

Investigating the Impact of Curriculum Literacy and Media Literacy on Job Self-Efficacy in Secondary School Teachers

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Purpose: Self-efficacy as a part of self refers to belief and confidence to one's abilities to achieve goals and tasks. Therefore, the aim of this study was investigating the impact of curriculum literacy and media literacy on job self-efficacy in secondary school teachers.

Methodology: The method of research was descriptive from type of correlation. The statistical population in this study were included all secondary school teachers in West Islamabad city in the academic years 2021-2022 with number of 260 people, which based on the Krejcie and Morgan table number of 165 people were selected by simple random sampling method. The research tools were included job self-efficacy, curriculum literacy and media literacy questionnaires, which were completed by the secondary school teachers and their reliability was estimated to be higher than 0.70. To answer the research hypotheses were used the confirmatory factor analysis tests and structural equation modeling in SPSS and LISREL software.

Findings: The findings showed that the job self-efficacy variable has four components of individual self-efficacy beliefs, collective self-efficacy beliefs, expectation of individual consequences and expectation of collective consequences, curriculum literacy variable has three components of curriculum planning system, curriculum basics and curriculum planning elements, and media literacy variable has five components of understanding the content of media messages, awareness of the hidden goals of media messages, critical look at media messages, conscious selection and analysis of media messages, which factor load of all was calculated above 0.50 and Cronbach's reliability of all was calculated above 0.70. Also, both variables of curriculum literacy and media literacy had a direct and significant effect on the job self-efficacy of secondary school teachers ($P < 0.001$).

Conclusion: The results of this study indicated the effective role of curriculum literacy and media literacy on the job self-efficacy of secondary school teachers. Therefore, to increase job self-efficacy, it is possible to improve their curriculum literacy and media literacy through educational workshops.

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1. Introduction

The concept of self-efficacy was developed by a psychologist named Bandura, based on the social cognitive theory. This theory emphasizes the role of observational learning, social experience, and reciprocal determinism in personality development. Self-efficacy justifies different behaviors of individuals when facing various challenges. Self-efficacy, or an individual's belief in their abilities to cope with problems, not only affects their emotional state but also plays a role in achieving goals (Wang et al., 2017). According to Bandura's theory, attitudes and behaviors, cognitive abilities, and skills of an individual, all constitute parts of a system called the self-system. This system plays an important role in how we perceive situations and interact in different situations. Job self-efficacy can be strengthened or reduced under various factors (Kung & Lee, 2016). Regarding the definitions of self-efficacy, it can be said that self-efficacy refers to an individual's belief and confidence in their abilities to achieve goals and perform tasks. This concept was first introduced in the social cognitive theory (Du, Qin, Wang, and Xin, 2022). Individuals with high self-efficacy approach difficult tasks and set higher goals for themselves. The feeling of self-efficacy not only explains human performance well but is also easily changeable through interventions. Self-efficacy is a part of the self-system. The self-system is composed of an individual's attitudes, cognitive abilities, and skills and plays a fundamental role in how we perceive situations and respond to them. Self-efficacy is an important and integral part of this system (Wang et al., 2017). One dimension of self-efficacy is job self-efficacy, which refers to an individual's confidence in their abilities to organize and perform necessary actions in work situations. Job self-efficacy includes individuals who have the freedom to act with self-efficacy. From this perspective, employee empowerment is a key factor in achieving job self-efficacy (Zhou, Liu, and Liu, 2020). Job self-efficacy refers to individuals' abilities and skills in the job domain. In other words, individuals with job self-efficacy can control job characteristics, pressures, and job-related factors and make self-efficacious decisions (Kung & Lee, 2016).

Job self-efficacy can create motivation or lack thereof for performing a job or task. Low job self-efficacy can lead to delaying job-related decisions or abandoning decisions previously made. In contrast, those with high job self-efficacy strive for success and seek positive outcomes for their job-related hopes and aspirations (Sheu et al., 2018). Generally, the higher the job self-efficacy, the greater the career goals and struggles individuals set for themselves, and the stronger they act on their promises. Low job self-efficacy must be fought and changed, while high job self-efficacy must be supported. Furthermore, job self-efficacy serves as the foundation for success in work, which can influence individuals' job behaviors regardless of their skills and knowledge (Rutherford et al., 2017). Job self-efficacy beliefs are an important factor among employees, including teachers, and thus, job self-efficacy beliefs among teachers are of particular priority and importance. Researchers agree that teachers' beliefs and attitudes illuminate their future function. Therefore, the presence of positive job self-efficacy beliefs among teachers can be a strong cornerstone for successful performance on the one hand and academic progress of students on the other (Lazarides, Buchholz, and Rubach, 2018).

Job self-efficacy is influenced by various factors, including curriculum literacy (Datu, Wong, and Rubie-Davies, 2021). Curriculum literacy is a specific set of organized social symbolic actions that are inseparable from desirable performance and organization in schools. Curriculum literacy is part of teacher literacy because teachers are associated with teaching or curriculum, and teaching or curriculum is related to the relevant curriculum. Another definition of curriculum literacy refers to the concept and importance of teachers' literacy in the subject matter (Ahrabi-Nejad et al., 2022). In the definition of curriculum literacy, it is referred to as a map for learning experiences that learners encounter with the school's guidance, and its goal is to provide a basis for organizing and guiding learning experiences (Dunn et al., 2022). In other words, teachers' knowledge of the curriculum has a significant impact on their performance, and teachers' experiences in this area affect their desirable performance in educational responsibilities. In fact, teachers' perspectives are the starting point for improving the curriculum and providing career growth opportunities.

Over the years, many definitions of curriculum literacy have been presented, and developing literacy skills is considered very important (Marks et al., 2021).

Furthermore, media literacy is another factor affecting job self-efficacy (Jeon & Kim, 2022). A teacher with media and information literacy skills can transfer these skills to students and promote lifelong learning. Therefore, it should be noted that one of the types of literacy is media literacy, which is mostly related to analytical, internet, and visual literacies. With the expansion and creation of visual and auditory media, this concept has emerged and has become more complex and extensive with the expansion of social networks (Paxton, McLean, and Rodgers, 2022). Media literacy is based on understanding that enables individuals to distinguish between different media and identify and differentiate between different media productions. Media literacy is a blend of effective productivity techniques that use media and insight to distinguish between media (Luo, Yang, and Kang, 2022). The ability to access, evaluate, analyze, and create messages in different forms (audio, print, film/internet, video, etc.) is based on the critical and conscious understanding of media by media producers. Media literacy has become an interdisciplinary field in response to the pervasive, constantly changing, and complex electronic communication environment of the 21st century. With media literacy, individuals can discover complex messages in the content of newspapers, radio, television, books, magazines, the internet, advertising billboards, and other independent media. They can also create their media and actively participate in shaping media culture, which enables them to use media intelligently rather than just consuming it. Using scientific content, updating information, and accessing current technologies through the internet have positive effects (Purtilo-Nieminen et al., 2021).

The most important research results on the relationship between curriculum literacy and media literacy with job self-efficacy are as follows. Datu et al. (2021) reported in their study that there was a positive and significant correlation between curriculum literacy and job self-efficacy. Shaheswari and Manzari Tavakoli (2016) showed in a study aimed at examining the relationship between curriculum literacy and job performance of employees of the Education and Training Department of Kerman Region 1 that there was a positive and significant relationship between curriculum literacy and job performance of employees. Also, Jeon and Kim (2021) examined the relationship between media literacy and job self-efficacy in a study, and the results of this study on 120 employees showed a significant correlation between media literacy and job self-efficacy. Tajabadi, Mohsen-Abadi, and Mohdian (2018) showed that learning media and information literacy skills in teachers is essential to increase their effectiveness and efficiency and, consequently, improve the educational system. Jafarzadeh, Ghahramanpour, and Safri (2016) reported in a study that there was a relationship between information literacy, cognitive styles, and student self-efficacy.

Job self-efficacy is an essential and effective structural element for other job functions and can improve them. On the one hand, research indicates that few studies have been conducted on job self-efficacy, and on the other hand, few studies have examined the impact of curriculum literacy and media literacy on it. Another important point is that no research has been found that has examined the impact of curriculum and media literacy on the job self-efficacy of teachers. Since teachers are responsible for educating future generations, it is necessary to research to examine job self-efficacy and plan to improve and enhance it. Self-efficacy refers to a belief in oneself and confidence in one's abilities to achieve goals and tasks. Therefore, this study aimed to examine the impact of curriculum literacy and media literacy on job self-efficacy in secondary school teachers.

2. Methodology

The method of this study was descriptive correlational research in terms of implementation method and was an applied study in terms of purpose. The statistical population in this study included all secondary school teachers in Islam Abad Gharb city in the academic year 2021-2022, with a total of 260 people, and the sample size was calculated as 165 people based on the Karjcie and Morgan table. The samples of the present study

were selected by convenient random sampling method. In this sampling method, each sample is assigned a code and the desired number is randomly selected from among them so that all individuals have equal and independent chances.

In this study, three questionnaires of job self-efficacy, curriculum literacy, and media literacy were used, which are explained below. The job self-efficacy questionnaire was designed by Riggs and Knight (1994) with 31 items in four components: individual self-efficacy beliefs, collective self-efficacy beliefs, individual outcome expectations, and collective outcome expectations. Each item has a five-point response scale from completely disagree to completely agree. The minimum and maximum scores for each individual in this test are 31 and 155, respectively. Riggs and Knight (1994) reported reliability with Cronbach's alpha method for the whole test as 0.93 and for the components of individual self-efficacy beliefs, collective self-efficacy beliefs, individual outcome expectations, and collective outcome expectations as 0.86, 0.88, 0.88, and 0.85, respectively. In Iran, Marashian, Naderi, Heidari, Enayati, and Asgari (2013) obtained reliability with Cronbach's alpha and test-retest methods as 0.53 and 0.57, respectively.

The Curriculum Literacy Questionnaire was designed by Farzanjou (2017) with 14 items in three components: curriculum planning system, curriculum foundations, and curriculum planning elements. Each item has a five-point response ranging from very low to very high. The minimum and maximum score for each individual in this test is 14 and 70, respectively. The reliability with Cronbach's alpha method was reported as 0.77 for the whole questionnaire and 0.75, 0.63, and 0.71 for the three components of curriculum planning system, curriculum foundations, and curriculum planning elements, respectively.

The Media Literacy Questionnaire was designed by Falsafi (2014) with 20 items in five components of understanding media message content, awareness of hidden goals of media messages, critical view of media messages, conscious selection, and analysis of media messages. Each item has a five-point response ranging from very low to very high. The minimum and maximum score for each individual in this test is 20 and 100, respectively. The reliability with Cronbach's alpha method was reported as 0.70 for the whole questionnaire and 0.68, 0.71, 0.66, 0.68, and 0.69 for the five components of understanding media message content, awareness of hidden goals of media messages, critical view of media messages, conscious selection, and analysis of media messages, respectively.

To conduct this study, necessary coordination was first made with the Education Department of Islam Abad Gharb city, and the importance of research was explained to them. Then, the statistics of secondary school teachers were prepared, and the necessary sample size was calculated. Due to the small size of the research population and the possibility of access to all teachers, simple random sampling was used, and 165 individuals were selected as the sample. They were justified for the importance and necessity of the research, and they were told that the researcher was committed to ethical considerations such as confidentiality, maintaining the privacy of the samples, etc. Finally, they were asked to respond to all research tools carefully. The data of this study were collected using self-efficacy, curriculum literacy, and media literacy questionnaires, and confirmatory factor analysis and structural equation modeling tests were used in SPSS and LISREL software to answer the research hypotheses.

3. Findings

In this study, 165 secondary school teachers participated, all of whom responded to research tools and there was no drop-out in the samples.

The results of the confirmatory factor analysis reported in Table 1 indicated that the job self-efficacy variable had four components of individual self-efficacy beliefs, collective self-efficacy beliefs, individual outcome expectations, and collective outcome expectations. The curriculum literacy variable had three components of curriculum planning system, curriculum foundations, and curriculum planning elements. The media literacy variable had five components of understanding media message content, awareness of hidden goals of media messages, critical view of media messages, conscious selection, and analysis of media messages, all of which had a factor loading above 0.50 and a Cronbach's alpha reliability above 0.70.

Table 1. Confirmatory factor analysis results of job self-efficacy, curriculum literacy and media literacy

Variable	Component	Factor loading	Chronbach's Alpha
Job self-efficacy	Individual self-efficacy beliefs	0.627	0.721
	Collective self-efficacy beliefs	0.859	0.765
	Individual outcome expectations	0.592	0.715
	Collective outcome expectations	0.592	0.824
Curriculum literacy	Curriculum planning system	0.633	0.864
	Curriculum foundations	0.782	0.812
	Curriculum planning elements	0.697	0.780
Media literacy	Media message comprehension	0.861	0.745
	Awareness of hidden objectives in media messages	0.534	0.865
	Critical view of media messages	0.687	0.916
	Conscious selection	0.721	0.844
	Analysis of media messages	0.877	0.831

The fit indices of the model examining the effect of curriculum literacy and media literacy on job self-efficacy indicated that the R² index with a value of 0.57, the Q² index with a value of 0.41, and the GOF index with a value of 0.74 were all indicative of a good model fit, as they were greater than 0.40, 0.20, and 0.35, respectively.

The results of the structural equation modeling reported in Figure 1 and Table 2 indicated that both curriculum literacy and media literacy variables had a direct and significant effect on the job self-efficacy of secondary school teachers ($p < 0.001$).

In other words, according to the standardized regression coefficient, the effect of curriculum literacy on occupational self-efficacy beliefs is equal to 0.385. In addition, the t-value for this coefficient is 9.666, which is greater than 1.96, indicating significance at the 5% level of error. Overall, the results of the model estimation indicate that the null hypothesis is rejected and the alternative hypothesis, which states that there is a direct effect of curriculum literacy on occupational self-efficacy beliefs in secondary school teachers, is supported.

Similarly, considering the standardized regression coefficient, the effect of media literacy on occupational self-efficacy beliefs is equal to 0.648. The t-value for this coefficient is 16.826, which is greater than 1.96, indicating significance at the 5% level of error. Overall, the results of the model estimation indicate that the null hypothesis is rejected and the alternative hypothesis, which states that there is a direct effect of media literacy on occupational self-efficacy beliefs in secondary school teachers, is supported.

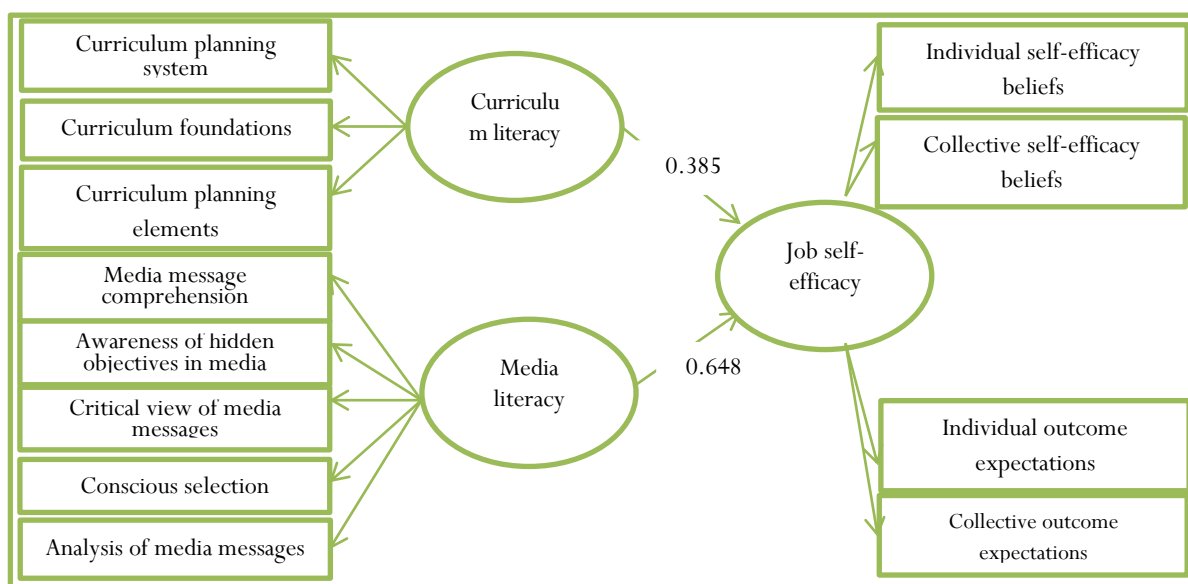


Figure 1. Structural equation modeling results of job self-efficacy, curriculum literacy and media literacy

Table 2. Structural equation modeling results of job self-efficacy, curriculum literacy and media literacy

Hypothesis	Path coefficient	t	Sig.	Result
The effect of curriculum literacy on job self-efficacy	0.385	9.666	<0.001	Approved
The effect of media literacy on job self-efficacy	0.648	16.826	<0.001	Approved

4. Discussion

Given the importance of occupational self-efficacy, especially in teachers, the aim of this study was to investigate the effect of curriculum literacy and media literacy on occupational self-efficacy in secondary school teachers. Overall, the findings of this study showed that occupational self-efficacy has four components: individual self-efficacy beliefs, collective self-efficacy beliefs, individual outcome expectations, and collective outcome expectations. Curriculum literacy has three components: curriculum planning system, curriculum foundations, and curriculum planning elements. Media literacy has five components: understanding media content messages, awareness of hidden goals in media messages, critical view of media messages, conscious selection and analysis of media messages. All of these variables had a factor loading above 0.50 and a Cronbach's alpha reliability above 0.70. Furthermore, both curriculum literacy and media literacy had a direct and significant effect on occupational self-efficacy in secondary school teachers.

The results of the first hypothesis of the study indicated that curriculum literacy had a direct and significant effect on occupational self-efficacy beliefs in secondary school teachers, which is consistent with the findings of Datu et al. (2021) and Shaheswari and Manzari Tavakoli (2016). It can be argued that the level of curriculum literacy in teachers, as one of the most important professional competencies, is a key factor in the quality of their teaching and an effective factor in achieving positive and appropriate educational outcomes. This competency and belief in it give teachers a sense of capability in their work and have a significant impact on their occupational self-efficacy. A teacher with high curriculum literacy is able to design and review the curriculum with the help of selecting and revising goals, topics, content, teaching strategies, assessment methods, various educational resources, and appropriate time and space, and this mastery of curriculum planning principles improves the quality of their activities, which in turn increases their confidence in

professional abilities and ultimately leads to the enhancement of occupational self-efficacy. Additionally, a curriculum literate teacher, with knowledge about educational policies, familiarity with the characteristics of traditional and centralized, advanced and decentralized curriculum systems, familiarity with different subject-based, learner-centered, and community-based curricula, as well as familiarity with the philosophical, psychological, and sociological foundations of curricula, makes them competent in teaching and leads to their professional success. Occupational success is the most influential source in achieving a sense of self-efficacy, and occupational success resulting from the competencies of teachers in curriculum planning, or in other words, their level of curriculum literacy, leads to the development of occupational self-efficacy in them.

Furthermore, the results of the second hypothesis of the research indicated that media literacy had a direct and significant effect on the job self-efficacy beliefs of secondary school teachers, which is consistent with the findings of Jeon and Kim (2021), Tajabadi et al. (2018), and Jafarzadeh et al. (2016). It can be argued that media literacy leads to the creation of creative thinking and critical thinking in individuals, which prevents them from unquestioningly accepting media messages and instead evaluates them critically and accurately. Therefore, individuals with higher media literacy will also have higher self-efficacy. This is because a precise understanding of media messages and how to use them, as well as recognition of this perception and ability, gives individuals a greater sense of ability and self-efficacy. Teachers with higher media literacy will be able to receive better and more accurate information from media, especially educational media, which will give them a greater sense of self-efficacy and enable them to utilize these media in teaching better. Additionally, teachers with media literacy have the ability and power to access, analyze, evaluate, and transmit information and media messages in various print and non-print formats. Teachers who are able to understand the content of media messages, analyze and consciously select these messages, are aware of hidden media message objectives, and have a critical view of these messages will have a better ability to use media and will have better teaching and performance, which will lead to better learning outcomes for students and strengthen their job self-efficacy beliefs.

The statistical population of this study was limited to secondary school teachers in Islam Abad Gharb city, and caution should be exercised in generalizing the results to teachers in other levels and cities. Another limitation was the use of self-reporting tools to collect data, and in such tools, individuals may not have enough self-awareness. They may not respond responsibly, which reduces the accuracy of the results. It is recommended that this research be conducted on elementary school teachers in Islam Abad Gharb city and teachers in different levels of other cities, and the results be compared with the results of this study. Another research suggestion is to conduct this study separately on male and female teachers and compare the results. The results of this study indicate the significant role of curriculum literacy and media literacy in the job self-efficacy of secondary school teachers. Therefore, to increase job self-efficacy, the level of curriculum literacy and media literacy can be improved through educational workshops.

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Conflict of interest

There was no conflict of interest in this study.

References

- Ahrabi-Nejad S, Collini RC, Miller-Way T, Patch SM, Rellinger A, Sempier T, Sparks E. (2022). Fostering science-to-civics literacy through the development and assessment of a sea-level rise curriculum. *Continental Shelf Research*. 241(5): 104731.
- Datu JAD, Wong GSP, Rubie-Davies C. (2021). Can kindness promote media literacy skills, self-esteem, and social self-efficacy among selected female secondary school students? An intervention study. *Computers & Education*. 161: 104062.
- Du C, Qin K, Wang Y, Xin T. (2022). Mathematics interest, anxiety, self-efficacy and achievement: Examining reciprocal relations. *Learning and Individual Differences*. 91: 102060.
- Dunn ME, Schreiner AM, Flori JN, Crisafulli MJ, Willis EA, Lynch GT, Dvorak RD. (2022). Effective prevention programming for reducing alcohol-related harms experienced by first year college students: Evaluation of the expectancy challenge alcohol literacy curriculum (ECALC). *Addictive Behaviors*. 131: 107338.
- Jafarzadeh Z, Ghahramanpour J, Safri E. (2016). The relationship between information literacy and cognitive styles with self-efficacy of the third year secondary school students of Ahvaz city in the academic year 2013-2014. *New Researches in Behavioral Sciences and Technology*. 5: 1-11. [Persian]
- Jeon J, Kim S. (2022). The mediating effects of digital literacy and self-efficacy on the relationship between learning attitudes and e-health literacy in nursing students: A cross-sectional study. *Nurse Education Today*. 113: 105378.
- Kung HY, Lee CY. (2016). Multidimensionality of parental involvement and children's mathematics achievement in Taiwan: Mediating effect of math self-efficacy. *Learning and Individual Differences*. 47: 266-273.
- Lazarides R, Buchholz J, Rubach C. (2018). Teacher enthusiasm and self-efficacy, student-perceived mastery goal orientation, and student motivation in mathematics classrooms. *Teaching and Teacher Education*. 69: 1-10.
- Luo YF, Yang SC, Kang S. (2022). New media literacy and news trustworthiness: An application of importance-performance analysis. *Computers & Education*. 185: 104529.
- Marashian FS, Naderi F, Heidari A, Enayati M, Asgari P. (2013). Comparison of organizational culture, emotional intelligence and job self-efficacy in male and female employees. *Journal of Social Psychology*. 8(28): 79-91. [Persian]
- Marks D, LaRose S, Brady C, Erasmus M, Karcher EL. (2021). Integrated STEM and poultry science curriculum to increase agricultural literacy. *Poultry Science*. 100(10): 101319.
- Paxton SJ, McLean SA, Rodgers RF. (2022). My critical filter buffers your app filter: Social media literacy as a protective factor for body image. *Body Image*. 40: 158-164.
- Purtilo-Nieminen S, Vuojarvi H, Rivinen S, Rasi P. (2021). Student teachers' narratives on learning: A case study of a course on older people's media literacy education. *Teaching and Teacher Education*. 106: 103432.
- Riggs ML, Knight PA. (1994). The impact of perceived group success-failure on motivational beliefs and attitudes: A causal model. *Journal of Applied Psychology*. 79(5): 755-766.
- Rutherford T, Long JJ, Farkas G. (2017). Teacher value for professional development, self-efficacy, and student outcomes within a digital mathematics intervention. *Contemporary Educational Psychology*. 51: 22-36.
- Shaheswari M, Manzari Tavakoli H. (2016). *Investigating the relationship between planning literacy and job performance among the employees of the Department of Education of one Kerman district in 2014*. Qom: The Second International Conference on New Findings of Science and Technology. [Persian]
- Sheu HB, Lent RW, Miller MJ, Penn LT, Cusick ME, Truong NN. (2018). Sources of self-efficacy and outcome expectations in science, technology, engineering, and mathematics domains: A meta-analysis. *Journal of Vocational Behavior*. 109: 118-136.
- Tajabadi R, Mohsen-Abadi GhA, Mohdian S. (2018). The position of teachers' information and media literacy skills in advancing the educational goals of schools. *Improving the Quality of Education with a Life Skills Approach*. 1(1): 1-11. [Persian]
- Wang YL, Liang JC, Lin CY, Tsai CC. (2017). Identifying Taiwanese junior-secondary school students' mathematics learning profiles and their roles in mathematics learning self-efficacy and academic performance. *Learning and Individual Differences*. 54: 92-101.
- Zhou D, Liu J, Liu J. (2020). The effect of problematic Internet use on mathematics achievement: The mediating role of self-efficacy and the moderating role of teacher-student relationships. *Children and Youth Services Review*. 118: 105372.