



ED504 Research Project Outline

There are three parts to Stage 1 of the Research Proposal, which is the final product generated in the ED504 course. The purpose of the outline is to help candidates solidify a topic and approach to a research project for addressing an existing problem in the environment of their field of study. The problem must be identified and supported by existing data and should be applicable to the candidate's field of study (i.e., library media, counseling, teaching).

*Remember, this is an outline. You need to provide sufficient detail to inform your instructor, but responses are not fully fleshed out. The complete details are provided in the Research Proposal and not here in the outline. To provide better guidance, responses to questions in the outline should **not exceed one paragraph**.*

Part 1 Data Gathering/Analysis

Gather data previously collected at the classroom, school, or district level to justify the identification of a topic for study.

OBJECTIVE: Identifying and analyzing a problem or weakness currently found in candidate's field of study for the purpose of completing the Research Proposal assignment. Remember, the Research Proposal is a proposal for an **experimental** research design.

RESPOND TO THE FOLLOWING PROMPTS:

1. Identify the problem that you wish to research and write a problem statement. (i.e., The problem this study will address is poor student academic achievement.) (Chapter 1)
The main problem is that safety strategies and drills need to be planned out or researched by new employees. These practices are observed to have been forgotten due to the onset of the pandemic.
2. Identify your hypothesis. (Chapter 1)
Safety strategies and drives are necessary in order to make employees well-prepared to face any type of emergency or disaster.
3. Elaborate on how you determined this was a problem and write a purpose statement based on your problem statement. (i.e., The purpose of this study is to evaluate the impact of socioeconomic status on student academic achievement.)

The purpose of this study is to evaluate the current status of the employees regarding their knowledge and practice of safety drills. Workplace safety drills are helpful in preparing employees for civil cases of emergency. However, considering the current situation, new employees are unaware of safety drills which can create several issues and problems in case of emergency. The majority of the new employees are unaware of even basic principles and strategies of safety drills which can be problematic in case of any serious emergency.

4. Construct a graphical representation that allows for easy analysis of your compiled data that highlights your problem. Identify the source of the data and discuss its credibility. Examples of existing data might include school district test scores, absenteeism reports, graduation rates, cost, ranks, divorce rates, living habits, etc.

Table 6. Means and standard deviations (SD) of student familiarity with SRP-X annexes by time with One-Way ANOVA statistics and post hoc analyses (N = 10,926).

Statement	T1 (n = 4,563)	T2 (n = 3,091)	T3 (n = 3,272)	F	Post hoc analyses (Scheffé)
I know what to do during a lockout.	3.54 (1.295)	3.69 (1.249)	4.04 (1.058)	26.352***	T1 < T3, T1 < T2, T2 < T3
I know what to do during a lockdown.	4.11 (1.046)	4.16 (.994)	4.27 (.890)	157.673***	T1 < T3, T1 < T2, T2 < T3
I know what to do if told to evacuate.	4.08 (1.036)	4.07 (1.046)	4.14 (.965)	4.623***	T1 < T3, T2 < T3
I know what to do if told to shelter in place.	3.65 (1.232)	3.75 (1.199)	3.94 (1.082)	57.556***	T1 < T3, T1 < T2, T2 < T3
I know what to do if told to hold in place.	3.89 (1.145)	3.98 (1.109)	4.14 (.980)	48.368***	T1 < T3, T1 < T2, T2 < T3

T1 = Pretest Survey; T2 = Post-Drill Survey; T3 = Post-Training/Drill Survey.

*p <.05, **p <.01, ***p <.001.

Table 7. Means and standard deviations (SD) of faculty/staff/administrator familiarity with SRP-X annexes by time with One-Way ANOVA statistics and post hoc analyses (N = 3,000).

Statement	T1 (n = 999)	T2 (n = 990)	T3 (n = 1,011)	F	Post hoc analyses (Scheffé)
I know what to do during a lockout.	3.85 (1.074)	3.91 (1.012)	4.23 (.799)	43.167***	T1 < T3, T2 < T3
I know what to do during a lockdown.	4.23 (.778)	4.27 (.719)	4.36 (.667)	8.674***	T1 < T3, T2 < T3
I know what to do if told to evacuate.	4.08 (.904)	4.06 (.877)	4.21 (.798)	8.038***	T1 < T3, T2 < T3
I know what to do if told to shelter in place.	4.05 (.932)	4.04 (.913)	4.23 (.783)	14.895***	T1 < T3, T2 < T3
I know what to do if told to hold in place.	4.02 (.969)	4.03 (.944)	4.27 (.760)	24.335***	T1 < T3, T2 < T3

T1 = Pretest Survey; T2 = Post-Drill Survey; T3 = Post-Training/Drill Survey.

*** p <.001.

Schildkraut & Nickerson (2020)



5. Discuss the data in your graphical representation to confirm that a problem or weakness can be addressed that is appropriate to the scope of the required program.

The graphical representation shows that the majority of the new employees do not understand and know the importance of safety drills. The responses show that the majority of people, especially in the new category or unaware of the basic requirements of safety drills. Only a few of the new employees are aware of the basic requirements of safety drills. However, the majority of the older employees are aware of the basic requirement of safety drills. It is necessary to equip the employees with basic knowledge and training regarding safety drills in order to cope with any emergency situation.

6. Connect the problem or weakness to trends or patterns represented in your data.

Research depicts that the majority of people need to be made aware of the importance and basic knowledge regarding safety drills which is also evident from the data shown above. The main reasons can include a lack of appropriate knowledge, lack of interaction and lack of interest due to prolonged periods of prolonged lockdown. There also needed to be more training sessions that could help the employees or other people to gain knowledge and practice of safety drills that are necessary to deal with emergency situations.

Part 2 Literature Review

You will conduct a literature review following APA format (most recent published edition) and become familiar with the scholarly debate surrounding your topic and what scholars and practitioners say about the best way to address the particular need or problem identified through the data analysis.

OBJECTIVE: Reviewing and writing a Review of Literature on your chosen topic for the purpose of completing UWA's Research Proposal assignment.

RESPOND TO THE FOLLOWING PROMPTS:

1. Provide a developed statement of the research problem that demonstrates a sound and focused understanding of the identified problem.

It has been observed that the majority of the new employees need to be made aware of basic knowledge regarding the need and requirement of safety drills and other safety strategies at the workplace. Non-awareness and lack of knowledge regarding safety strategies and safety rules at the workplace can make the employees incapable of dealing with emergency situations. Therefore, this research is aimed at understanding the needs and requirements of workplace safety strategies.

2. Identify best practice(s) that will be used to address the problem or weakness. This should be a theorist or theory that is known and documented in the research literature.

There is a need to recognize the importance of a safety attitude among the employees in order to improve the overall safety of the employees. This research will include the theory presented by Loosemore & Malouf (2019), which is based on the work of Steers, who defined the attitude as "A predisposition to respond in a favourable or unfavourable way to objects or persons in one's environment." Attitudes play an important role in determining and directing the behaviour of individuals. It has been observed that the attitude of the worker towards safety is a determinant of the safe behaviour of the individual in the workplace. Acceptance and adherence to formal workplace instructions and other formal practices not only help the individual to become aware of safety drills but also helps the organization to maintain the practice.

3. Describe and justify a trend/theory that will be used to validate the use of the identified best practice(s) and clearly highlight the connection with the identified trend/theory to address the problem.

Odeyemi & Ajisegiri (2013) has stated that safety and its basic requirements must be exercised within the workplace as the people working within and outside the organisation spend the majority of their time at their workplace. In order to make their workplaces more secure and safe, it is necessary to spread awareness and train the employees to deal with emergency

situations. For example, in the construction industry, the majority of the employees work at construction sites; therefore, it is necessary for them to gain ample knowledge regarding safety measures and safety drills in order to deal with any emergency situation that can occur at the site. Breslin et al. (2017) that at construction sites, the majority of the employees do not consider safety training as an essential element because they consider injuries or any emergency situation a part of their job. Therefore, it is necessary to consider and shape the attitude of the employees in order to convince the employees to actively take part in safety training.

4. Provide reference listings (in APA format) for a minimum of 10 sources (largely representative of the most recent five years) you will use to describe/justify the best practice and/or theory identified. Be sure to include only sources that show clear connections with the best practice(s) and/or theory/trend identified as viable responses to the problem/weakness presented.

Schildkraut, J., & Nickerson, A. B. (2020). Ready to respond: Effects of lockdown drills and training on school emergency preparedness. *Victims & Offenders*, 15(5), 619-638. <https://doi.org/10.1080/15564886.2020.1749199>

Loosemore, M., & Malouf, N. (2019). Safety training and positive safety attitude formation in the Australian construction industry. *Safety science*, 113, 233-243. <https://doi.org/10.1016/j.ssci.2018.11.029>

Odewumi, S., & Ajisegiri, M. (2013). An appraisal of environmental health & safety management in the workplace (a study of continental shipyard limited). *Asian journal of natural and applied sciences*, 2(2), 145-158.

Breslin, F. C., Polzer, J., MacEachen, E., Morrongiello, B., & Shannon, H. (2007). Workplace injury or “part of the job”? Towards a gendered understanding of injuries and complaints among young workers. *Social Science & Medicine*, 64(4), 782-793. <https://doi.org/10.1016/j.socscimed.2006.10.024>

Islam, M. S., & Islam, T. (2017). Safety in Workplace and Its Effect on Labor Productivity: A Case Study for Pharmaceutical Industry. In *Rajshahi: International Conference on Mechanical, Industrial and Materials Engineering (ICMIME2017)*.

Hosseini, K. A., & Izadkhah, Y. O. (2020). From “Earthquake and safety” school drills to “safe school-resilient communities”: A continuous attempt for promoting community-based disaster risk management in Iran. *International journal of disaster risk reduction*, 45, 101512. <https://doi.org/10.1016/j.ijdrr.2020.101512>

Tetzlaff, E. J., Goggins, K. A., Pegoraro, A. L., Dorman, S. C., Pakalnis, V., & Eger, T. R. (2021). Safety culture: a retrospective analysis of occupational health and safety mining reports. *Safety and health at work*, 12(2), 201-208. <https://doi.org/10.1016/j.shaw.2020.12.001>

Ahmad, I., Balkhyour, M. A., Abokhashabah, T. M., Ismail, I. M., & Rehan, M. (2017). Workplace safety and health conditions and facilities in small industries in Jeddah, Saudi Arabia. *Journal of safety studies*, 3(1), 37-52. <https://doi.org/10.5296/jss.v3i1.11104>

Symanski, E., Han, H. A., Han, I., McDaniel, M., Whitworth, K. W., McCurdy, S., ... & James, D. (2022). Responding to natural and industrial disasters: partnerships and lessons learned. *Disaster medicine and public health preparedness*, 16(3), 885-888. . <https://doi.org/10.1017/dmp.2020.467>

Zhu, R., Lin, J., Becerik-Gerber, B., & Li, N. (2020). Human-building-emergency interactions and their impact on emergency response performance: A review of the state of the art. *Safety science*, 127, 104691. <https://doi.org/10.1016/j.ssci.2020.104691>

5. Provide a summary of the literature and how it justifies the need for the study. You are synthesizing your collection of sources into a brief 1-2 paragraph summary. Do **NOT** describe the specific studies included in your sources. During the literature review, the data regarding the behaviour of the employees towards safety training and drill, the impact of emergency situations and the association with safety training and drills were commonly observed. It also included case studies of different countries where the positive consequences of safety drills were analysed as it can help in convincing the employees to actively participate in safety training so that they can better cope with any emergency situation. The literature is also focused on the response to natural disasters and emergency situations.

Part 3 Methodology/Action Plan

You will write a measurable and executable action plan on your chosen topic for the purpose of completing UWA's Research Proposal assignment. The action plan must be APA formatted (most recently published edition). Collaborative resources must be included, and each category in the grading rubric must be addressed. Evidence of collaboration with appropriate stakeholders is required.

OBJECTIVE: Writing a measurable and executable action plan on an identified topic for the purpose of completing UWA's Research Proposal assignment.

RESPOND TO THE FOLLOWING PROMPTS:

1. Identify the population and provide a description of the participant sample and the sampling technique.
The population will include both male and female participants with different ages ranging from 18 to 40 years old. The focus of selecting the participants will include both old and new employees who are associated with safety training and safety drills in order to better understand the existing knowledge and safety practices among the participants. A random sampling technique will be used in order to select the participants, where the participants will be asked to fulfil the question here, which will be based on the questions regarding safety training and safety drill. A total of 100 participants will be selected.
2. Justify the sampling technique and the sample chosen.
The research will include a quantitative research design which will be aimed at the administration of the questionnaire. The questionnaire will be distributed among the participants, where they will be briefed about the main objective of the research. The questionnaire will include questions related to the need for safety drills along with the existing knowledge of the employees regarding safety measurements, training and knowledge. The participants will depend on new and old workers, and the participants will be selected from simple random sampling techniques. A simple random sampling technique will be employed in the research in order to remove the probability of biased selection and to ensure that every member of the population has an equal opportunity to be chosen as a participant.
3. Describe the role of all participants and the plan to prevent harm to them, including the plan for protecting student confidentiality and data.
The participants will be asked to complete the questionnaire, which will include questions regarding their existing knowledge and safety practices. The participants will be provided with the concerned form where all the main objectives of the research will be provided in order to make them aware of the purpose of the research before the administration of the questionnaire. The participants will also be made sure that they can withdraw from the research at any time they need without informing the researcher regarding the issue or problem. In order to protect their identity and personal information, the participants will only be asked to reveal their gender and age. No other information will be recorded. The overall data will be saved and accessible to the researcher and relevant authorities. Other than that, no authority will be provided, and access to the personal information and data of the participants will be in order to ensure anonymity and confidentiality data.
4. Provide a description of steps and sequence of steps required to complete a successful study.
First of all, it will be developed, which will be completed by analysing the literature and the objectives of the study. After that, the participants will be asked about their willingness to participate in the study. After the confirmation, each participant will be provided with informed consent which will inform them about the purpose, aim and objectives of the research.

The questionnaire for both old and new employees will remain the same so that their existing knowledge can be observed. After the administration of the questionnaire, the questionnaire will be collected and analysed. During the analysis, sub-categories will be made in order to categorise the data.

The tables and graphs will be created in order to compare and contrast the knowledge and practices of the old and new employees in order to observe the need for safety training for new and old employees.

5. Justify the plan of action with respect to the identified problem and purpose. Be sure to justify the connection between the plan and the expected impact on student achievement.
Safety measures and safety drills are important as emergency situations can come up anytime. Especially at workplaces which include construction sites, there is always a risk of an emergency. Other than that, natural disasters can also create an emergency situation. Other significant harms mainly include fire or collapse of the buildings. In these circumstances, it is necessary for the employees to have ample knowledge and practice to deal with the situation. Therefore, this research is aimed at understanding the current knowledge of new employees as due to the pandemic; there has been a gap regarding safety training leading to the non-compliance of the workers towards safety measures. By calculating existing knowledge, training plans and manuals can be formed according to which employees can be trained.
6. Define constitutive and operational definitions of key terms.
Safety Drill: A safety drill is considered a functional exercise which ensures the practices and knowledge regarding the real disaster in an emergency event which is close to reality.
Quantitative Research Design: It is the type of research methodology which ensures that the researcher obtains quantifiable data. In this case, the administration of the question year will provide quantifiable data.
7. Identify the variables in the study and define how each will be measured.
Old employees: one of the significant variables of the study will be based on the old employees where both male and female employees will be considered ranging from 18 to 40 years of age. Personal or contact information will not be used in the study in order to ensure anonymity and maintain the confidentiality of the participants. The participants will be based on individuals who have prior experience working and have undergone safety training.
New employees: new employees will be the individuals who started working after the pandemic.
Questionnaire: The questionnaire will also be considered as the variable as it will provide the answers to the series of questions that aim at analysing the current knowledge of the workers regarding safety measures. The questionnaire is considered one of the significant research collecting tools which provide a direct response from the participants in a cost and time-efficient manner.
8. Describe the data that is needed for the study and how it will be collected. Include a description of the timeline for the data collection.

The questions will be used as the main source to collect the data between the old and new participants. The data will be collected regarding their current knowledge of safety measures taken at the workplace or during emergency situations. The collected data will be beneficial in providing an overview of the need for safety grills and training in order to keep the employees with the necessary knowledge which will help them during the emergency. The questionnaire will take about 20 to 25 minutes and will be completed within the time frame of 3 to 4 weeks.

9. Identify any instrument that will be used in the study and its validity and reliability measures.
In this research study, the main tool and source for the collection of the data include the administration of the questionnaire. The questionnaire will include a series of questions which will be aimed at extracting information regarding the knowledge of safety drills and safety measures of the old and new employees. A questionnaire is considered a valid and reliable source as it provides quantifiable data which can be subjected to different types of analysis.
10. Describe any threats to the internal validity of the study and measures for control.
The questionnaire will be used as a primary source to collect the data. As a control measure, the questionnaire will be thoroughly checked in order to avoid any biased or discriminatory gesture. The questionnaire will include similar questions irrespective of gender and age, and experience. An explanation regarding the aims and objectives of the research will also be given to every participant. Moreover, the personal information of every participant will be kept anonymous.
11. Describe the limitations or outside interferences that might interfere with improved student achievement.
Inaccurate responses from the participants can be considered one of the main interferences that can alter the outcomes of the study. Another interference may include the withdrawal of the participants during the study, as it will reduce the number of responses.

Data Gathering/Analysis

CATEGORY	Unacceptable	Revisions Required	Target
Problem and problem statement	Problem/weakness is not identified, or the problem statement is missing	Problem/weakness is identified; problem statement is provided but is overly vague or wordy	Problem/weakness is identified; clear and concise problem statement is provided
Hypothesis	Hypothesis statement is missing	Hypothesis statement is included; but alignment with the problem statement is weak	Clear hypothesis statement is included and aligns with the problem statement
Elaboration and purpose statement	Description of how the problem was determined is missing or purpose statement based on problem statement is missing	Description of how the problem was determined is provided but lacks sufficient detail; purpose statement based on problem statement is provided	Clear description of how the problem was determined; purpose statement based on problem statement is provided
Graphical representation	Graphical format does not present the data in a clear manner; data is only partially presented; data source(s) is not identified	Graphical format(s) is appropriate and clearly presents all the collected data; data source(s) is identified	Graphical format(s) is appropriate; clearly presents all the collected data; highlights visible patterns or trends; data source(s) is identified, and credibility is properly established
Data discussion	No details are provided to support the problem/weakness identified or does not align with the type of data collected	Details provided weakly support the problem/weakness identified; aligns with the type of data collected	Details provided support the problem/weakness identified; is appropriate to the required project scope; aligns with the type of data collected
Connection between data and problem	No connection with the trends and patterns identified in the data are drawn	Connections between the trends/patterns in the data are noted, but not clearly supported in the narrative	Clear connections between the trends/patterns in data are drawn in the narrative and supported in detail in the narrative

Literature Review

CATEGORY	Unacceptable	Revisions Required	Target
Developed problem statement	Problem statement is missing or if one is provided it fails to demonstrate an understanding of the identified problem	Problem statement is provided but could be further fleshed out; evidence of an emerging understanding of the identified problem is demonstrated	Problem statement is fully developed and demonstrates a clear and accurate understanding of the identified problem

Best practice(s)	Best practice(s) are not clearly identified or the practice identified is inappropriate; connection to theorist or theory documented in literature is missing	Best practice(s) are clearly identified; connection to theorist or theory documented in literature is weak or missing	Best practice(s) are clearly identified; connection to theorist or theory documented in literature is established
Theory/trend	Theory or trend is not adequately described and does not validate the selected best practice(s); appropriateness of theory/trend for addressing the problem or weakness is not addressed	Theory or trend is described but description fails to validate the selected best practice(s); appropriateness of theory/trend for addressing the problem or weakness is noted but the connection is weak	Theory or trend is clearly described and validates the selected best practice(s); appropriateness of theory/trend for addressing the problem or weakness is clearly highlighted and accurate
Reference listing	Source requirement was not met; multiple (more than 6) APA formatting errors in the reference list; sources included are not representative of recent research; sources connection to the identified best practice(s) and/or theory/trend is not clear	Meets minimum requirements for degree level: Masters – A minimum of 10 sources were utilized; fewer than 6 APA format errors are present in the reference list; sources included are representative of recent research; sources appear to be connected to the identified best practice(s) and/or theory/trend	Five (5) sources beyond minimum requires were utilized; there are virtually no APA format errors present in the reference list; sources included are representative of recent research; sources appear to be clearly connected to the identified best practice(s) and/or theory/trend
Literature summary	Summaries of content of individual sources included in the collection is presented rather than a synthesis of source content; exceeds 2 paragraphs	Summary of content presented in the collection of sources is provided but includes some details of specific studies; exceeds 2 paragraphs	Synthesis of content presented in the collection of sources is provided; does not exceed 2 paragraphs
Methodology/Action Plan			
CATEGORY	Unacceptable	Revisions Required	Target
Population and sampling technique	Descriptions of the participant sample and/or sampling technique are missing	Descriptions of the participant sample and sampling technique are included, but details are limited	Full descriptions of the participant sample and sampling technique are included
Sampling technique justification	Justifications for the sample chosen and/or the sampling technique are missing	Justifications for both the sample chosen and the sampling technique are provided, but details are limited	Justifications for both the sample chosen and the sampling technique are provided
Role of participants and plan to prevent harm	Role of participants is not clearly described; plans for protecting the data and/or student confidentiality are missing	Role of participants is described; plans for protecting the data and/or student confidentiality are not provided or are inadequate	Role of participants is thoroughly described; adequate plans for protecting student confidentiality and/or data are provided

Action plans steps and sequence	Action plan is not described; description is not clear; steps in plan are not in a logical order	Action plan description is provided, but additional detail may be warranted; steps in plan are outlined, but additional steps may be needed, or the order could be altered for better efficiency	Action plan description is provided, and sufficient detail is included; steps in plan are outlined; exhaustive list of steps and sequence of steps allows for optimal efficiency and outcome
Key terms	Definitions of key terms are missing	Definitions of key terms are provided, but are inaccurate or incomplete	Constitutive and operational definitions of key terms are provided
Variables are identified and defined	Variables are misidentified	Variables are identified correctly, but with no clear definitions or explanations as to how they will be measured	Variables are identified correctly, with clear definitions and explanations as to how they will be measured
Required data needs	Data needs are not identified or do not align with the problem; data retrieval plans are missing or inappropriate	Data needs are identified; data retrieval plans are included, but not timeline for collection is provided	Data needs are identified; data retrieval plans are described and a timeline for collection is included
Instrument	Instrument is not described	Instrument is described, but information about instrument validity and reliability limited or missing	Instrument is described in detail and information about instrument validity and reliability are included
Internal validity threats	Threats to internal validity are not identified or described	Threats to internal validity are described, including measure(s) for control, but there are inaccuracies in the details	Threats to internal validity are thoroughly and accurately described, including measure(s) for control
Limitation	Limitations and/or outside interferences with improved student achievement are not identified	Limitations and/or outside interferences with improved student achievement are identified, but limited details are provided	Limitations and/or outside interferences with improved student achievement are identified and thoroughly described