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## Development, Validation, and Application for a Bilingual Education Curriculum in Turkey

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### ABSTRACT

The right to education is one of the most essential rights ensured by international agreements. The right of mother tongue education is vital for a child to have equal access to education and derive benefits from that education as do other children. The literature has claimed that receiving bilingual education offers many benefits, such as preserving cultural and ethnic identity and the linguistic knowledge of minority groups, and helps in socialization so that minority group members are involved in the community. Therefore, a need exists to develop a bilingual education program for the benefit of the academic development and social life of minority communities. The purpose of this study is to investigate a bilingual education curriculum scale including certain parameters such as the views and attitudes towards bilingual education and curriculum development that may affect the development of a bilingual education curriculum in Turkey. The results indicated that "The Attitude Scale towards the Development of a Bilingual Education Curriculum (DBEC)" is a valid and reliable tool. The DBEC is a valid and reliable data collection tool for future studies on attitudes towards a bilingual education curriculum.

**Keywords:** DBEC, bilingual education, ethnic identity, curriculum

### INTRODUCTION

The literature has claimed that receiving bilingual education offers many benefits, such as preserving cultural and ethnic identity and the linguistic knowledge of minority groups, and helps in socialization so that minority group members are involved in the community (Cummins, 2000). Therefore, a need exists to develop a bilingual education program for the benefit of the academic development and social life of minority communities. Thus, this study investigated certain parameters such as the views and attitudes towards bilingual education and curriculum development that may affect the development of a bilingual education curriculum. Implementing a bilingual education program may allow all individuals who speak minority languages to prosper in their education and in their opportunities for job employment (Ozfidan, 2014). It will also allow for minority groups to continue strengthening their culture while participating in the greater culture.

This study is significant in its attempt to pave the way for the development of a bilingual education program in Turkey. When a bilingual education begins in Turkey, this education can contribute to the integration of minority people in the society in general (Ozfidan, Burlbaw, & Kuo, 2016). Such an education model will enable minorities to have better job opportunities, preserve their cultural identities, to be equal in front of the law, and to

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#### Contribution of this paper to the literature

- The study contributes to a deepening of the current debates about mother tongues based on an understanding and development of bilingual education, involving the use of minority languages in educational settings in Turkey.
- This study is significant in its attempt to pave the way for the development of a bilingual education program in Turkey.

express themselves more effectively (Ozfidan, & Burlbaw, 2016). Moreover, being bilingual means that students can understand the lesson content more effectively, leading to success in their education. When students receive education in their mother tongue, they can express their thoughts, ideas and feelings better in their classes. This, in turn, will give them the self-confidence they need to be successful in their courses. If students see that their mother tongue and culture are valued and vital, they will seek to retain their fluency in their mother tongue. When they become good writers and readers in their native language they can apply the same methods to reading and writing in the target language (Krashen, 2000).

Another significance of the study is that, if more information can be collected about how to develop a bilingual education program in Turkey, the results may help educators in Turkey gain a broader perspective on the establishment of a language education system as they address these questions in Turkey. Finally, the study will contribute to a deepening of the current debates about mother tongues based on an understanding and development of bilingual education, involving the use of minority languages in educational settings in Turkey.

The purpose of this study is to investigate a bilingual education curriculum scale including certain parameters such as the views and attitudes towards bilingual education and curriculum development that may affect the development of a bilingual education curriculum in Turkey.

The following questions are addressed:

- 1- What are the exploratory factor analysis results of The Attitude Scale towards the Development of a Bilingual Education Curriculum (DBEC)?
- 2- What are the confirmatory factor analysis results of the DBEC?

## METHODS

The DBEC was aimed at identifying what the participants believed to be the main reasons for the development of a bilingual education program in Turkey. A snowball sample procedure was used to collect data for the DBEC. Summative scale scores were calculated, and Exploratory Factor Analysis was used to analyze the scales. Data were gathered through administering a survey by snowball sampling. The DBEC included 5 demographic questions and 57 questions that were ranked on a 5-point Likert-like scale. All data gathered through this scale (Appendix A) were quantified and placed into tables.

The purpose of the factor analysis was to examine the structure of the DBEC underlying the perception of a bilingual education curriculum in Turkey. Because the study contained many variables that were grouped into a smaller number of factors, factor analysis was used to group variables with similar characteristics. According to Isaac and Michael (1997), factor analysis "is a statistical procedure that affords an explanation of how the variance common to several inter-correlated measures can be accounted for in terms of a smaller number of dimensions with which the variables are correlated" (p. 212). Clusters and outliers were used to identify the factors. This analysis, according to Borg and Gall (1989), contributes

*An empirical basis for reducing the many variables to a few factors by combining variables that are moderately or highly correlated with each other. Each set of variables that is combined forms a factor, which is a mathematical expression to the common element that cuts across the combined variables (p. 621).*

The first step for factor analysis in this study was a correlation matrix generated for all variables. To select the factors from the variable data, the maximum likelihood estimation procedure was used. Kaiser's rule, which requires that a given factor can explain at least the equivalent of one variable's variance, was used to decide which factors were most appropriate for interpretation. According to Isaac and Michael, "Kaiser's rule is not unreasonable given that factor analysis has as its objective reducing several variables into fewer factors" (p. 215).

### Participants

The DBEC were prepared based on quantitative measures. A survey link was sent to more than 1000 people and 140 participants responded. Participants included 96 males and 44 females. In accordance with the IRB (Institutional Review Board) guidelines of Texas A&M University (reference #043138) (Appendix B), the participations were voluntary, and they could drop out at any phase of the study if they did not want to continue.

### Reliability and Validity

Cronbach's alpha was used to analyze "The Attitude Scale towards the Development of a Bilingual Education Curriculum" (DBEC) for reliability. Because factor analysis was used, Cronbach's alpha scores were created while running the data on SPSS. **Table 1** indicates that the Cronbach's alpha internal consistency measure was found to be high across all 57 items ( $\alpha = .98$ ). For Cronbach's alpha, a minimum value of .70 is considered acceptable (Nunnally, 1978). Hence, the DBEC scale was reliable.

**Table 1.** Reliability statistics

Cronbach's alpha	N of Items
.984	57

Likewise, academicians who are experts in the field of bilingual education in Turkey and the United States reviewed the questionnaires for content/face validity. The results for validity in the DBEC scale indicated a statistically significant correlation. The correlation ( $r_s = .520$ ,  $p = .000$ ) can be considered to be a moderate/medium correlation (.40 -.60). (See Laerd Statistics, n.d.) Therefore, the DBEC was found to have content validity.

## FINDINGS

Factor analysis examined variables that were studied measure the same underlying construct. This analysis determined which variables were associated with each other and then sorts them mathematically into groups called factors. There are two types of factor analysis normally used in this type of exploratory research: Principal Axis Factoring and Principal Component Analysis (Browne, & Cudeck, 1989). The method of factor analysis that was used in this study was called Principal Component Analysis; Principal Component Analysis lets a researcher create or simply a measurement scale into various components. That is because principal components analysis finds optimal ways of combining variables into a small number of subsets (Factor Analysis versus PCA, n.d.). Additionally, PCA is designed to account for all the variance including those found in the correlation coefficients and error variance.

However, before data was analyzed using factor analysis, five assumptions were met. These include: multiple variables that were measured at a continuous level, a linear relationship between the variables, sampling adequacy, suitability for data reduction, and no significant outliers. With respect to this data set, the assumptions that need to be tested for include suitability for data reduction, which is measured by correlation, and sampling adequacy, which is measured by the Kaiser-Meyer-Olkin Test (KMO) and Bartlett's Test (Laerd Statistics, n.d.).

### Preliminary Analysis

A correlation matrix was used to check the relationships for patterns. First, the significant values were determined, and the results found that virtually all values were less than 0.05. Second, correlation coefficients were determined, and all of them were less than 0.9. The determinant value of these data was 0.0003010, which was

higher than the required cutoff value of 0.00001. Thus, multicollinearity was not an issue for this study. None of the correlation coefficients were predominantly large, and all items in the DBEC correlated fairly well; therefore, no need existed to remove any items/questions from the analysis.

### KMO and Bartlett's Test

The Kaiser-Meyer-Olkin (KMO) test is used to indicate sampling adequacy, which is an assumption that must be met in determining the appropriateness of using factor analysis, and values can range between 0 and 1 (Ballesteros, 2003). The KMO test can be used to determine the overall sampling adequacy of the sample or to measure each individual variable (Anderson, & Gerbing, 1984). In this study, the overall sampling adequacy was tested for factor analysis.

Several guidelines exist for interpreting the results. Jolliffe's (2002) guideline for interpreting the test said that a "value of 0 shows the sum of partial correlations is large relative to the sum of correlations, which indicate diffusion in the correlations pattern; therefore, factor analysis is probably inappropriate" (p. 213). He also stated that "if the value is close to 1, patterns of correlations are quite compact and factor analysis indicates different and reliable factors" (p. 213). Kaiser (1974) created more precise guidelines for interpretation. He asserted that if the values were higher than 0.5 they were acceptable. Furthermore, he said that values between 0.5 and 0.7 should be considered mediocre, values between 0.7 and 0.8 should be considered good, values between 0.8 and 0.9 should be considered great, and values of more than 0.9 should be considered superb (Hutcheson & Sofroniou, 1999, p. 226-227). This study used Kaiser's interpretation; the value for this study was 0.93, which falls into the range of superb. Thus, these data are appropriate for factor analysis.

Additionally, Bartlett's test is used to test if a sample comes from populations with equal variances and if the variables have enough variation to be separated into components. This variation is called homoscedasticity, which is a necessary condition for factor analysis. According to Hutcheson and Sofroniou (1999), "a significant test tells us that the R-matrix is not an identity matrix; therefore, there are some relationships between the variables we hope to include in the analysis" (p. 228). For this study, **Table 2** indicates that Bartlett's test was significant at  $p < 0.001$ ; hence, factor analysis was appropriate for this study.

**Table 2.** KMO and Bartlett's Test

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</b>		.926
<b>Bartlett's Test of Sphericity</b>	df	7044.687
	Sig.	.000

### Factor Extraction

Typically, four approaches are used. These include: 1) select the factors with eigenvalues of 1.00 or higher, 2) examining the scree plot of eigenvalues plotted against the factor numbers, 3) increasing the numbers of factors and stopping when all non-trivial variance is accounted for, 4) and using the number of factors that the theory being used would predict (Gorsuch, 1983).

In factor analysis, eigenvalues are used to condense the variance in a correlation matrix. "The factor with the largest eigenvalue has the most variance and so on, down to factors with small or negative eigenvalues that are usually omitted from solutions" (Tabachnick & Fidell, 1996, p. 646). Traditionally, only variables with eigenvalues of 1.00 or higher are considered worth analyzing (see Gorsuch, 1983, pp. 164-171).

All eigenvalues that were related with every liner factor were determined before extraction, after extraction, and after rotation in this study. SPSS has found 57 linear factors in the data set before extraction. The eigenvalues related with each factor signify the variance explained by that particular liner component. "The factor with the largest eigenvalue has the most variance and so on, down to factors with small or negative eigenvalues that are usually omitted from solutions" (Tabachnick & Fidell, 1996, p. 646). See **Table 3** below.

**Table 3.** Communalities

Question	Initial	Extraction	Question	Initial	Extraction
1	1.000	.743	30	1.000	.604
2	1.000	.746	31	1.000	.600
3	1.000	.760	32	1.000	.610
4	1.000	.614	33	1.000	.675
5	1.000	.600	34	1.000	.677
6	1.000	.588	35	1.000	.622
7	1.000	.655	36	1.000	.603
8	1.000	.593	37	1.000	.744
9	1.000	.659	38	1.000	.565
10	1.000	.598	39	1.000	.515
11	1.000	.680	40	1.000	.617
12	1.000	.665	41	1.000	.632
13	1.000	.638	42	1.000	.534
14	1.000	.536	43	1.000	.632
15	1.000	.608	44	1.000	.591
16	1.000	.622	45	1.000	.684
17	1.000	.621	46	1.000	.648
18	1.000	.627	47	1.000	.703
19	1.000	.659	48	1.000	.679
20	1.000	.577	49	1.000	.721
21	1.000	.579	50	1.000	.720
22	1.000	.660	51	1.000	.698
23	1.000	.583	52	1.000	.640
24	1.000	.593	53	1.000	.625
25	1.000	.715	54	1.000	.686
26	1.000	.604	55	1.000	.716
27	1.000	.599	56	1.000	.766
28	1.000	.614	57	1.000	.550
29	1.000	.583			

Because one assumption was this study was that the factors might be correlated, oblique rotation was used. The result of this rotation was that factor 1 was found to explain about 52.01% of total variance. The first few factors indicated a large amount of variance (particularly the first factor). SPSS extracted all factors with eigenvalues that were larger than 1, and five factors resulted.

Rotation influences the structure of the factors, and one consequence for these data is that relative importance of the five factors is matched. Before performing factor rotation, factor 1 explained considerable more variance than the remaining four (52.01%) compared to 4.06%, 2.92%, 2.49%, and 2.25%; however, after extraction, factor 1 explained 14.756 % of the variance compared to 12.77 %, 12,69 %, 12,56 %, 11.04 % for the other four factors.

Before and after extraction of communalities were run in SPSS. Principal component analysis was used, and all variance on the initial assumption was common; therefore, the communalities were all 1 before extraction. The communalities on the extraction assumption reflected the common variance in the structure of the data. The variance associated with item 1, which was 74.3 % was common variance.

Five factors were extracted using Kaiser's criterion. This criterion is accurate because the average of the communalities was greater than 0.6, and communalities were also greater than 0.7 after extractions. The average of the communities, after added them all of them up, was 0.65.

Figure 1 indicates that a scree plot was also used that indicated the point of inflexion on the curve, and the curve started to tail off after four factors; a drop after four factors before a stable plateau was reached. All factors with eigenvalues above 1 because communalities were also greater than 0.7 after extraction, and the average of the communalities was greater than 0.6. See Table 4.

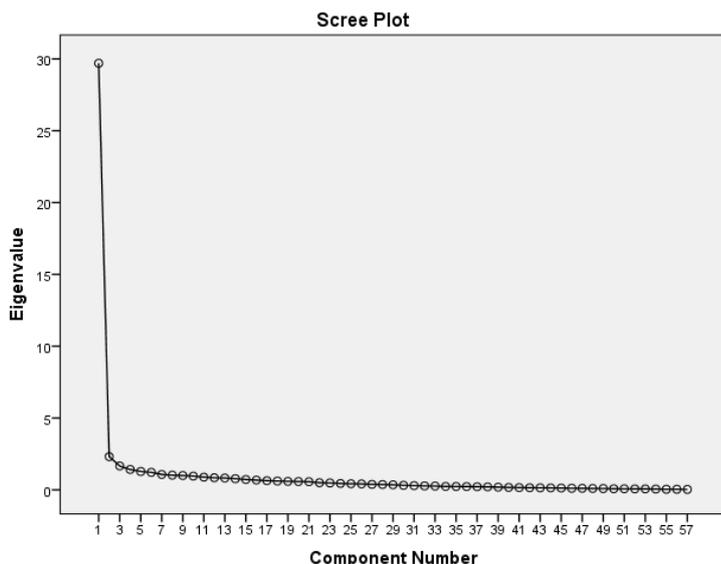


Figure 1. Scree plot for data that underlying factors

Oblique rotation was used because factors were related to each other. To identify common themes, the content of the questions, which loaded onto the same factor, were examined. This analysis revealed that common themes existed among highly loading questions, which helped in recognizing content. The first highly loaded factor concerned a perspective on bilingual education. Therefore, this factor was labeled “beliefs about bilingual education in Turkey.” The second highly loaded factor was related to the benefits of using a bilingual education program; therefore, this factor was labeled “benefits of bilingual education.” The third highly loaded factor was related to how bilingual education is useful in an academic environment; therefore, this factor was labeled “academic value of bilingual education.” The fourth highly loaded factor was about the relationship of the mother tongue to bilingual education; therefore, this factor was labeled the “right of knowing and using mother tongue.” The fifth highly loaded factor was about curricular issues; therefore, this factor was labeled “curriculum related issues.” Thus, this analysis indicated that the questionnaire included five sub-scales: 1) beliefs about the value of bilingual education in Turkey, 2) the benefits of bilingual education, 3) the academic value of bilingual education, 4) the right of knowing and using mother tongue, and 5) curriculum-related issues. Taken as a whole, the sub-scales indicated that respondents believed that a bilingual education program would conserve the cultural heritage, linguistic knowledge, religious, and ethnic identity of minority peoples in Turkey. They strongly believed that such a program would increase the educational success of minority students, promote peace between different ethnic groups, and provide equality in education. A bilingual education program would build strong relationship between different ethnic groups. A mother language is an inseparable element of someone’s culture, and everyone has the right to learn his or her mother tongue according to the respondents.

**Table 4.** Rotated Component Matrix

Question	1	2	3	4	5
1	.755				
2	.761				
3	.618				
4	.491				
5	.641				
6	.604				
7	.639				
8	.565				
9	.524		.504		
10	.478				
11	.511				
12	.529				
13	.510				
14		.480			
15		.487			
16		.532			
17		.459			
18		.506			
19		.601			
20		.450			.434
21		.374			
22		.454			
23		.467			
24		.602			
25		.568			
26		.493			
27			.613		
28			.588		
29			.466		
30			.465		
31			.539		
32			.517		
33			.623		
34			.500		
35			.477		
36			.426		
37			.620		.520
38			.465		
39			.473		
40				.664	
41				.647	
42				.474	
43				.496	
44				.557	
45		.464		.474	
46				.462	
47					.601
48					.560
49					.609
50					.722
51					.631
52					.545
53					.643
54					.633
55					.669
56					.632
57					.422

## DISCUSSION AND CONCLUSION

Five factors were extracted according to Kaiser’s criterion. Each factor represented a different sub-topic related to the development of a bilingual education program in Turkey. The first factor was related to the thoughts of the respondents about the development of a bilingual education program in Turkey. The second factor was concerned with the benefits of using a bilingual education program for minority populations. The third factor was related to how bilingual education would be useful in an academic environment, which is important for the future careers of minority children. The fourth factor was concerned with mother tongue and bilingual education. This factor was related to the rights of learning a mother tongue, which many believe is a human right (UNESCO, 2003). The last factor was about curricular issues. This factor represented what should be involved in a bilingual education curriculum. Overall, this factor analysis represented each subscale and related topics in these subscales, and how the instrument is relevant to this study.

Each factor extracted from the analysis was also discussed in terms of a descriptive analysis. The first factor was labelled “beliefs of bilingual education in Turkey.” This factor showed that respondents believed that minority students who are taught by means of a bilingual education program could protect their linguistic knowledge, cultural heritage, ethnic, and religious identity; additionally, other benefits that would be seek include an increased understanding of language and cultural variety, and school attendance at the primary school level. If minority

people are educated under a bilingual education program, respondents believed that such as program might also bring balance among the ethnic structures by preserving linguistic and cultural diversity and helping to reduce ethnic conflicts and integrating people into society at large. The respondents perceived that a bilingual education program in Turkey would have an affirmative influence on minority groups and might increase intergroup understanding.

The second factor was labelled "benefits of bilingual education." This factor reflected that respondents believed that a bilingual program for minority students could provide language skills and improve employment skills for minority groups. This program, according to the respondents, could increase the educational success of minority students, bring peace into the society, and provide equality in education. Via a bilingual education program, minority students could have equal access to education. Respondents believed that, if these students were allowed to be educated in their mother tongue, the result would be helping to solve social conflicts between different ethnic groups, and these students would psychologically feel more comfortable. Therefore, according to the respondents, the government should support bilingual education programs. Children who have a good knowledge of their mother tongue have been seen to improve their literacy skills in the majority language (Baker, 2000; Skutnabb-Kangas, 2000). Developing bilingual education has been seen to improve not only the mother tongue in the school, but also student aptitudes in the language that the majorities speak (Aydin, & Ozfidan, 2014; Cummins, 2000).

The third factor was labelled "academic value of bilingual education." Respondents believed that minority students whose Turkish language is not good usually do not continue their education. Integrating the language courses of these students into their education might help them be successful in their education and reinforce their ethnic identity. Respondents also believed that minority students were losing their mother tongue because they are only being taught in a language other than their mother tongue. Respondents believed that students who are taught in a bilingual education program would become more fluent and confident in their second language for their academic purposes. Respondents also felt that bilingual education would help build stronger relationships between different ethnic groups and have a positive effect on all the academic achievement of minority students. Bilingual education also brings socio-economic equalities and opportunities for equal access to education. In academic content courses, students should be taught in their mother tongue while they study their second language (dominant language) (Krashen, 2000). This process would enable these students to learn such subjects as math, science, and history while developing their language capabilities.

The fourth factor was "right of knowing and using mother tongue." Respondents believed that someone's mother language was an inseparable element of his or her culture and that everyone has the right to learn his or her mother tongue. In this study, respondents said that speaking or learning a mother tongue should not be prohibited; on the contrary, learning a mother should be encouraged. Speaking the mother tongue in school was also seen as a way to increase self-confidence and thinking skills and provide speech freedom. This is vital. According to UNESCO's (1974) reports, the most realistic way to eliminate discrimination between majority and minority students when they begin school is to use their mother tongue in education within a bilingual education model.

The fifth factor was labelled "curriculum-related issues." Respondents believed that a bilingual education curriculum was necessary for the education system in Turkey because the population of minority peoples is quite large (approximately 30 %). Respondents also believed that a bilingual education program in Turkey should focus on speaking, listening, writing, reading, and on the development of vocabulary. Universities should open language teacher training departments for teachers who are going to teach in two languages. Teachers who are going to teach in two languages should demonstrate their proficiency in both languages before they can teach in bilingual classrooms, and materials used in schools should be available in both languages. Respondents also believed that bilingual education programs developed in other countries should be examined for possible use in Turkey. In doing so, the challenges that other countries faced could be examined, and, therefore, a Turkish bilingual program could develop solutions to potential stumbling blocks beforehand. In this way, Turkey might avoid time-taking false

starts and errors and move forward more quickly. Perhaps bilingual educational systems like the Basque program in Spain and French immersion program in Canada could provide useful elements upon which Turkey could draw.

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APPENDIX A

IRB Outcome Letter

DIVISION OF RESEARCH



**DATE:** September 21, 2016

**MEMORANDUM**

**TO:** Lynn M Burlbaw  
TAMU - College Of Education & Human Dev - Teaching, Learning And Culture

**FROM:** Dr. David Martin  
Chair, TAMU IRB

**SUBJECT:** Expedited Approval – Reference #043138

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**Study Number:** IRB2016-0601

**Title:** Investigation of Parameters Affecting the Development of a Bilingual Education Curriculum in Turkey

**Date of Determination:**

**Approval Date:** 09/21/2016

**Continuing Review Due:** 08/15/2017

**Expiration Date:** 09/15/2017

**Documents Reviewed and Approved:**

Only IRB-stamped approved versions of study materials (e.g., consent forms, recruitment materials, and questionnaires) can be distributed to human participants. Please log into IRIS to download the stamped, approved version of all study materials. If you are unable to locate the stamped version in IRIS, please contact the IRIS Support Team at 979.845.4969 or the IRB liaison assigned to your area.

Submission Components			
Study Document			
Title	Version Number	Version Date	Outcome
Survey Questions	Version 1.1	08/17/2016	Approved
Interview Questions	Version 1.1	08/17/2016	Approved
Study Consent Form			
Title	Version Number	Version Date	Outcome
consent form for interview	Version 1.2	08/17/2016	Approved
consent form for survey instrument	Version 1.3	08/17/2016	Approved

**Document of Consent:** Written consent in accordance with 45 CF 46.116/ 21 CFR 50.27  
Waiver approved under 45 CFR 46.117 (c) 1 or 2/ 21 CFR 56.109 (c)1

**Waiver of Consent:**

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<http://rcb.tamu.edu>

- Comments:**
- This study has been approved for 200 participants.
  - This IRB study application has been reviewed and approved by the IRB. Research may begin on the approval date stated above.
  - Research is to be conducted according to the study application approved by the IRB prior to implementation.
  - Any future correspondence should include the IRB study number and the study title.

Investigators assume the following responsibilities:

1. **Continuing Review:** The study must be renewed by the expiration date in order to continue with the research. A Continuing Review application along with required documents must be submitted by the continuing review deadline. Failure to do so may result in processing delays, study expiration, and/or loss of funding.
2. **Completion Report:** Upon completion of the research study (including data collection and analysis), a Completion Report must be submitted to the IRB.
3. **Unanticipated Problems and Adverse Events:** Unanticipated problems and adverse events must be reported to the IRB immediately.
4. **Reports of Potential Non-compliance:** Potential non-compliance, including deviations from protocol and violations, must be reported to the IRB office immediately.
5. **Amendments:** Changes to the protocol and/or study documents must be requested by submitting an Amendment to the IRB for review. The Amendment must be approved by the IRB before being implemented.
6. **Consent Forms:** When using a consent form or information sheet, the IRB stamped approved version must be used. Please log into IRIS to download the stamped approved version of the consenting instruments. If you are unable to locate the stamped version in IRIS, please contact the IRIS Support Team at 979.845.4969 or the IRB liaison assigned to your area. Human participants are to receive a copy of the consent document, if appropriate.
7. **Post Approval Monitoring:** Expedited and full board studies may be subject to post approval monitoring. During the life of the study, please review and document study progress using the PI self-assessment found on the RCB website as a method of preparation for the potential review. Investigators are responsible for maintaining complete and accurate study records and making them available for post approval monitoring. Investigators are encouraged to request a pre-initiation site visit with the Post Approval Monitor. These visits are designed to help ensure that all necessary documents are approved and in order prior to initiating the study and to help investigators maintain compliance.
8. **Recruitment:** All approved recruitment materials will be stamped electronically by the HRPP staff and available for download from IRIS. These IRB-stamped approved documents from IRIS must be used for recruitment. For materials that are distributed to potential participants electronically and for which you can only feasibly use the approved text rather than the stamped document, the study's IRB Study Number, approval date, and expiration dates must be included in the following format: TAMU IRB#20XX-XXXX Approved: XX/XX/XXXX Expiration Date: XX/XX/XXXX.
9. **FERPA and PPRA:** Investigators conducting research with students must have appropriate approvals from the FERPA administrator at the institution where the research will be conducted in accordance with the Family Education Rights and Privacy Act (FERPA). The Protection of Pupil Rights Amendment (PPRA) protects the rights of parents in students ensuring that written parental consent is required for participation in surveys, analysis, or evaluation that ask questions falling into categories of protected information.
10. **Food:** Any use of food in the conduct of human research must follow Texas A&M University Standard Administrative Procedure 24.01.01.M4.02.
11. **Payments:** Any use of payments to human research participants must follow Texas A&M University Standard Administrative Procedure 21.01.99.M0.03.
12. **Records Retention:** Federal Regulations require records be retained for at least 3 years. Records of a study that collects protected health information are required to be retained for at least 6 years. Some sponsors require extended records retention. Texas A&M University rule 15.99.03.M1.03 Responsible Stewardship of Research Data requires that research records be retained on Texas A&M property.