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The Impact of Writing Approaches, Self-Efficacy, Educational Context, and GPA on the Quality of MA Theses

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Abstract

The task of producing a master's thesis is both formidable and crucial, posing challenges to postgraduate students. Consequently, many encounter obstacles in achieving successful completion, resulting in substandard work. A thorough examination of the literature pertaining to the factors influencing the production of high-quality master's theses clearly reveals a gap in exploration. This study aims to address this gap by investigating the influence of three distinct writing approaches employed by master's students, alongside their self-efficacy, educational context, and Grade Point Average (GPA), on the overall quality of the theses they produce. To this end, 35 master's degree candidates specializing in Teaching English as a Foreign Language (TEFL) at the Islamic Azad University of Kerman were recruited, utilizing a mixed methods research design for data collection. The findings from a questionnaire and semi-structured interviews highlighted the significant impact of thesis writing approaches, self-efficacy, and the educational context on the quality of master's theses. However, no correlation was observed between the students' GPA and their thesis quality. The findings of this study can contribute to increasing stakeholders' awareness towards developing and implementing procedures to enhance the skills of graduate students in relation to the quality of their thesis writing.

Keywords: Educational context, Grade point average, Self-efficacy, Thesis quality, Writing approaches.

I | INTRODUCTION



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Composing a master's thesis can prove to be a challenging endeavor for students. It is an important and intricate task, requiring a comprehensive approach. The process of composing a master's thesis enables learners to cultivate their own academic competencies (Tuononen & Parpala, 2021). Tuononen & Parpala (2021) assert that writing a master's thesis is a multifaceted learning task that entails a wealth of knowledge and skills from varied academic domains, including critical inquiry, problem-solving, effective communication, collaborative work, scholarly writing abilities, as well as the capacity to consider and analyze diverse perspectives. Crafting a master's thesis that embodies these academic competencies necessitates that learners shift and modify their prior or conventional approaches to writing and learning. A shift towards prior approaches to writing and learning, as posited by Wisker (2019), entails a deeper learning process and writing from a more profound perspective.



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Previous research has demonstrated that adopting a profound approach to writing leads to improved writing proficiency and academic grades (Asikainen et al., 2014; Hermann et al., 2017; Parpala et al., 2021; Salmisto et al., 2017). Despite the significance of writing approaches for composing a master's thesis, there has been limited attention paid to this area. There exist various approaches to writing and diverse attitudes towards learning. Knowledge telling and knowledge transformation are akin to the approaches that individuals adopt when engaging in surface and deep learning methods. According to Pessoa et al. (2018) and Habibie & Hyland (2019), novice writers typically rely on knowledge telling, which involves recalling facts from memory without engaging in critical thinking. Conversely, experienced writers employ knowledge transformation, which necessitates deeper thinking and reiterating ideas.

Concerning the pedagogical context, Fraser (1998) suggests that the educational environment encompasses the psychological state of learners, the social setting in which they learn, and the pedagogical approach employed. The impact of the learning environment on the learning process has been established by the studies conducted by Salmisto (2017) and Parpala et al. (2010), which indicate that a positive educational context including teacher and peer support and collaboration as well as students' interest in the subject is conducive to a profound approach, whereas a negative experience results in superficial learning.

Self-efficacy is a variable that has a noteworthy association with students' learning, as mentioned by Bandura (1997). It pertains to an individual's confidence in performing a particular task. Self-efficacy in learning environments is intimately related to motivation and accomplishment. The level of self-efficacy that students possess determines the types of tasks they will undertake, the complexity of those tasks, and the extent of effort they will expend on those tasks. Additionally, GPA, grade point average, is a factor contributing to thesis writing. It has been used interchangeably with academic achievement in the literature that focuses on student achievement.

II. REVIEW OF THE LITERATURE

The culmination of most university master's programs worldwide is typically the submission of a master thesis. However, according to some researchers (e.g. Ekpoh, 2016; Essumannot, 2020; Hajar & Mhamed, 2022; Komba, 2016; Paltridge & Starfield, 2019; Rauf, 2016), not all students are able to complete this requirement, and some produce substandard theses. Wong (2010) and Rauf (2016) note that a significant number of students encounter difficulties during the thesis process, leading to delays, disruptions, poor quality work, and failure to complete their degrees. Agu and Oluwatayo (2014) and Ferrer (2014) contend that completing a thesis is a challenging undertaking that necessitates numerous qualities for successful and timely completion. Consequently, one can reasonably posit that substandard or incomplete theses present a substantial issue that requires serious attention and proactive planning (Chin et al., 2017; Rauf, 2016).

Previous investigations pertaining to thesis writing have recognized several variables that influence the performance of the students engaging in such tasks. These variables include motivation, self-efficacy, GPA, supervisor feedback, educational context, and the ability of students to write efficiently. The present study seeks to examine the effects of several variables, namely writing approaches, self-efficacy, GPA, and educational context, on the quality of MA students' theses.

Learning approaches, as defined by Entwistle et al. (2006) and Gijbels et al. (2005), are characterized by learners' objectives and desires in their academic pursuits and their methods of learning. The deep approach to learning, as described by Biggs (1987) and Entwistle & Peterson (2004), emphasizes the comprehension of information by linking it to previously acquired knowledge and carefully analyzing the material, thereby promoting intrinsic motivation for learning and critical thinking skills. Conversely,



the surface approach is characterized by external motivation for studying and the utilization of unthinking learning strategies, such as memorization and rote recall. Lastly, the third approach to studying is organized studying, which refers to the techniques that learners employ to manage their time. Organized studying, as defined by [Entwistle & McCune \(2004\)](#), is a way of studying, not just learning. [Asikainen \(2014\)](#) and [Parpala et al. \(2010\)](#) note that learning approaches and students' learning styles are influenced by their attitudes toward their instructors, the learning environment, and the pedagogical context. In a study by [Mendoza et al. \(2022\)](#), the relationship between writing an MA thesis and different writing approaches was explored. They identified three distinct groups of thesis writers including those using a dissonant approach, those employing a deep and organized approach, and those with an unorganized approach. The study revealed that the students who adopted a deep and organized approach to their thesis writing stood out significantly over the other two groups.

The impact of the pedagogical environment on the learning development has been the subject of investigation in numerous studies. Particularly, [Salmisto \(2017\)](#) and [Parpala et al. \(2010\)](#) have found that a constructive educational setting is highly conducive to a deep approach to learning, whereas a destructive experience often results in superficial learning. Moreover, the educational context has been examined in depth by [Hyytinen et al. \(2019\)](#) and [Parpala et al. \(2010\)](#), who have explored several factors such as the orientation of teacher's goals and activities, the level of engagement, relevance, and interest, as well as the support provided by peers and teachers. In the literature, this alignment of teaching goals, methods, and evaluation has been referred to as constructing alignment, as discussed by [Biggs \(2003\)](#). Peer support, on the other hand, refers to learners collaborating during tasks such as thesis writing, while teacher support pertains to the quality of supervisory feedback provided during the same tasks. Finally, relevance and interest are the critical features that relate to the subject matter and learning task's relevance and interest. According to [Paltridge & Starfield \(2019\)](#), [Yu et al. \(2018\)](#) and [Liu et al. \(2021\)](#), peer support and feedback significantly improves thesis and dissertation quality.

Self-efficacy, the belief in one's ability to succeed in specific tasks, is a critical factor influencing academic achievement ([Schunk, 2023](#); [Ugwuanyi et al., 2020](#)). As noted by [Schunk & DiBenedetto \(2022\)](#), recent studies have shown its positive correlation with students' performance and motivation. According to [Bandura \(1997\)](#), self-efficacy impacts the effort that students invest in their studies, their persistence in facing challenges, and their resilience to setbacks. Contemporary research further supports this issue, demonstrating that higher self-efficacy predicts better academic outcomes ([Tomás et al., 2019](#); [Zheng et al., 2021](#); [Usher & Pajares, 2007](#)). Moreover, interventions aimed at boosting self-efficacy have shown to enhance students' academic skills and confidence, thereby improving their overall academic performance ([Schunk & DiBenedetto, 2022](#)). [Mendoza et al. \(2022\)](#) discovered a correlation between self-efficacy and the quality of theses. However, [Foulstone & Kelly \(2019\)](#) found that self-efficacy does not necessarily predict academic outcomes.

The Grade Point Average (GPA) has long been considered as a predictor of students' success and achievement. Educational institutions employ GPA as a means of monitoring student performance ([Fauria & Fuller, 2015](#)). The use of GPA as a gauge of academic performance is prevalent in academic research, including the investigations of student engagement and academic achievement ([Carini et al., 2006](#); [Gordon et al., 2008](#); [Kuh et al., 2008](#); [Lauver et al., 2004](#)).

Understanding the determinants of a high-quality thesis can provide valuable insights to policymakers, faculties, professors, and supervisors, enabling them to implement novel procedures that facilitate and enhance this process. Currently, there exists a paucity of comprehensive literature reviews examining the effects of various factors on the quality of master's theses, owing to a dearth of studies focused on this issue (see [Mendoza et al., 2022](#); [Medaille et al., 2022](#); [Reynolds & Thompson, 2011](#)). To address this gap in knowledge, this study aims to investigate the impacts of thesis writing approaches employed by master's students, self-efficacy, educational context in which students find themselves, and student GPA on the quality of the theses that they produce. Therefore, the current investigation aims to answer the following questions:



1. Do writing approaches have any impacts on MA thesis quality?
2. Does self-efficacy have any impacts on MA thesis quality?
3. Does educational context have any impacts on MA thesis quality?
4. Does GPA have any impacts on MA thesis quality?
5. What are MA students' attitudes towards the impacts of writing approaches, self-efficacy, educational context and GPA on their thesis quality?

III. METHODOLOGY

This investigation employed a mixed methods research design which involved the gathering of both quantitative and qualitative data in order to address the research questions. This particular approach enables a more comprehensive and holistic examination than a single methodological approach, as it combines the benefits of both methods. The researchers utilized a questionnaire to evaluate the writing approaches, self-efficacy, and educational context of the master's students in their program. Additionally, a semi-structured interview was conducted to assess the attitudes of the participants towards the aforementioned variables. Finally, the data were integrated to provide a more comprehensive understanding of the subject matter. In terms of the context of the current investigation, the participants were selected from the master's students majoring in TEFL at the Islamic Azad University of Kerman located in Kerman Province, Iran.

1. Participants

Initially, a total of 35 master's degree candidates at the Islamic Azad University of Kerman, who were majoring in Teaching English as a Foreign Language, were chosen via a random sampling procedure. Subsequently, those who expressed interest in participating in this study ($N = 27$) were selected to take part. Among the 27 participants, 12 (44.4%) were male, and 15 (55.6%) were female. The participants were in the range of 25 to 35 years of age. All of them were native Persian speakers who also spoke English as a foreign language.

2. Instruments

This investigation employed two primary tools, specifically the HowULearn survey and a semi-structured interview. The HowULearn Questionnaire, formerly known as the Learn Questionnaire (Parpala & Lindblom-Ylänne, 2012), was utilized to gather the required quantitative data. The questionnaire consisted of 29 statements, which were categorized into (1) deep, surface, and organized writing methods for thesis writing with 11 items, (2) self-efficacy beliefs for thesis writing with 5 items, and (3) experiences of the thesis as an educational environment with 13 items divided into (a) feedback and supervision, (b) thesis objectives and requirements, (c) interest and relevance, and (d) peer support. The items were measured using a five-point Likert scale. With regard to the thesis grades and students' GPAs, consent was obtained from the individual students. Cronbach's alpha coefficient of the questionnaire's three dimensions was calculated and deemed satisfactory. The second tool employed to gather qualitative data was a semi-structured interview consisting of 15 questions intended to uncover master's students' attitudes toward (1) the roles of thesis writing approaches, (2) self-efficacy, (3) experiences of the thesis as an educational environment, and (4) students' GPA on the quality of their thesis. Two TEFL faculty members evaluated the interview items, and, after some revisions, the entire interview checklist was deemed reliable and valid. Each interview took approximately 15 minutes, after which the responses were transcribed, tabulated, and analyzed.



3. Procedure

At the beginning of the investigation, following the determination of the mixed methods research design, a total of 35 master's students pursuing a TEFL master's degree at the Islamic Azad University of Kerman were selected through random sampling. From the initial sample, 27 students expressed their willingness to participate in the study. Subsequently, upon a thorough review of the literature pertaining to the issue in question, it was found that the HowULearn questionnaire was most suited to address the research questions. Accordingly, a few modifications were made to the questionnaire, taking into account the learning context of the students. Subsequently, the internal consistency of the questionnaire, as well as its three sections, was evaluated. In terms of the qualitative data collection, a semi-structured interview was designed and validated, taking into consideration the HowULearn questionnaire and the relevant literature. Since a component of the study was aimed at assessing the impact of GPA on the quality of the master's thesis, the required permissions were obtained, and the participants' GPAs were provided. Furthermore, a similar process was followed to obtain access to the students' thesis scores, which were taken into account in assessing the quality of the theses. The data were analyzed with several descriptive and inferential statistical factors and procedures, including frequency distribution, percentage, mean, median, SD, skewness, kurtosis, Cronbach's Alpha Coefficient, Kolmogorov-Smirnov test, Multiple Regression, ANOVA, and Pearson's Correlation test.

IV. RESULTS

To determine the internal consistency of the questionnaire's dimensions, Cronbach's alpha coefficient was evaluated. The findings are presented in Table 1.

Table 1. The Cronbach's alpha coefficient of the questionnaire dimensions.

Dimensions	Cronbach's alpha coefficient
Writing approaches	0.75
Self-efficacy	0.74
Learning environment	0.73
GPA	0.77

As shown in Table 1, Cronbach's alpha coefficient pertaining to the dimensions of the questionnaire surpasses 70%, whereas Cronbach's alpha coefficient for the questionnaire in its entirety is 75%. Consequently, the questionnaire under investigation exhibits an acceptable level of reliability, thereby obviating the need for the elimination of any item.

Table 2. Descriptive statistics of the variables.

Variables	Mean	Median	SD	Skewness	Kurtosis
Self-efficacy	3.26	3.30	0.48	-0.23	0.76
Educational environment	3.12	3.20	0.81	-0.39	0.85
Deep approach	3.30	3.48	0.77	-0.77	1.74
Surface approach	3.51	3.50	0.87	-0.70	1.12
Organized approach	3.87	4	0.58	-0.92	1.40
Writing approaches	3.53	3.60	0.82	-0.98	1.21
GPA	3.19	3.25	0.76	-0.54	1.01

Table 2 presents a descriptive analysis of the variables. This includes the computation of essential statistical indices such as the mean, median, standard deviation, skewness, and kurtosis values. The results indicate that the Educational Environment variable has the lowest mean value at 3.12. Moreover, its median is found to be 3.20. The Organized Approach variable has the highest mean value at 3.87, and the medium



value for this variable is 4.00. Furthermore, the Self-Efficacy variable has the lowest standard deviation at 0.48, indicating that the data are less dispersed compared to the mean values of the other variables. In contrast, the Surface Approach variable has the highest standard deviation at 0.87, suggesting that the data are more dispersed compared to the mean values of the other variables. With regard to their skewness values, all the variables examined in this study exhibited an upward projection.

Table 3. Kolmogorov-Smirnov test to assess the normal distribution of the variables.

Normality	Sig	Kolmogorov-Smirnov	Variables
Yes	0.20	0.09	Self-efficacy
Yes	0.05	0.12	Educational environment
Yes	0.07	1.14	Deep approach
Yes	0.20	0.09	Surface approach
Yes	0.08	1.51	Organized approach
Yes	0.13	1.59	Writing approaches
Yes	0.21	1.30	GPA

As it can be seen in Table 3, the Kolmogorov-Smirnov test and sig values have been calculated for the variables. If $p < 0.05$, the variables do not follow a normal distribution in the population. Consequently, it can be claimed that the data for the variables under study are normal.

1. The Effects of Writing Approaches on The Quality of MA Theses

The first research question was meant to explore if three writing approaches, namely surface, deep and organized writing approaches affect the quality of master's theses. The multiple regression analysis results are summarized in Table 4.

Table 4. Significance of multiple regression.

Model	Sum of squares	df	Mean square	F	Sig.
Regression	0.815	3	0.271	1.676	0.001
Residual	3.743	23	0.162		
Total	4.558	26			

In accordance with the value of F or Fisher's statistic and the significance level of this test, as shown in Table 4, an examination has been conducted to determine the significance of multiple regression. The significance level of this test, which is less than 5%, has been assumed as a result of the significance of the model. The outcomes reveal that the regression is not rejected, thereby indicating that the multiple regression model is suitable. Table 5 presents the coefficients of the multiple regression model.

Table 5. Coefficients.

Model	Unstandardized coefficients		Standardized coefficients		
	B	Std. error	Beta	t	Sig.
(constant)	0.277	0.735	-	0.513	0.001
Deep Approach	0.111	0.154	0.278	1.719	0.001
Surface Approach	0.198	0.143	0.321	1.090	0.001
Organized Approach	0.422	0.166	0.435	2.536	0.001

As it can be seen in Table 5, based on the t statistics and the significance level of the test, it is evident that the regression model includes variables whose significance level is less than 0.05. The multiple regression model indicates that the quality of the thesis without the influence of independent variables is 0.277. Additionally, a modification of one standard deviation in the Deep Approach instigates a 0.111 change of standard deviation in the quality of the thesis. Similarly, a change of one standard deviation



in the Surface Approach leads to a 0.198 change of standard deviations in the quality of the thesis. Finally, a change of one standard deviation in the Organized Approach causes a 0.422 change of standard deviations in the quality of the thesis. Therefore, based on the tabulated data, it can be asserted that the regression model can be expressed in the following manner:

$$\text{Thesis Quality} = (\text{Constant}) + (\text{Deep Approach}) + (\text{Surface Approach}) + (\text{Organized Approach}).$$

$$\text{Thesis Quality} = (0.277) + (0.111) + (0.198) + (0.422).$$

Table 6 presents the results of Pearson's correlation test examining the relationship between writing approaches and the quality of MA theses.

Table 6. The association between the writing approaches and the quality of masters' theses through Pearson's correlation test.

Correlation coefficient	0.412
Sig.	0.001

Pearson's correlation coefficient is utilized to examine the significant association between students' thesis writing approaches and thesis quality. Table 6 indicates that the Pearson correlation coefficient between the two variables analyzed in the complete sample is 0.412. Moreover, the significance level of the Pearson correlation test is $0.001 < 0.05$. Consequently, hypothesis one is rejected, and it is concluded that there is a positive significant relationship between students' thesis writing approaches and thesis quality in the entire sample.

2. The Effects of Self-Efficacy on MA Theses Quality

The second research question was directed towards investigating the impact of self-efficacy on the quality of master's theses. Table 7 presents the Pearson correlation test results regarding the relationship between these two variables.

Table 7. The association between the self-efficacy and the quality of masters' theses through Pearson's correlation test.

Correlation coefficient	0.516
Sig.	0.001

As demonstrated in Table 7, the Pearson correlation coefficient for the two variables under investigation within the entire sample is 0.516. Furthermore, the level of significance in relation to the Pearson correlation test is 0.001 which is less than 0.05. Therefore, it can be claimed that a positive significant correlation exists between self-efficacy and thesis writing quality within the entire sample.

3. The Effects of Educational Context on Master's Thesis Quality

The third research question was aimed at investigating the effect of educational context experiences on master's thesis quality. It is worth noting that educational context experiences were subdivided into three categories, namely (1) feedback and supervision, (2) thesis objectives and requirements, and (3) interest, relevance and peer support. Table 8 presents the results of the multiple regression analysis.

Table 8. Significance of multiple regression.

Model	Sum of squares	df	Mean square	F	Sig.
Regression	0.815	3	0.271	1.318	0.001
Residual	4.743	23	0.206		
Total	5.558	26			



In accordance with the value of F and the significance level of this test, as it can be seen in Table 8, an examination was conducted to determine the significance of multiple regression. The significance level of this test, which is less than 5%, is assumed as a result of the significance of the model. The outcomes reveal that the regression is not rejected, thereby indicating that the multiple regression model is suitable. Table 9 presents the coefficients from the multiple regression analysis.

Table 9. Coefficients.

Model	Unstandardized coefficients		Standardized coefficients		
	B	Std. Error	Beta	t	Sig.
(constant)	0.45	0.43	-	0.36	0.001
Feedback and supervision	0.10	0.16	0.19	2.65	0.001
Thesis objectives and requirements	0.29	0.18	0.31	1.35	0.001
Interest, relevance and peer support	0.27	0.10	0.28	1.65	0.001

Table 9 depicts the regression coefficients of the variables that affect the dependent variable. According to the t statistic and the significance level of the test, it is evident that the regression model incorporates variables with a significance level of less than 0.05. Moreover, the multiple regression model demonstrates that thesis writing, without the effect of independent variables, is 0.45. Additionally, a standard deviation modification in feedback and supervision leads to a 0.10 standard deviation alteration in thesis writing. Similarly, a change of one standard deviation in the objectives and requirements of the thesis results in a 0.299 shift of standard deviations in the quality of the thesis. Lastly, a standard deviation adjustment in peer support, interest and relevance leads to a 0.276 standard deviation change in thesis quality. Based on the tabulated data, it can be posited that the regression model is capable of being expressed in the following manner:

Thesis Quality = (Constant) + (feedback and supervision) + (objectives and requirements of the thesis) + (peer support, interest and relevance).

Thesis Quality = (0.45) + (0.10) + (0.29) + (0.27).

4. The Effects of GPA on MA Thesis Quality

The fourth research question dealt with the possible influence of master's students' GPA on their thesis quality. To this end, Pearson's correlation coefficient was employed to investigate the possible significant relationship between students' GPA and their thesis quality. Table 10 presents the results of Pearson's correlation test.

Table 10. The association between the writing approaches and the quality of masters' theses through Pearson's correlation test.

Correlation coefficient	0.09
Sig.	0.21

As it can be seen in Table 10, the Pearson correlation coefficient for the two variables analyzed in the complete sample is 0.09. Moreover, the significance level of the Pearson correlation test is $0.21 > 0.05$. Consequently, hypothesis one is not rejected, and it is concluded that there is no significant relationship between master's students' GPA and their thesis quality in the entire sample.



5. MA Students' Attitudes Towards the Influential Factors

The final research question was meant to acquire qualitative data that centers on the attitudes of master's students towards the impact of (1) the methods utilized in thesis writing, (2) the experiences gained in the context of thesis as an educational context, and (3) self-efficacy on the quality of their thesis writing. Table 11 summarizes the responses of MA students to the interview questions regarding their attitudes towards the impact of various factors on the quality of their thesis writing.

Table 11. Master's students' attitudes towards the effect of approaches to thesis writing, experiences of thesis writing as an educational task, and self-efficacy on thesis quality.

Interview questions		Yes	No	Total
1. Was the material taught in the classroom adequate and beneficial in composing your thesis?	F	17	10	27
	%	63%	37%	100
2. Was there any correlation between your academic performance and thesis composition?	F	20	7	27
	%	74.1%	25.9%	100
3. Did your self-efficacy contribute to the thesis writing process?	F	22	5	27
	%	81.5%	18.5%	100
4. Did the academic setting have a significant impact on the writing of your thesis?	F	18	9	27
	%	66.7%	33.3%	100
5. Was the quality of your thesis writing influenced by the relevance and level of interest in the chosen topic?	F	19	8	27
	%	70.4%	29.6%	100
6. Did the relationship and experience with your supervisor affect the quality of your thesis writing?	F	22	5	27
	%	81.5%	18.5%	100
7. Did your familiarity and understanding of the thesis objectives and requirements impact the quality of your thesis writing??	F	23	4	27
	%	85.2%	14.8%	100
8. What is the impact of the deep approach (characterized by critical thinking and intrinsic motivation) on thesis writing?	F	17	10	27
	%	63%	37%	100
9. What is the influence of the surface approach (marked by external imposition and thoughtless strategies such as memorization and reconstruction of events) on the process of thesis writing?	F	21	6	27
	%	77.8%	22.2%	100
10. Does the organized approach (exemplified by the regulation of time and academic efforts) significantly impact the quality of the thesis?	F	19	8	27
	%	70.4%	29.6%	100
11. In general, is there a connection between writing approaches, self-efficacy, educational environment and the final score of the thesis?	F	22	5	27
	%	81.5%	18.5%	100

A portion of the interview focused on the effect of educational experiences in the context of master's students' thesis quality. Corresponding statements 1, 2, 4, 5, 6, and 7 were dedicated to this topic. This section included feedback and supervision from professors, students' awareness of thesis objectives and requirements, students' interest in the topic and its relevance, and peer support from classmates. Among the participants, approximately two thirds (63%) believed that the instructional materials used in their master's program contributed to their thesis writing quality. However, one third (37%) believed that there could have been more beneficial teaching materials in the program to improve their thesis writing. Several interviewees suggested that more updated materials and qualified university professors could have resulted in a higher quality thesis.

Additionally, the interviews with the students revealed that 74% of master's students believe that their academic performance affects the quality of their thesis, according to their responses to statement 2. Conversely, 26% did not agree. They added that those who study more and achieve higher scores seem to be more aware of the teaching materials and can write better-quality theses. Overall, most of the



participants correlated academic performance with thesis composition. However, some students argued that having a better academic performance does not necessarily lead to a better-quality thesis due to other influential factors such as university rank, thesis advisor support, interest in the topic, etc.

The fourth statement of the interview centered on the attitude of master's students towards the impact of the academic setting on the quality of their thesis. A sizable majority of the students, approximately 67%, held the belief that their thesis writing quality was influenced by the academic setting they found themselves in, whereas the remaining 33% did not share in this conviction. The interviewees who affirmed the direct and indirect impact of academic settings on thesis quality were of the opinion that department and classroom designs and the presence of laboratories, among other factors, played a crucial role in determining the quality of their thesis. Moving on to the fifth statement, it sought to evaluate the opinions of master's students regarding the link between their interest in the thesis topic and the quality of their thesis. This claim was supported by nearly 70% of the participants, with those in agreement citing increased curiosity and motivation as the main reasons for their support.

The sixth statement in the interview aimed to assess the students' attitudes towards whether the quality of their thesis was dependent on the supervisory skills of their thesis supervisor. A significant majority of the participants (80%) concurred with this claim, while the remainder did not confirm it. Upon analyzing the proposed reasons by the advocates of this claim, it became apparent that students believed that the character of the supervisor, their academic knowledge, ability to establish an appropriate rapport with the students, as well as comments made by the supervisor concerning thesis improvement, were the most significant contributing factors. The seventh statement in this section addressed the effect of the students' familiarity and understanding of thesis objectives and requirements on the quality of the thesis. The vast majority of master's students, about 85%, agreed with this statement, while the remaining 15% disagreed. The participants believed that familiarity with thesis objectives and requirements was critical since they established the scope and depth of the project, helped avoid unnecessary research, and set the researcher on the right path.

With reference to the potential impact of self-efficacy on the quality of thesis writing amongst master's students, as presented in statement 3, Table 11, the majority of students (81.5%) who perceived self-efficacy as a valuable attribute, believed that it reflects a sense of confidence in their ability to exert control over their own motivation, behavior, and social environment. In fact, those who found this quality useful reported that self-efficacious master's students are more likely to step out of their comfort zone to perform tasks more effectively, are undeterred by obstacles, and make a concerted effort to find solutions to problems while working holistically with a broader perspective. Additionally, the participants noted that self-efficacious master's students tend to display greater determination when approaching tasks.

As evidenced by the data presented in Table 11, with regards to the attitudes of master's students towards writing approaches and the impact on the quality of their thesis, as reflected in statements 8, 9, and 10, approximately 78%, 70%, and 63% of the respondents found surface, organized, and deep writing approaches to be influential, respectively, while 22%, 30%, and 37% of the students did not find these approaches to be effective. In other words, some master's students believed that the surface approach was the most effective, while the deep approach was considered to be the least useful when it comes to the thesis quality. The responses from the participants indicated that almost four-fifths of them favored the surface approach because they lacked critical thinking strategies. Furthermore, it was discovered that most of the master's students were not intrinsically motivated to complete their theses; hence, they resorted to techniques such as memorization, which reflected thoughtless strategies and external imposition.



V. DISCUSSION

This investigation aimed to determine the factors which might affect MA students' thesis quality. One of these variables discussed was thesis writing approaches, namely surface, deep and organized. Analyzing the quantitative and qualitative data, it was found that all writing approaches were used, among which surface approach was more utilized by masters' students in order to manage their thesis. This finding can be explained by students' lack of critical thinking skill and intrinsic motivation. The findings are in line with those investigations by [Schramm-Possinger et al. \(2015\)](#), [Komba \(2016\)](#), [Ekpoh \(2016\)](#) and [Zaid \(2016\)](#). The findings are consistent with those of [Tuononen et al. \(2021\)](#) who found out that the highest academic achievement was associated with deep and organized study while lower academic success and low self-efficacy was connected to an unorganized and surface approach. These findings align with those of [Mendoza et al. \(2022\)](#), who found that a deep and organized writing approach is the rarest among students. This approach is also correlated with higher self-efficacy and better thesis quality.

Self-efficacy, which pertains to a students' perception of their ability to perform a specific task, is linked to students' success. The role of self-efficacy in thesis writing has not been extensively explored in previous literature. Analyzing the responses from the master's students through a questionnaire and interviews about how self-efficacy affects thesis quality showed that those with higher self-efficacy were able to produce better-quality theses. These findings are consistent with those of [Hailikari & Parpala \(2014\)](#) and [Hyytinen et al. \(2018\)](#), who found that self-efficacy beliefs are linked in different ways to deep approaches to writing. In a similar vein, [Mendoza et al. \(2022\)](#) identified a connection between thesis quality, self-efficacy, and a deep writing approach. The findings are consistent with the research by [Schunk & DiBenedetto \(2022\)](#), [Tomás et al. \(2019\)](#), [Zheng et al. \(2021\)](#), and [Usher & Pajares \(2007\)](#). They showed that higher self-efficacy tends to predict better academic outcomes and performance. However, [Foulstone & Kelly \(2019\)](#) found that self-efficacy does not always predict academic outcomes.

The next variable was educational context. The study investigated various aspects, such as the provision of feedback and supervision, familiarity with thesis objectives and requirements, interest and relevance, and peer support. Both qualitative and quantitative data revealed that these factors significantly affect the quality of students' theses. The importance of support provided by thesis supervisors and peers to thesis writers as well as students' interest to the thesis has been confirmed by [Wang & Yang \(2014\)](#), [Schramm Possinger et al. \(2015\)](#), and [Salmisto et al. \(2017\)](#). Moreover, peers and supervisors' constructive feedback has been linked to both the deep and organized approaches to learning ([Postareff et al., 2018](#)). The findings are consistent with the research by [Paltridge & Starfield \(2019\)](#), [Yu et al. \(2019\)](#), and [Liu et al. \(2021\)](#), who have all emphasized that peer support and feedback enhances the quality of academic writing, including theses and dissertations.

The relationship between academic success and high grades and GPA has long been assumed to be true. This particular study set out to investigate the impact of an MA student's GPA on the quality of his or her thesis. While the quantitative data did not reveal a significant correlation between a higher GPA and the quality of a master's thesis, the qualitative data collected through the interviews showed that a considerable number of participants believed in the positive effect of a higher grade on the thesis quality. The findings are partially consistent with the studies conducted by [Hermann et al. \(2017\)](#) and [Salmisto et al. \(2017\)](#) who found that a deep, reflective, and organized approach to learning is more likely to be associated with higher academic success and GPA.

VI. CONCLUSIONS AND IMPLICATIONS

Due to involving numerous challenges, the composition of a master's thesis is a significant task for every student. Despite extensive research on the effects of writing approaches, self-efficacy, educational context, and GPA on academic success, few studies have examined the impact of these factors on the quality of thesis



writing. The results of this research indicated that writing approaches, self-efficacy, and the educational environment have significant effects on the quality of thesis composition. However, no significant relationship was found between students' GPA and the quality of their thesis composition. Students with higher self-efficacy produce higher-quality theses, and those who believe in their ability to write are more likely to produce better work. Similarly, the educational context of master's students, including feedback from supervisors, professors, and peers, their interest in the topic, and their familiarity with the thesis objectives and requirements, significantly affect the quality of their theses. In this study, although students believed that GPA had an impact on thesis writing, the researchers did not find a relationship between their GPA and thesis writing.

The findings from this study offer theoretical and practical insights into the factors influencing the quality of MA theses. Theoretically, the research extends Bandura's self-efficacy theory by illustrating its specific impact on complex academic tasks such as thesis writing. This shows the importance of self-efficacy in not only general academic performance but also in the successful completion of academic projects. Additionally, the study integrates various writing approaches into existing educational theories, highlighting how different methods of engagement, namely deep, surface, and organized approaches affect the quality of academic work. This integration suggests a need for a more detailed understanding of how students' writing strategies influence their academic outcomes. Furthermore, the significant role of the educational context in thesis quality emphasizes the necessity for contextual factors to be more prominently featured in learning theories.

Practically, the findings can guide improvements in curriculum design by incorporating targeted interventions to enhance self-efficacy and promote effective thesis writing strategies. Lecturers and curriculum designers can develop workshops and resources focused on thesis planning, critical thinking, and time management to better support graduate students. Faculty training programs can also benefit from including strategies to support student self-efficacy and guide them in adopting effective writing approaches. Additionally, universities should strive to create supportive educational environments that facilitate high-quality thesis production, including the establishment of writing centers, peer support groups, and access to research materials. Policymakers in higher education can use these findings to develop policies that enhance thesis writing skills and self-efficacy, such as mandatory courses on academic writing and research methodology.

Enhancing student support services, including mental health support and counseling, is also crucial for managing the stress associated with thesis writing. Furthermore, implementing continuous assessment and feedback systems will help students improve the quality of their work progressively. Addressing these factors and focusing on self-efficacy, writing approaches, and educational context benefit stakeholders to implement more effective strategies to support MA students and improve the overall quality of their theses.

VII. RECOMMENDATIONS FOR FURTHER STUDIES

Based on the findings and limitations of this study, several recommendations for further research emerge to deepen the understanding of the factors influencing the quality of MA theses and to address the existing gaps in the literature. Firstly, the sample size of 27 participants used in the study may limit the generalizability of the results. Exploring the subject across larger student populations would provide a more comprehensive view. This study focused on EFL MA students at Kerman Azad University. Investigating the impact of thesis writing approaches, self-efficacy, and educational context across different majors and universities could yield insights into how these elements vary by field and academic setting. Additionally, conducting longitudinal studies would be beneficial to track how thesis writing approaches and self-efficacy evolve over time and how these changes affect the quality of the thesis throughout the writing process.



A more detailed comparative analysis of the effectiveness of different writing approaches could further illuminate how each approach influences various aspects of thesis quality. This could lead to identifying best practices for each approach and refining thesis writing strategies. Furthermore, examining the impact of different supervisory styles and the quality of supervisor-student interactions could provide insights into how effective supervision contributes to thesis quality through better training and support by supervisors.

Another important area for future research is the role of institutional support structures, such as writing centers, peer support groups, and workshops, in enhancing thesis quality. Assessing how these resources are utilized and their effectiveness could help to develop robust support systems for students. Exploring additional psychological factors, such as motivation, stress, and resilience, and their impacts on thesis quality could also be valuable in developing targeted interventions to improve student outcomes.

Although this study found no definitive correlation between GPA and thesis quality, further research could explore potential indirect relationships or mediating variables that might influence this connection. Additionally, investigating the impact of technological tools and resources on thesis writing, including the use of writing software and digital collaboration tools, could shed light on their influence on thesis quality. Finally, examining how students' self-assessment of their own thesis writing approaches and self-efficacy align with actual thesis quality might reveal inconsistencies between self-perception and performance, highlighting areas where students may need additional support.

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APPENDICES

The HowULearn Questionnaire, formerly known as the Learn Questionnaire (Parpala & Lindblom-Ylänne, 2012).

Approaches to thesis writing	
Deep approach to thesis writing	<p>5. While doing my thesis, I often contemplated the ideas from multiple perspectives.</p> <p>6. I carefully looked for evidence to reach my own conclusions while doing my thesis.</p> <p>10. While writing my thesis, I tried to make use of different viewpoints on the subject matter as much as possible.</p> <p>11. In my thesis, I tried to form a coherent whole of its contents.</p> <p>2. I put a lot of effort into my thesis.</p>
Surface approach to thesis writing	<p>1. I had trouble forming a coherent whole of my thesis.</p> <p>3. Many themes related to the contents of my thesis remained disconnected from each other.</p> <p>7. The contents of my thesis were so complicated that I often had trouble understanding them.</p>
Organized approach to thesis writing	<p>4. On the whole, I worked on my thesis in an organized way.</p> <p>8. I organized the time reserved for my thesis carefully to make the best use of it.</p> <p>9. I made a schedule so that I could complete my thesis as planned.</p>
Self-efficacy for thesis writing	
Self-efficacy for thesis writing	<p>12. I believed that I would do well in my thesis.</p> <p>13. I was certain that I can understand even the most difficult contents related to my thesis.</p> <p>14. I was confident I can understand the concepts related to my thesis.</p> <p>15. I believed I would finish the thesis in due time.</p> <p>16. I was certain I can achieve the set requirements for the thesis well.</p>
Thesis as a teaching and learning environment	
Feedback & supervision	<p>25. I received enough feedback about my thesis from my supervisor.</p> <p>27. The feedback given on my work helped me to improve my thesis.</p> <p>28. The supervision I have received helped me to improve my thesis.</p> <p>29. The feedback given by my supervisor helped to clarify things I hadn't fully understood before.</p> <p>18. The supervision of my thesis supported the achievement of the set requirements.</p>
Thesis objectives and requirements (removed from analysis because only two items remained)	<p>17. It was clear to me what objectives have been set for the thesis in my school.</p> <p>26. The requirements set for the thesis in my school were clear to me.</p>
Interest and relevance	<p>19. Doing the thesis was meaningful for me.</p> <p>21. I found it very interesting to do my thesis.</p> <p>23. I enjoyed doing my thesis.</p>
Peer support	<p>20. I got support from other students for my thesis when needed.</p> <p>22. Talking with other students helped me to develop my understanding of the concepts related to my thesis.</p> <p>24. I worked comfortably with other students while working on my thesis.</p>