A Study on Risk Management Mechanism in Secondary Schools of Punjab

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Received on: 20-07-2023 Accepted on: 22-08-2023

Abstract

Risk management is an important process for any organization, but it is especially important for secondary schools, which are responsible for the safety and well-being of thousands of students and staff each day. This study investigated risk management in secondary schools in nine districts of Punjab, Pakistan. Data were collected from 400 public and private school principals through a 5-point Likert scale. The study found that secondary schools in Punjab, Pakistan, face a wide range of risks, including physical, security, health, safety, financial, and academic risks. The study also found that the most common risk management mechanisms used by secondary schools in Pakistan are risk assessment, risk control, and risk monitoring. However, the perceived effectiveness of risk management mechanisms in secondary schools in Pakistan is variable. The study developed a number of recommendations for improving risk management in secondary schools in Pakistan. These recommendations include providing training on risk management for school leaders and staff, developing and implementing comprehensive risk management plans, conducting regular risk assessments, implementing effective risk control measures, and monitoring and evaluating the effectiveness of risk management programs.

Keywords: Risk Management Mechanism, Secondary Schools, Risk Assessment, Risk Control, Risk Monitoring.

Introduction

Risk management is the process of identifying, assessing, and controlling risks. It is an important process for any organization, but it is especially important for secondary schools, which are responsible for the safety and well-being of thousands of students and staff each day (Hussain et al., 2022; Chance & Brooks, 2021).

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There are a variety of risks that secondary schools face, including:

- a) Physical risks: These risks include fire, natural disasters, and accidents.
- **Security risks:** These risks include violence, theft, and vandalism.
- **c) Health and safety risks:** These risks include food poisoning, illness, and injury.
- **d) Financial risks:** These risks include budget cuts, fraud, and embezzlement.
- **e) Academic risks:** These risks include student failure, teacher turnover, and curriculum gaps.

Risk Management Mechanism

A risk management mechanism is a system or process that is used to identify, assess, and control risks (Chen et al., 2022; Poltarykhin et al., 2020). There are a number of different risk management mechanisms that secondary schools can use, including:

- **i.Risk assessment:** This involves identifying and assessing the risks that the school faces.
- **ii.Risk control:** This involves implementing measures to reduce the likelihood or impact of risks.
- **iii.Risk monitoring:** This involves tracking and monitoring risks to ensure that they are being managed effectively.

Preparation Plan

A preparation plan is a document that outlines the steps that the school will take in the event of a risk or crisis (Romaniuk, 2022; Di Ludovico & Di Lodovico, 2020; Syreyshchikova et al., 2020). The preparation plan should include the following information:

- **1. Contact information for key personnel:** This should include the names and contact information of the school principal, other school administrators, and emergency responders.
- **2. Procedures for evacuating the school:** This should include a diagram of the school layout and evacuation routes.
- **3. Procedures for communicating with parents and staff:** This should include how the school will communicate with parents and staff in the event of a crisis.
- **4. Procedures for providing first aid and medical care:** This should include the names and locations of first aid kits and defibrillators.

Benefits of risk management

There are a number of benefits to implementing a risk management system in a secondary school (Amri et al., 2022; Addo et al., 2021; Shah et al., 2020). These benefits include:

- **1) Reduced risk:** By identifying and assessing risks, schools can take steps to reduce the likelihood or impact of those risks.
- **2) Improved safety and security:** A risk management system can help to improve the safety and security of students and staff.
- **Reduced costs:** By preventing risks from occurring, schools can reduce the costs associated with responding to and recovering from those risks.
- **4) Improved decision-making:** A risk management system can help schools make better decisions about how to allocate resources and manage their operations.

Risk management is an important process for any organization, but it is especially important for secondary schools. By implementing a risk management system, schools can reduce the

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risks they face and improve the safety and security of students and staff Ak & Sahin, 2021). Risk management is a critical aspect of school management. By identifying, assessing, and controlling risks, schools can create a safer and more secure environment for students, staff, and visitors (Shah et al., 2020).

A number of studies have investigated the importance of risk management in schools. For example, a study by the National Association of School Psychologists (NASP) found that schools with a comprehensive risk management program had lower rates of student absenteeism and suspension (Madfis et al., 2021). Similarly, a study by the Center for Safe Schools found that schools with a risk management program were less likely to experience violence (Lenhardt et al., 2018).

In addition to reducing the likelihood of incidents, risk management can also help schools to mitigate the impact of incidents that do occur. For example, a school with a well-developed emergency response plan will be better able to respond to a crisis such as a fire or a natural disaster (Lenhardt et al., 2018).

Despite the clear benefits of risk management, many schools do not have a comprehensive risk management program in place. This may be due to a number of factors, such as a lack of awareness of the importance of risk management, a lack of resources, or a lack of expertise (Paci-Green et al., 2020).

A number of studies have identified challenges to effective risk management in schools. For example, a study by the National School Boards Association (NSBA) found that the most common challenges to risk management in schools were a lack of time, a lack of staff, and a lack of funding (Ruffin, 2020).

Despite the challenges, there are a number of things that schools can do to improve their risk management practices. These include:

- Developing a comprehensive risk management plan
- Conducting regular risk assessments
- Implementing effective risk control measures
- Monitoring and evaluating the effectiveness of risk management programs
- Providing training on risk management for school leaders and staff

By taking these steps, schools can create a safer and more secure environment for all members of the school community.

Rationalization

- A. **Reduced risk:** By proactively identifying and assessing risks, secondary schools can take steps to mitigate or eliminate them entirely. This can help to reduce the likelihood of incidents occurring, and in the event that they do occur, it can help to minimize their impact.
- B. **Improved safety and security:** A comprehensive risk management program can help to create a safer and more secure environment for students, staff, and visitors. This can lead to a reduction in accidents, injuries, and crime.
- C. **Enhanced reputation:** Schools that are seen as being proactive in managing risk are more likely to be viewed as being well-managed and trustworthy. This can lead to a positive impact on the school's reputation, which can, in turn, attract and retain students, staff, and funding.
- D. **Improved decision-making:** The risk management process can help schools make

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more informed decisions about how to allocate resources and manage their operations. By understanding the risks that they face, schools can make better decisions about how to protect their students, staff, and assets.

E. **Compliance with regulations:** Many jurisdictions have laws and regulations that require schools to have a risk management program in place. By implementing a risk management program, schools can demonstrate that they are meeting their legal obligations. In addition to these rationalizations, there is also a growing body of evidence that suggests that risk management can lead to improved academic performance. For example, a study by the National Association of School Psychologists found that schools with a comprehensive risk management program had lower rates of student absenteeism and suspension. Overall, the benefits of risk management in secondary schools are clear. By implementing a comprehensive risk management program, schools can reduce their risks, improve their safety and security, and enhance their reputation.

Statement of Problem

Secondary schools face a wide range of risks, including physical risks, security risks, health and safety risks, financial risks, and academic risks. These risks can have a significant impact on the safety and well-being of students, staff, and the school community as a whole. Despite the importance of risk management, many secondary schools do not have a comprehensive risk management system in place. This can be due to a number of factors, such as a lack of awareness of the importance of risk management, a lack of resources, or a lack of expertise. As a result, secondary schools may be exposed to a number of risks that could have been prevented or mitigated. This can lead to incidents that can have a significant impact on the school community. For example, a school that does not have a fire safety plan in place may be more likely to experience a fire. A school that does not have a bullying prevention program in place may be more likely to experience bullying incidents. A school that does not have a financial difficulties.

The lack of effective risk management in secondary schools can have a number of negative consequences, including:

- a. Increased risk of incidents
- b. Increased costs associated with responding to and recovering from incidents
- c. Reduced safety and security
- d. Damage to the school's reputation
- e. Reduced student and staff morale

Therefore, it is important for secondary schools to develop and implement comprehensive risk management systems. By doing so, schools can reduce their exposure to risks and improve the safety and well-being of their students, staff, and the school community as a whole.

Theoretical Framework

The theoretical framework for risk management in secondary schools is based on the following key concepts:

i.**Risk:** Risk is the potential for an event to occur that could have a negative impact on an organization.

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ii. **Uncertainty:** Uncertainty is the lack of knowledge about the likelihood or impact of a risk.

- iii.**Vulnerability:** Vulnerability is the degree to which an organization is susceptible to the negative impact of a risk.
- iv.**Resilience**: Resilience is the ability of an organization to adapt to and recover from the negative impact of a risk.

The risk management process involves the following steps:

- 1. Risk identification: This involves identifying the risks that the school faces.
- 2. Risk assessment: This involves assessing the likelihood and impact of each risk.
- 3. Risk control: This involves implementing measures to reduce the likelihood or impact of each risk.
- 4. Risk monitoring: This involves tracking and monitoring risks to ensure that they are being managed effectively.
- 5. Risk communication: This involves communicating information about risks to stakeholders.

The theoretical framework for risk management in secondary schools can be drawn from a number of different disciplines, including:

- **i.Systems theory:** Systems theory views an organization as a complex system of interconnected parts. Risk management can be seen as a way of ensuring that the system is able to function effectively in the face of uncertainty.
- **ii.Chaos theory:** Chaos theory is concerned with the behaviour of nonlinear systems. Risk management can be seen as a way of managing the unpredictable and nonlinear nature of the world.
- **iii.Complexity theory:** Complexity theory is concerned with the behaviour of complex systems. Risk management can be seen as a way of managing the emergent properties of complex systems.
 - The theoretical framework for risk management in secondary schools is still evolving. However, the key concepts outlined above provide a useful basis for understanding the nature of risk and the importance of risk management.

In addition to the above, the following theoretical frameworks can also be used to inform risk management in secondary schools:

- **iv.The social construction of risk:** This framework recognizes that risks are not objective entities but are instead socially constructed. This means that the way in which risks are perceived and managed can vary depending on a range of social factors.
- **v.** *The risk society:* This framework argues that modern societies are characterized by a high level of risk. This is due to a number of factors, such as technological advances, globalization, and environmental degradation. The risk society framework highlights the need for organizations to develop effective risk management strategies.
- **vi.** The precautionary principle: The precautionary principle states that where there is a threat of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. The precautionary principle can be used to justify taking action to manage risks even where there is uncertainty about the likelihood or impact of those risks.
 - By drawing on these theoretical frameworks, secondary schools can develop a more comprehensive and nuanced understanding of risk. This can help them to develop more

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effective risk management strategies.

Conceptual Framework for Risk Management in Secondary Schools

The conceptual framework for risk management in secondary schools is based on the following key components:

- **1. Risk identification:** This involves identifying the potential risks that the school faces. These risks can be internal or external, and they can be physical, security, health and safety, financial, or academic in nature.
- **2. Risk assessment:** This involves evaluating the likelihood and impact of each risk. The likelihood of a risk occurring is the probability that it will happen. The impact of a risk is the severity of the consequences if it does occur.
- **3. Risk control:** This involves implementing measures to reduce the likelihood or impact of risks. Risk control measures can be preventive, detective, or corrective. Preventive measures are designed to stop risks from occurring in the first place. Detective measures are designed to identify risks early on so that they can be mitigated. Corrective measures are designed to minimize the damage caused by risks that do occur.
- **4. Risk monitoring:** This involves tracking and monitoring risks to ensure that they are being managed effectively. Risk monitoring involves regularly reviewing risks to assess whether they have changed in any way.
- **5. Risk communication:** This involves communicating information about risks to stakeholders. Risk communication is important for ensuring that everyone is aware of the risks that the school faces and the measures that are being taken to manage them.

The conceptual framework for risk management in secondary schools can be represented by the following diagram:

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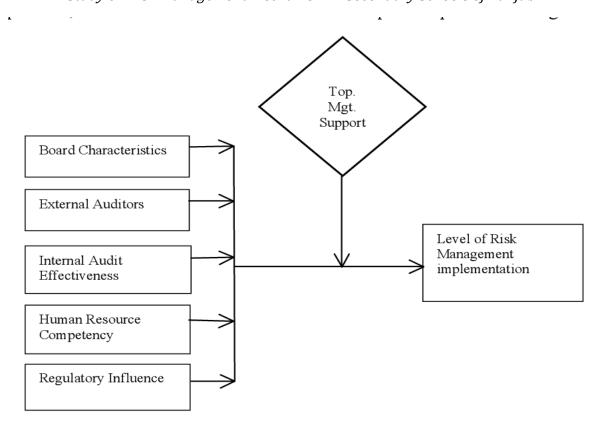


Fig. 1. Research Model.

In addition to the key components listed above, the conceptual framework for risk management in secondary schools also includes the following considerations:

- **1. The school's context:** The risks that a school faces will vary depending on its context. For example, a school in a rural area may face different risks than a school in an urban area.
- 2. The school's stakeholders: The school's stakeholders include students, staff, parents, governors, and the wider community. It is important to consider the needs and concerns of all stakeholders when developing and implementing a risk management program.
- **3. The school's culture:** The school's culture will influence the way that risks are perceived and managed. For example, a school with a strong safety culture is more likely to have effective risk management practices in place.

By taking these considerations into account, schools can develop a risk management program that is tailored to their specific needs.

Significance of the Study

The significance of this study is threefold:

1. It contributes to the development of knowledge and understanding of risk management in secondary schools. The study will provide a comprehensive overview of the risks that secondary schools face, the risk management mechanisms that are currently being used, and the effectiveness of these mechanisms. This information will be of value to

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researchers, policymakers, and practitioners who are interested in improving risk management in secondary schools.

- 2. It provides insights into the challenges and barriers to effective risk management in secondary schools. The study will identify the factors that can hinder the effective implementation of risk management practices. This information can be used to develop strategies to overcome these challenges and barriers.
- 3. It provides recommendations for improving risk management in secondary schools. The study will develop evidence-based recommendations for how secondary schools can improve their risk management practices. These recommendations can be used by schools to develop and implement more effective risk management programs.

In addition to these specific contributions, the study is also significant because it is one of the first studies to focus on risk management in secondary schools. As such, it will help to raise awareness of the importance of risk management in this setting and encourage further research in this area.

The findings of the study will be of interest to a wide range of stakeholders, including:

i.Secondary school principals and other school leaders

ii.Teachers and other school staff

iii.Parents and guardians

iv.Students

v.Researchers

vi.Policymakers

vii.Practitioners in the field of risk management

The study was expected to make a significant contribution to the field of risk management in secondary schools. The findings of the study can be used to inform the development of policies, practices, and training programs that can help secondary schools improve their risk management practices.

The Objectives of This Study Were:

- **1. Identify the key risks that secondary schools face.** Secondary schools in Pakistan face a high level of physical risks, such as fire, natural disasters, and accidents.
- 2. Assess the risk management mechanisms that are currently being used by secondary schools. This involved gathering information on the types of risk management mechanisms that were in place in secondary schools, as well as the perceived effectiveness of those mechanisms.
- 3. Investigate the challenges and barriers to effective risk management in secondary schools. This involves identifying the factors that can hinder the effective implementation of risk management practices in secondary schools.
- **4. Develop recommendations for improving risk management in secondary schools.** This involved drawing on the findings of the study to develop evidence-based recommendations for how secondary schools can improve their risk management practices.

Research Questions

- **1.** What are the key risks that secondary schools face in Pakistan?
- 2. What risk management mechanisms are currently being used by secondary schools

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in Pakistan?

- **3.** How effective are the risk management mechanisms currently being used by secondary schools in Pakistan?
- **4.** What are the challenges and barriers to effective risk management in secondary schools in Pakistan?
- **5.** What are the best practices for risk management in secondary schools in Pakistan?
- **6.** What are the implications of the findings of this study for policy and practice in the area of risk management in secondary schools in Pakistan?

Alternate Hypotheses

- **1. Hypothesis 1:** Secondary schools in Pakistan face a high level of physical risks, such as fire, natural disasters, and accidents.
- **2. Hypothesis 2:** The most common risk management mechanisms used by secondary schools in Pakistan are risk assessment and risk control.
- **3. Hypothesis 3:** The effectiveness of risk management mechanisms in secondary schools in Pakistan is variable, with some schools having more effective practices than others.
- **4. Hypothesis 4:** The main challenges and barriers to effective risk management in secondary schools in Pakistan are a lack of resources, a lack of awareness of the importance of risk management, and a lack of expertise in risk management.
- **5. Hypothesis 5:** The best practices for risk management in secondary schools in Pakistan include involving all stakeholders in the risk management process, conducting regular risk assessments, and implementing effective risk control measures.
- **6. Hypothesis 6:** The risk management landscape in secondary schools in Pakistan differs from other countries in a number of ways, such as the level of resources available for risk management, the cultural attitudes towards risk, and the legal and regulatory environment.

Research approach

The research approach for this study was quantitative. This means that quantitative data were collected and analyzed. The quantitative data were collected through a survey of sampled secondary school principals in nine districts of Punjab, Pakistan. The qualitative data were collected through a 5-point Likert scale from school principals.

Sampling

The sampling frame for the quantitative data consists of nine districts of Punjab public and private secondary school principals in Punjab, Pakistan. A simple random sample of 400 principals was drawn from the sampling frame according to the suggestions of Krejcie and Morgan's (1970) sample table.

Data collection instrument

To test each hypothesis, solid questions were asked from school heads. The instrument was validated by experts; according to Pakistani school's contexts, some questions were omitted, some were edited and some new questions were also added. The questionnaire was then redeveloped and pilot-tested for reliability; Cronbach's alpha was .89.

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Data collection

The quantitative data was collected through a self-administered 5-point Likert scale. The questionnaire was developed to collect information on the risks that secondary schools face, the risk management mechanisms that are currently being used, and the perceived effectiveness of these mechanisms.

Data analysis

The quantitative data were analyzed using descriptive and inferential statistical methods. The qualitative data were analyzed through SPSS, draw mean, standard deviation and one sample t-test.

Table 1 Data Analyses

One-Sample Statistics						
	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Hypothesis 1	400	3.6835	.53745	137.074	399	.000
Hypothesis 2	400	3.2717	.74784	87.497	399	.000
Hypothesis 3	400	3.4438	.66034	104.302	399	.000
Hypothesis 4	400	3.4465	.59060	116.712	399	.000
Hypothesis 5	400	3.5504	.53128	133.655	399	.000
Hypothesis 6	400	3.5369	.64213	110.161	399	.000

Table 1 describes the results of the hypotheses; all alternate hypotheses were found significant and accepted because the p < .05.

Findings of the study

The study found that secondary schools in Pakistan face a wide range of risks, including:

- 1) Physical risks: fire, natural disasters, and accidents
- 2) Security risks: violence, theft, and vandalism
- 3) Health and safety risks: food poisoning, illness, and injury
- 4) Financial risks: budget cuts, fraud, and embezzlement
- 5) **Academic risks:** student failure, teacher turnover, and curriculum gaps

The study also found that the most common risk management mechanisms used by secondary schools in Pakistan are:

- **1.** Risk assessment
- 2. Risk Control
- 3. Risk monitoring

The study found that the perceived effectiveness of risk management mechanisms in secondary schools in Pakistan is variable. Some schools have well-developed risk management programs in place, while others have more ad hoc approaches to risk management.

The study identified a number of challenges and barriers to effective risk management in secondary schools in Pakistan. These challenges and barriers include:

- 1) A lack of resources
- 2) A lack of awareness of the importance of risk management
- 3) A lack of expertise in risk management

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Discussion

This study investigated risk management in secondary schools in Pakistan. The study found that secondary schools in Pakistan face a wide range of risks, including physical risks, security risks, health and safety risks, financial risks, and academic risks. The study also found that the most common risk management mechanisms used by secondary schools in Pakistan are risk assessment, risk control, and risk monitoring. The study found that the perceived effectiveness of risk management mechanisms in secondary schools in Pakistan is variable. The study identified a number of challenges and barriers to effective risk management in secondary schools in Pakistan, including a lack of resources, a lack of awareness of the importance of risk management, and a lack of expertise in risk management. The study developed a number of recommendations for improving risk management in secondary schools in Pakistan, including providing training on risk management for school leaders and staff, developing and implementing comprehensive risk management plans, conducting regular risk assessments, implementing effective risk control measures, and monitoring and evaluating the effectiveness of risk management programs. The findings of this study are significant because they provide a comprehensive overview of the risks that secondary schools in Pakistan face, the risk management mechanisms that are currently being used, and the perceived effectiveness of these mechanisms. The study's findings can be used to inform the development of policies, practices, and training programs that can help secondary schools in Pakistan improve their risk management practices. The study's findings are also significant because they contribute to the growing body of research on risk management in education. The study's findings can be used to inform future research on risk management in secondary schools.

Overall, the study makes a valuable contribution to the field of risk management in education. The study's findings can be used to help secondary schools in Pakistan to improve their risk management practices and to reduce the risks they face.

Conclusions

In conclusion, risk management is an important process for secondary schools in Pakistan. This can lead to improved safety and security for students and staff, reduced costs, and better decision-making.

The study found that secondary schools in Pakistan face a wide range of risks. The most common risk management mechanisms used by secondary schools in Pakistan are risk assessment, risk control, and risk monitoring. However, the perceived effectiveness of risk management mechanisms in secondary schools in Pakistan is variable.

The study identified a number of challenges and barriers to effective risk management in secondary schools in Pakistan. These challenges and barriers include a lack of resources, a lack of awareness of the importance of risk management, and a lack of expertise in risk management.

Recommendations

Recommendations for improving risk management in secondary schools in Pakistan

1. Provide training on risk management for school leaders and staff. This training should cover the basics of risk management, as well as specific risks that are relevant to

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secondary schools in Pakistan.

- **2. Develop and implement comprehensive risk management plans.** These plans should identify the risks that the school faces, assess the likelihood and impact of those risks, and develop and implement measures to control those risks.
- **3. Conduct regular risk assessments.** This will help to ensure that the school's risk management plan is up-to-date and that new risks are identified and addressed.
- **4. Implement effective risk control measures.** This may involve a variety of measures, such as installing security cameras, conducting fire drills, or developing emergency response plans.
- **5. Monitor and evaluate the effectiveness of risk management programs.** This will help to ensure that the school's risk management program is effective in reducing the likelihood or impact of risks.

In addition to these recommendations, the study also found that a number of challenges and barriers need to be addressed in order to improve risk management in secondary schools in Pakistan. These challenges and barriers include:

- **6. A lack of resources.** Schools may not have the financial or human resources necessary to implement effective risk management programs.
- **7. A lack of awareness of the importance of risk management.** School leaders and staff may not be aware of the importance of risk management or may not know how to implement effective risk management practices.
- **8. A lack of expertise in risk management.** School leaders and staff may not have the expertise necessary to identify, assess, and control risks.

To address these challenges and barriers, the following recommendations are made:

- **9. Provide funding for risk management programs.** This funding could be used to hire risk management specialists, develop risk management training materials, or implement risk control measures.
- **10. Raise awareness of the importance of risk management.** This could be done through workshops, seminars, or other awareness-raising activities.
- **11. Provide training on risk management.** This training could be provided to school leaders, staff, and students.
- 12. By addressing the challenges and barriers to effective risk management, secondary schools in Pakistan can improve their ability to identify, assess, and control risks. This can lead to improved safety and security for students and staff, reduced costs, and better decision-making.

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