members have the responsibility of sharing information in order to promote their own status as well as that of the whole community. With the emergence of computers and the application of the Internet, recently sharing information has eased among the members of all communities. Teachers can easily communicate and share information and their experiences with their professional counterparts. As the result, they can improve their teaching knowledge and skills. This trend has also affected EFL learning and teaching-learning a foreign language through technology has been widely accepted among EFL practitioners. As Liu (2009, p. 101) points out, nowadays technology has "a greater role during class and home study, as computer-assisted instruction and interactive media technologies supplement the traditional use of chalk and the blackboard". In this regard, Nicholson and Bond (2003) assert that "electronic discussion boards can play an integral role in the development of pre-service teachers. First, they benefit pre-service

teachers in terms of time, scheduling, and geographical issues. Next, they provide emotional and intellectual support and foster a sense of community. And finally, they promote growth of reflective discourse" (p. 261). In the same line, the National Educational Technology Standards cited in Hernández-Ramos (2004, p.1-2) enumerates the following goals for the use of technology in education:

• Teachers use technology to enhance their productivity and professional practice.

• Teachers use technology resources to engage in ongoing professional development and lifelong learning.

• continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.

• apply technology to increase productivity.

Recently, social media has found strong acclaim in the world and there is a growing trend toward using various applications to share information via social media. People spend lots of hours sending and receiving informal information to entertain themselves, buy and sell goods, and gain knowledge. As Bigdeli and Ghanadi Nezhad (2019, p.2) explain "using social networks in academic communications can increase scientific transparency in universities and speed up information flow and effectiveness and trust among scholars".

Among different applications for social networks, one of the most preferred ones is WhatsApp (Çetinkaya & Sütçü,2018). Purkayastha and Chanda (2018) carried out a study on the use of WhatsApp among so professionals in India reported that the respondents use WhatsApp for various purposes such sharing knowledge content, being in connection with others, sharing documents, photos, and videos, and sending and/or receiving messages. In Iran also WhatsApp is a popular social network that is used for versatile purposes. It can be used to share messages, videos, audio, and images. Rezaei and Meshkatian (2017) who investigated ELT (English language teaching) views attitudes towards WhatsApp found that the participants showed a positive attitude towards the use of social media in ELT courses. Tawiah, Nondzor, and Alhaji (2014, p.105) argue that WhatsApp "has cost efficiency, effective, quick and easier mode of communication, confidential, and convenient usage; allows learners to communicate with peers and teachers". As such, it seems that the use of social networks like WhatsApp is promising for the inexperienced EFL teachers who wish to promote their practice in the profession or those who regularly reflect on their practice.

Dewey as the fonder of reflective thinking defined reflection as "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (p. 6). Schön (1983, 1987) later expanded the idea and suggested two modes of reflection; namely, Reflection-on-action and Reflection-in-action. Reflection-in-action takes place when a teacher reflects on his action at the moment it occurs. He evaluates the assumptions underlying the action and considers the consequences of the practice. Reflection-on-action happens after the action. As such, the teacher should look back at and evaluate the event. Reflective action, as Akbari, Behzadpoor and Dadvand (2010, p.212) put it, "is contrasted with impulsive and routine actions.... [which is] based on trial and error". As they maintain "a reflective teacher...is one who critically examines his/her practices, comes up with

some ideas as how to improve his/her performance to enhance students' learning, and puts those ideas into practice".

Although different theoretical frameworks have been suggested for reflection (e.g. Gibbs, 1988; Kolb, 1984; Mezirow, 1991), our treatment is based on the model proposed by Gibbs (1988). There are six stages in Gibbs' reflective cycle, description, feelings, evaluation, analysis, conclusion, and action plan. The first element of Gibbs' cycle is 'description' that refers to the factual description of the event. The second element is 'feelings' indicates one's emotions one may have during and after the incident. 'Objective evaluation of the situation' is the third stage of Gibbs' reflective cycle. At this stage, one evaluates whether things went well or poorly. As the next element, 'analysis' is related to the experienced one has gained from the events and requires one to relate the experience to past experiences or to the theories he is familiar with. 'Conclusion' deals with whether based on what one has learned she could have reacted differently to that incident. Based on 'action plan' one considers how she responds better in a similar situation in the future based on the lessons you have learned.

Various studies have demonstrated that teachers' knowledge sharing has a positive impact on their reflection (Attard 2012; Clarà et al., 2019; Daniel et al, 2013; McCullagh 2012). On the other hand, some other studies have reported that teachers' collaboration in knowledge sharing does not have a significant effect on their reflection (Wopereis et al., 2010; Killeavy and Moloney, 2010; Loh, et al., 2017). In addition, the recepchers did not find any study on the impact of knowledge sharing on teachers' reflective practice through the implementation of WhatsApp. Accordingly, the following research questions were posed:

RQ1. Does information sharing via WhatsApp have a significant impact on EFL teachers' reflective practice?

RQ 2. What challenges EFL teachers encounter to share information in their daily practice?

Methodology

Participants

Sixty EFL teachers from seven language schools were recruited as the participants of the study. The teachers' experience ranged from three to ten years. The incentive for participating in the course was that all participants were required to attend the teaching training course (TTC). All participants had master's degree in TEFL. The participants were randomly assigned to the experimental (n=30) and control group (n=30). Regarding the years of experience, all the teachers had more than 5 years of experience.

Instruments

Three instruments were utilized in the study, namely, The English language teaching reflection inventory, a semi structured interview, and WhatsApp.

The English language teaching reflection inventory

To assess the EFL teachers' reflective practice The English language teaching reflection inventory developed by Akbari, Behzadpoor, and Dadvand (2010) was employed in the present study. There were 29 items with five subscales and have a five-point Likert scale. The subscales were, practical reflection (six items), cognitive reflection (six items), affective reflection (three items), metacognitive reflection (seven items), and the last subscale, critical reflection (seven items.

A semi structured interview

To find the difficulties EFL teachers encounter to share information in their daily practice, a week after the treatment a semi structured interview with 21 volunteer EFL teachers from the experimental group was carried out. The interviews were conducted in Farsi to let the teachers express themselves freely in their first language. Each interview lasted for 45 minutes. The interviewees were asked if they share ideas regarding the latest theories on language teaching and if the answer is positive how they do it and what are the hurdles they may encounter. The interviewees responses were recorded, transcribed, and translated to English.

WhatsApp

WhatsApp as a popular social media in the country was used to allow the teachers to share and negotiate their ideas regarding their daily practice with the colleagues. Each participant was guided to set up an individual WhatsApp for herself.

Procedures

Before starting the study, the participants were informed that the data would be used just for the research purposes would remain completely confidential. The EFL teachers were handed in The English language teaching reflection inventory in their tea break. Both groups went through the first cycle but the second cycle, as the treatment, was just for the experimental group. While the first cycle included four stages, the second one included six stages which were based on Bener and Yildiz's (2019) guideline.

For the first cycle, important recent theories in TEFL extracted from either books or articles sent to the teachers via WhatsApp. The teachers were required to answer some questions regarding the extracts and send the answers to the researcher's email. Feedback was given on the content of the answers. If found unsatisfactory, the participants were asked to redo the assignment. As for the second cycle, the following steps were taken. It should be noted that one of the researchers who held Ph.D. in TEFL (Teaching English as Foreign Language) The experimental group was asked to choose a specific event which drew their attention or caused a problem and describe it in the joint group. The online discussion took around 1 hour and lasted two weeks. When there was no volunteer to begin the discussion, the researcher chose a teacher and asked her about her experience. The teachers were required to describe a specific event or a problem. As the second step, the researcher asked the teacher who described the problem about her purpose of the practice. She was also asked about his feeling. It should be noted that other teachers were free to ask their questions or comment on the experience. In the third stage, the teachers

were asked about what was good and bad about the experiment. At this stage, care was taken by the researcher not to pass his judgment. Next, the EFL teacher was asked about any alternative strategies she could adopt and if she could behave differently. Finally, the teacher talked about how she could act differently the next time. After the treatment, both experimental and control groups were given The English language teaching reflection inventory again.

The first phase: (online WhatsApp classes): for both groups	The second phase: (WhatsApp): fo the experimental group	r
1. Important recent theories in TEFL were discussed in the online classroom.	1. The participants were required describe a specific event or a proble	
2. All participants were required to study books or articles related to the classroom discussion.	that draw their attention or caused problem and describe it in the jo group.	int
 The participants were required to answer some questions regarding the extracts and send the answers to the researchers' email. Feedback was given on the content of the answers. If found unsatisfactory, the participants were asked to redo the assignment. 	 The participants who described the problem were asked about the purpose of the practice. Other participants were free to a their questions or comment on the experience. The participants were asked analyze the experience. The participant/participant/participant/participant/participants was/were asked about any alternatist strategies she could adopt and if strategies she could adopt adopt and if strategies she could adopt and if strategies she could adopt ad	ner sk he to nts ve he

Figure 1. The framework for knowledge sharing through WhatsApp

Findings

fore presenting the results, the demographic information of the participants is presented in Tables 1 and 2.

Table 1. T	he distribution of	participants' gend	ler	5
C	Gei	nder	Total	
Group	female	male		
Experimental	13 (43.3%)	17 (56.7%)	30	
Control	11(36.7%)	19 (63.3%)	30	
Total	24 (40%)	36 (60%)	60	

Table 1	The distribution of	of narticinants	gender
I able 1.		n participants	genuer

According to Table 1, demographic characteristics show that 24 of the participants (40%)were female and 36 (60%) were male.

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Group	Table 2. particij	Level of education	on	Total
Group	BA	MA	Ph.D.	I otai
Experimental	17 (56.7%)	12 (40%)	1 (3.3%)	30
Control	10 (33.3%)	17 (56.7%)	3 (10%)	30
Total	27 (45%)	29 (48.3%)	4 (6.7%)	60

Table 2. participants' level of education

The statistical population of the study showed that a total of 27 of the participants (45%) hold bachelor degrees; 29 (48.3%) were masters and 4 persons (6.7%) had Ph.D. Degrees.

Regarding the level of reflectivity of the EFL teachers, as already stated they were given The English language teaching reflection inventory. The results of which are shown in table 3. The results presented in Table 3 indicate that teachers developed their reflectivity during the course of the treatment.

Items (Never=1; Rarely=2; Sometimes=3; Often=4; Always=5)	Grope	Pre M	Pre SD	Post M	Post SD	t	Sig.
. I have a file where I keep my accounts of my	ex	2.13	.628	2.80	.55	-4.551	.000
eaching for reviewing purposes.	со	1.70	.595	1.93	.449	-2.971	.006
2. I talk about my classroom experiences with my	ex	2.03	.764	3.13	.571	-7.503	.000
colleagues and seek their advice/feedback.	со	1.53	.507	1.76	.430	-2.971	.006
3. After each lesson, I write about the	ex	2.50	.508	3.33	.606	-8.601	.000
accomplishments/failures of that lesson or I talk about the lesson to a colleague.	со	2.43	.504	2.56	.504	-2.112	.043
. I discuss practical/theoretical issues with my	ex	2.13	.571	3.53	.507	-12.339	.000
colleagues.	co	2.40	.498	2.53	.507	-2.112	.043
5. I observe other teachers' classrooms to learn	ex	2.46	.730	3.71	.466	-6.954	.000
bout their efficient practices	co	2.33	.958	2.50	.900	-2.408	.023
5. I ask my peers to observe my teaching and	ex	2.46	.730	3.70	.465	-6.954	.000
omment on my teaching performance.	со	2.30	.702	2.40	.563	-1.795	.083
. I read books/articles related to effective teaching o improve my classroom performance.	ex	3.03	.927	3.66	.546	-2.726	.011
	co	2.73	1.01	2.83	.985	-1.795	.083
. I participate in workshops/conferences related to	ex	2.76	.504	3.60	.498	-6.113	.000
eaching/learning issues.	co	2.03	.927	2.20	.805	-2.408	.023
9. I think of writing articles based on my classroom	ex	3.00	.830	4.53	.628	-8.063	.000
experiences	co	2.20	.846	2.33	.711	-2.112	.043
0. I look at journal articles or search the internet to	ex	2.53	.628	4.50	.508	-11.609	.000
see what the recent developments in my profession are.	co	2.06	.944	2.20	.846	-2.112	.043
1. I carry out small scale research activities in my	ex	2.16	.592	4.60	.498	-17.223	.000
elasses to become better informed of earning/teaching processes.	со	2.13	.730	2.23	.773	-1.795	.083
2. I think of classroom events as potential research	ex	1.70	.794	4.06	.520	-13.443	.000
opics and think of finding a method for nvestigating them	со	2.36	.764	2.50	.682	-2.112	.043
3. I talk to my students to learn about their	ex	1.96	.850	3.56	.504	-9.049	.000
earning styles and preferences	со	2.10	.959	2.26	.868	-1.980	.057
4. I talk to my students to learn about their family	ex	1.66	.711	4.066	.691	-19.484	.000
backgrounds, hobbies, interests and abilities.	со	2.00	.787	2.16	.647	-2.408	.000

Table 3. The English language teaching reflection inventory

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15. I ask my students whether they like a teaching	ex	2.46	.730	3.76	.727	-6.040	
task or not.	co	1.93	.639	2.06	.739	-2.112	
16. As a teacher, I think about my teaching	ex	2.40	.621	4.23	.626	-9.251	
philosophy and the way it is affecting my teaching.	co	2.33	.958	2.43	.971	-1.795	
17. I think of the ways my biography or my	ex	2.16	.698	3.80	.996	-8.391	
background affects the way I define myself as a teacher	co	2.30	.702	2.43	.678	-2.112	
18. I think of the meaning or significance of my job	ex	2.60	.968	4.00	.643	-7.167	
as a teacher	co	1.93	.827	2.03	.808	-1.795	
19. I try to find out which aspects of my teaching	ex	2.30	.702	4.03	.764	-8.308	
provide me with a sense of satisfaction	co	2.36	.927	2.66	.606	-3.525	
20. I think about my strengths and weaknesses as a	ex	3.06	.868	4.43	.678	-6.458	
teacher	со	2.33	.802	2.70	.534	-3.266	
21. I think of the positive/negative role models I	ex	2.03	.764	3.50	.682	-8.572	
have had as a student and the way they have affected me in my practice	co	1.76	.727	2.06	.691	-3.071	
22. I think of inconsistencies and contradictions	ex	2.13	.628	4.30	.651	-13.57	
that occur in my classroom practice.	co	1.83	.833	2.03	.718	-2.693	
23. I think about instances of social injustice in my	ex	2.20	.961	3.40	.563	-6.180	
own surroundings and try to discuss them in my classes.	со	2.23	.678	2.40	.498	-2.408	
24. I think of ways to enable my students to change	ex	2.13	.571	3.63	.668	-7.883	
their social lives in fighting poverty, discrimination, and gender bias.	со	2.40	.498	2.50	.508	-1.795	
25. In my teaching, I include less-discussed topics,	ex	2.46	.730	3.70	.702	-6.495	
such as old age, AIDS, discrimination against women and minorities, and poverty	со	2.43	1.19	2.60	1.03	-2.408	
26. I think about the political aspects of my	ex	2.16	.698	3.86	.628	12.420	
teaching and the way I may affect my students' political views	со	2.30	.702	2.46	.507	-2.408	
27. I think of ways through which I can promote	ex	2.76	1.19	4.20	.664	-4.746	
tolerance and democracy in my classes and in the society in general	co	1.80	.886	2.10	.711	-3.525	
28. I think about the ways gender, social class, and	ex	2.23	.773	3.76	.727	-8.630	
race influence my students' achievements	co	1.96	.850	2.20	.664	-2.971	
29. I think of outside social events that can	ex	2.70	.952	4.43	.504	-8.785	
influence my teaching inside the class. Note: M= mean: SD= standard deviation: ex-	co	2.16	.874	2.40	.674	-2.971	

Note: M= mean; SD= standard deviation; ex= experimental; co= control

To check whether the differences in means were significant before examining the research hypothesis, descriptive statistics including mean and standard deviation and inferential statistics including independent samples t-test were used. The descriptions of the experimental and control group scores are reviewed in Table 4.

Table 4. Pre-test scores for the control & experimental group											
	Variables	Practical		Variables Practical Cognitive Affective		Meta- cognitive		critical			
	Groups	М	SD	M	SD	М	SD	М	SD	М	SD
pre-test	Experimental	2.23	.308	2.53	.325	1.92	.434	2.38	.377	2.38	.381
pre-test	Control	2.11	.244	2.25	.373	2.01	.535	2.12	.361	2.18	.320
nost tost	Experimental	3.31	.261	4.16	.260	3.80	.285	4.04	.212	3.85	.246
post-test	Control	2.28	.210	2.38	.309	2.16	.444	2.33	.263	2.38	.216

Note: M= mean; SD= standard deviation; df= degrees of freedom.

According to Table 4, the mean and standard deviation of the pre-test scores of the subscales; namely, practical, cognitive, affective, metacognitive, and critical are not significantly different in the experimental and control groups, but the mean and standard deviation of the two groups show a significant difference. The mean and standard deviation of the experimental group showed a significant increase in the post-test score, and the mean increased receiving the treatment. Therefore, it can be concluded that knowledge sharing via Watts App has been effective in enhancing EFL teachers' reflective practice. To make sure the differences were significant one independent sample T-test was used to test the hypothesis of each subscale in the two experimental and control groups. The results are shown in Table 5.

	variable	groups	Μ	SD	t	P-value
Practical		Experimental	2.23 .308 1.701		.094	
		Control	2.11	.244	1.701	.094
÷	Cognitive	Experimental	2.53	.325	3.071	.003
pre-test		Control	2.25	.373	5.071	.003
Ļ	Affective	Experimental	1.92	.434	705	.483
STC.		Control	2.01	.535	703	.485
	Meta-cognitive	Experimental	2.38	.377	2.746	.008
Critical		Control	2.12	.361	2.740	.008
		Experimental	2.38	.381	2.146	.036
		Control	2.18	.320	2.140	.030

Table 5. Independent sample t-test for the pretest of the control & experimental groups

As shown in Table 5, there was a slight significant difference between the mean scores of the control and experimental groups before the treatment regarding cognitive, metacognitive, and critical affective subscales; however, it is important to note that this difference can be due to the sample size, which affects the significant with a small change.

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	variable	groups	M	SD	t	P-value
	Practical	Experimental	3.31	.261	16.761	.000
		Control	2.28	.210	10.701	.000
št	Cognitive	Experimental	4.16	.260	24.041	.000
ě	C	Control	2.38	.309	24.041	.000
post-tes	Affective	Experimental	3.80	.285	16.951	.000
õ		Control	2.16	.444	10.951	.000
d	Meta-cognitive	Experimental	4.04	.212	27.547	.000
	C	Control	2.33	.263	27.047	.000
	Critical	Experimental	3.85	.246	24.668	.000
		Control	2.38	.216	24.000	.000

Table 6. Independent sample t-test for the post-test of the control & experimental groups

According to Table 6, there is a significant difference between the scores of the two experimental and control groups in all of the reflective thinking subscales. In general, the state of reflective thinking before and after the treatment is shown in Table 7.

	variable	groups	М	SD	t	P-value
pre-test		Experimental	2.33	.216	3.139	.003
•	Reflective	Control	2.15	.236	0.100	
	Practice	Experimental	3.84	.118	44.129	.000
post-test		Control	2.32	.146	1.120	

 Table 7. Results of independent sample t-test for the control & experimental groups

As Table 7 illustrates, the mean and standard deviation of the pre-test of The English language teaching reflection inventory were not significantly different in the experimental and control groups, although the difference was significant. But the post-test means and standard deviation of the two groups showed a significant difference.

Covariance analysis was used to compare the pre-test and post-test results of the experimental and control groups. The results of the analysis are shown in Table 8.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	34.857ª	2	17.429	1416.006	.000	.980
Intercept	3.225	1	3.225	261.994	.000	.821
Group	27.195	1	27.195	2209.451	.000	.975
Pre-test effect	.327	1	.327	26.558	.000	.318
Error	.702	57	.012			
Total	607.465	60				
Corrected Total	35.559	59				

Table 8. Tests of Between-Subjects Effects

According to Table 8, Levene's Test was used to examine the covariance analysis of variance. Based on the results, the slope of regression coefficients showed that this defect is in post-test (P <0.05). The results of covariance analysis are compared in the post-test and after controlling for the pre-test effect in the above table. As can be seen, there was a significant difference between the two groups in posttest training (P <0.000). In addition, the effect (Eta squared) is 0.980. Therefore, sharing knowledge helped teachers improve their reflective practice.

To find out the answer for the second question, a semi-structured interview was conducted. The results of the content analysis are shown in Table 9.

Table 9. challenges EFL teachers encounter to knowledge sharing in their daily practice

Challenges	Frequency	Response
		percentage
Lack of awareness regarding the importance of knowledge	13	61.9
sharing		

Sticking to conventional methods of teaching	10	47.6
Considering authorities views as more trustworthy	8	38
Teachers' overreliance on theories	8	38
Heavy work-load and not having enough time	6	28.6
Not considering knowledge sharing as being efficient	4	19
Not Considering colleagues' views as trustworthy	3	14.2
Lack of motivation	3	14.2

The data based on the interview provided the answer to the second research question which inquired the challenges EFL teachers encounter to share information in their daily practice.

In response to the question on the barriers to information sharing in the educational context, the first theme was lack of awareness regarding the importance of knowledge sharing. As one of the interviewees put it, "we are so used to thinking about the teaching process on our own that we do not realize its importance". Another teacher also considered lack of awareness important, and reported that "in teacher education courses less emphasis is placed on knowledge sharing and that teachers have always been regarded as independent individuals who should totally rely on their own knowledge and skills".

Sticking to conventional methods of teaching was the second theme. Ten interviewees stated that the habit of using conventional methods has prevented them from considering knowledge sharing as being important. A teacher said, "from the time we were students we have learned that a teacher should model other successful teachers". Another said," what is absent is reflection on teaching and what is prevalent is teaching recommended books by the institute page by page. As if it is the book that sets the pace".

Eight teachers reported that the classroom teachers do not believe that they have a say in English. They consider curriculum developers and ELT authorities' views as more dependable than their own. A Ph.D. holder teacher expressed her opinion as the following:

"I have learned to follow textbook developers view.... on top of that, before attending this course [the experiment] I thought that how can one expects that her views regarding teaching and learning are superior than that of those laid out in prestigious books". Such a response indicated that the teacher had a low opinion of herself.

When asked how she developed such an idea she explained that "we [EFL teachers] have no say regarding the specification of educational objectives and preparation of EFL curriculum knowing that those were a priori prescribed by instructors.

As the fourth theme teachers' overreliance on theories was recognized as a barrier to knowledge sharing. Based on what interviewees stated some Iranian teachers rely heavily on theories, and these theories may keep them away from the real world. At the same time, it prevents reflecting on one's daily practice in the classroom.

Heavy work-load and lack of enough time were considered as another challenge. One teacher reported that "we are so involved in teaching that we rarely talk to each other about effective teaching". Another teacher commented "due to heavy workload I do not have enough time to think about what is right or wrong. In

informal encounters with other teachers, we may discuss a few problems with others, but the discussion is not taken seriously by teachers".

It was surprising that four teachers said that before the treatment they were not sure about the effectiveness of knowledge sharing. A teacher said that many teachers find that talking about teaching methods and adapting them to teaching theories does not help much in improving teaching. There is a common notion, as he stated, that there are specific methods of teaching that need to be taught to naïve teachers.

Based on the content analysis, three teachers expressed that lack of trust in the opinion of other colleagues was another obstacle to knowledge sharing. As a teacher said, "Sometimes it is difficult to prefer colleagues" opinion to well-known theories and techniques which can be found in the books".

As the last theme, lack of motivation was another barrier to knowledge sharing. Teachers' lack of motivation, based on the interviewees reports, can be attributed to factors such as lack of time, unfamiliarity with knowledge sharing experience, heavy workload, and lack of teacher autonomy.

Overall, the analysis of the data revealed that there was a lack of support from the educational context to implement knowledge sharing and this alleviated EFL teachers' lack of awareness and respect for knowledge sharing. This may lead to the teachers' demotivation to share their ideas with the colleagues.

Discussion and conclusion

The present study sought the impact of knowledge sharing on EFL teachers' reflective practice. In response to the first research question, studies have shown that collaboration with others results in effective professional learning (Eaker et al. 2002; Huffman et al. 2001; McLaughlin & Talbert 2006). The findings are also in line with what Hawkes and Romiszowski's (2001) since as they reported although computer-mediated teacher dialogue was less interactive than face-to-face meetings, it was more reflective. In tandem with the findings, in a qualitative study Schoffner's (2008) investigated the integration of blogs in a teaching course. It was shown that that the characteristics of blogs, namely, flexibility, personalization and informality enhance reflective exchanges among the teachers.

In an answer to the second question, it was found that there are several challenges EFL teachers face in their attempt to share information. The results showed that EFL teachers' lack of awareness regarding the importance of knowledge sharing was the biggest challenge. This calls for raising teachers' awareness as to the importance of sharing knowledge with their colleagues. Sticking to conventional methods of teaching was the third challenge EFL teachers face. Based on the results, teachers were inclined to teach as they had been taught and did not "theorize what they practice or practice what they theorize" (Kumaravadivelu, 2003, p.37). Considering authorities' views as more trustworthy was rated as the third challenge. The finding is not surprising since "in a top-down system of education, the absence of questioning, challenging work conditions, lack of pedagogical knowledge, and the degree of support in favor of the reflective practice are abundant" (Avarzamani& Farahian, p. 3). Accordingly, "knowledge is perceived as simple and certain rather than complex and uncertain" (Chittooran ,2015, p.79). Teachers' overreliance on theories was another challenge, based on the interviewees' report. Perhaps, teachers consider theories as more trustworthy and considers themselves as those who should apply theories. This keeps them away from 'theorizing their own practice' in Kumarayadiyelu's (2006), term. The fifth challenge was the heavy workload which deters teachers from knowledge sharing. Soodmandafshar and Farahani (2017) have also reported that teachers' working conditions negatively affect their reflective practice. The next challenge the teachers reported was that teachers did not consider knowledge sharing as being efficient. It seems that EFL teachers undervalue the discourse which takes place among them. In this regard, teachers also reported that they do not consider their colleagues' views as trustworthy. Lack of motivation was the last barrier for the teachers. Overwhelmed by their daily problems such as financial problems and heavy workload, EFL teachers are left with low motivation for "self-construction and self-conceptualization of pedagogic knowledge" (Kumaravadivelu's, 2006, p.173) from one hand and considering negotiation with other colleagues from another hand.

Overall, it seems that more collaboration among EFL teachers is needed in order to boost their professional development. Here social media can be an important means through which teachers can in light of the related theories share ideas, learn from each other, and ultimately gain education-related knowledge.

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