Effective Management of School Scouting Program by Applying Plan-Do-Check-Act Model

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ABSTRACT
Management of scouting program in schools appears to be challenging despite being a popular youth program that supports the holistic development of children and young people. This study identifies the importance of the school scouting program and reports the findings of a mixed mode study involving the development of guidelines to enhance effective management of scouting program, in schools in Bhutan. Applying PDCA (Plan-Do-Check and Act) model, the research catered to study the management of scouting program using 178 scout leaders and 4 experts in the field of scouting. The researcher used quantitative and qualitative methods to collect data that are subjected to statistical analysis. The result analysis by the participating scout leaders and experts revealed that guidelines to enhance effective management of scouting program in schools has been found imperative to strengthen the school scouting program. The study has profound implications for development of guidelines with respect to the use of PDCA (Plan-Do-Check and Act) model for the improvement of the scouting program. This article thus makes significant contributions to the management of school scouting program literature extending it to the school-based youth programs in the Bhutanese education context and beyond.

Keywords
Management, Scouting Program, Plan of Scouting Program, Do of Scouting Program, Check of Scouting Program, Act of Scouting Program

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Introduction
Effective management of school scouting program is important as it is an educational movement for young people which develops various capabilities of youth throughout life, both as an individual and as a member of society. “We live in a fast-changing world and producing more of the same knowledge and skills will not suffice to address the challenges of the future. Today, because of rapid economic and social change, schools have to prepare students for jobs that have not yet been created, technologies that have not yet been invented and problems that we don’t yet know will arise” [1]. Bhutan Vision 2020 emphasizes a holistic approach to education that grooms the citizens to become knowledgeable, skillful, creative, enterprising, mindful, reflective, confident, and capable of responding to the emerging global challenges and who make a conscious effort to uphold the traditional values of the nation [2].

Education has played a central role in the social, economic, political, cultural, intellectual, and environmental development of Bhutan to give it a distinct identity as a small, peaceful, progressive, and happy nation [2]. The management of school is supported by School Management Board whose decisions are executed by School Management Team consisting of the Principal, Vice principal, and teachers who hold key responsibilities [2]. The Principal looks after the overall management of the school and the Vice principals usually head academic and nonacademic affairs. The non-academic affairs include those activities that provide moral and value education to students through various programs such as mindfulness and meditation, value education, games and sports, clubs, cultural activities, counselling, and scouting. Scouting in Bhutan started in 1996 as one of the channels to promote value education among the students and has been making all concerned efforts to expand the Scout Program in every part of the Kingdom [3]. However, despite being a popular youth program in Bhutan, there are some challenges in managing the Scout Program in the schools. A research on Education Policy Reforms in Bhutan, Yezer [4] mentions that, “A small number of schools felt that they are not able to carry out counseling, scouting and physical education well. Another research on Attitude of Youth towards Scouting Program in context to Bhutan, Dorji [5] stated that there is inconsistent implementation of standard scouting program across Bhutan. To address this research gap, in the study reported herein, we developed and used PDCA (Plan-Do-Check and Act) model-based indicators to study the management of school scouting program designed to strengthen the program and evaluated the result by gathering both quantitative and qualitative evidences of scout leaders and experts subsequent level of agreement on management of school scouting program. Deming [6] introduced PDCA model, according to which quality improvement take place through four major steps. It is also known by two other names, the Shewhart cycle and the Deming cycle and is explained that PDCA meant Plan, Do, Check, and Act [7]. It is a well-known model for continual process improvement, with reliability, and greater efficiency in performance of activities allowing for effective planning in strategy development, implementation, measuring effectiveness and fault detection.
The objective is to study the management of Scouting Program in schools in Central Region, Bhutan; to compare the management of Scouting Program in schools in Central Region as classified by gender of scout leader and level of school; to study the guidelines to enhance the effective management of Scouting Program in schools in Bhutan. In addition, the significance of the study is that the schools can use Plan-Do-Check and Act (PDCA) model that provides a framework for the improvement of the process or system. The study is also expected to inform policy makers to revisit existing policies to further enhance the scouting program and provide long-term benefits to the education system.

Materials and Methods

2.1. Study area

The study for the first part comprises of scout leaders of Central Region of Bumthang, Sarpang, Trongsa, Tsirang, Zhemgang and Gelephu municipality town. There were 320 scout leaders working in Schools in Central Region, Bhutan in the academic year 2019. The study for the second part includes four experts from policy designing, district administration and school management levels in the field of scouting. It is focused on the Plan-Do-Check and Act (PDCA) of Scouting Program in Schools including the management of School Scouting Program.

2.2. Research Design

The study was conducted by incorporating a standard Mixed Model Approach, which consists of both Qualitative and Quantitative method of research. The first step of the study included quantitative method while the second step of the study included qualitative method of research.

2.3. Sample Size and Sampling Technique

The sample size consists of 178 scout leaders working in Primary and Secondary Schools in Central region Bhutan in the academic year 2019. It consists of 66.3% (n=118) male and 33.7% (n=60) female scout leaders, respectively. The researcher used 178 scout leaders working in Primary and Secondary Schools in Central region, Bhutan in the academic year 2019 for the first step of the study. The sample was calculated with Yamane’s formula [10]. In addition, the researcher used stratified random sampling for collecting data. The target group for the interview included experts in scouting field from the policy designing, district administration and school administration levels who had an experience of 15 or more years in the field of scouting in Bhutan. The experts were selected using purposive sampling.

2.4. Research Instrument and Data Collection

The research instruments used were the questionnaire form with structured questions and semi-structured interview or open-ended questions based on literature review and management of school scouting program. A rating scale was used as the response format and a structured interview using semi-structured or open-ended questions was asked to share...
the expertise’s opinions and suggestions in the field of scouting. The content validity was approved through consultation process with the advisor. The measures of the questionnaire which had Item-Objective Congruence (IOC) of >0.5 were selected. The research instrument was then tried out for reliability with 30 Scout Leaders whose characteristics were like the population in this study. The process of reliability testing was based on Cronbach’s Alpha. The result showed that the Alpha Coefficients is 0.93. The data for the first step of the study was collected by distributing 178 questionnaires through email while the data for the interview was collected from the experts using a digital voice recorder.

2.5. Data Analysis

Demography of Scout Leaders of Central Region was analyzed using frequency and percentage. The management of Scouting Program in schools in Central Region, Bhutan was analyzed using arithmetic means ( ) and standard deviation (S.D.). With reference to 5-point Rating scale, it was divided into 5 equal ranges as 4.50-5.00 as strongly agreed, 3.50-4.49 as agreed, 2.50-3.49 as neutral, 1.50-2.49 as disagree and 1.00-1.49 as strongly disagree (Best & Kahn, 1997). To compare the management of School Scouting Program of Scout Leaders of Central Region, Bhutan, t-test independent for gender and level of school was used. The data analysis for the interview was analyzed using Content analysis and was presented in descriptive form.

2.6. Results

2.6.1. Management of Scouting Program in schools under the Central Region, Bhutan.

The result from Table 1 shows that in overall, the respondents’ level of agreement on management of Scouting Program was indicated at Agreed level. It was found out that the ‘Do of Scouting Program’ was shown at Strongly Agreed level while ‘Plan, Check and Act of Scouting Program’ were shown at Agreed level. When considered in aspect, it was found that the highest mean was ‘Do of Scouting Program ( =4.59)’ and the lowest mean was ‘Act of Scouting Program ( =4.12)’. The overall mean of management of Scouting Program was at 4.36% and S.D at 0.40.

Table 1. Management of Scouting Program.

| Management of Scouting Program | n=178 | x | S. D | Level of Agreement |
|-------------------------------|-------|---|------|-------------------|
| Plan of Scouting Program      | 4.38  | 0.42 | Agreed |
| Do of Scouting Program        | 4.59  | 0.38 | Strongly Agreed |
| Check of Scouting Program     | 4.33  | 0.59 | Agreed |
| Act of Scouting Program       | 4.12  | 0.60 | Agreed |
| Total                         | 4.36  | 0.40 | Agreed |

Note: x (mean), SD (standard deviation)

2.6.2. Comparison of the Management of Scouting Program in schools under the Central Region, Bhutan as classified by Gender of the scout leaders and Level of School.

2.6.2.1 Comparison of the Management of Scouting Program in schools under the Central Region, Bhutan as classified by Gender of the scout leaders.

Table 2 shows the comparison of management of Scouting Program in schools as classified by Gender of scout leader. The result shows that the overall differences in gender of scout leaders had no significant difference at the level 0.05, (p=0.00 <0.05).

Table 2. Comparison as classified by Gender of scout leader.

| Management of Scouting Program | n=178 | x | S. D | n=178 | x | S. D | t  | sig |
|-------------------------------|-------|---|------|-------|---|------|----|-----|
| Plan of Scouting Program      | 4.40  | 0.42 | 4.36 | 0.41 | 0.65 | 0.52 |
| Do of Scouting Program        | 4.60  | 0.38 | 4.58 | 0.36 | 0.41 | 0.68 |
| Check of Scouting Program     | 4.38  | 0.59 | 4.25 | 0.60 | 1.31 | 0.19 |
| Act of Scouting Program       | 4.15  | 0.60 | 4.07 | 0.60 | 0.87 | 0.39 |
| Total                         | 4.38  | 0.39 | 4.31 | 0.40 | 1.08 | 0.28 |

Note: x (mean), SD (standard deviation), Significance at the p<0.001

2.6.2.2 Comparison of the Management of Scouting Program in schools under the Central Region, Bhutan as classified by Level of School.

Table 3 shows the comparison of management of Scouting Program in schools as classified by level of school. The result shows that the overall differences in level of school had no significant difference at the level 0.05, (p=0.00 <0.05).

Table 3. Comparison of Management of Scouting Program as classified by Level of school.

| Management of Scouting Program | n=178 | x | S. D | n=178 | x | S. D | t  | sig |
|-------------------------------|-------|---|------|-------|---|------|----|-----|
| Plan of Scouting Program      | 4.35  | 0.46 | 4.42 | 0.36 | -1.04 | 0.30 |
| Do of Scouting Program        | 4.60  | 0.38 | 4.58 | 0.38 | 0.29 | 0.77 |
| Check of Scouting Program     | 4.29  | 0.61 | 4.38 | 0.56 | -1.02 | 0.31 |
| Act of Scouting Program       | 4.05  | 0.67 | 4.20 | 0.50 | -1.60 | 0.11 |
| Total                         | 4.33  | 0.43 | 4.40 | 0.36 | -1.18 | 0.24 |

Note: x (mean), SD (standard deviation), Significance at the p<0.001
2.6.3. The guidelines to enhance the effective scouting program in schools in Bhutan.

The guidelines to enhance the scouting program in schools in Bhutan was derived from the interview with the experts based on PDCA model (Plan, Do, Check and Act) for quality improvement introduced by Deming which was identified after the literature review. For the Plan of the scouting program, the respondents expressed that strategic planning is essential for proper functioning of the school scouting program. An analysis on areas of development and discussion with expertise in field of scouting including stakeholders and youth while planning is stated to provide a better insight in enhancing the program. The plan for scouts’ program should include relevant activities for the youth which should be reflected and aligned with the school yearly calendar. The schools should plan, discuss, and develop on resource management as well so that specific resources like materials, financial resources and human skills are assigned the right tasks. There should be a proper procedure in place for procuring, awarding, and using scout materials to ensure proper utilization of resources. There should be strategic budget planning procedures to provide financial support to the scouting program guided by concrete targets and priorities. Human resource support for the program from other teachers, local leaders and parents should be encouraged to manage the program efficiently and achieve success. The school should actively maintain membership registration of scout leaders and members of all level of scouts in school for membership growth and retention. The School scouting program should function as a program which is progressive and actively engages and supports young people in their personal development and empowers them to contribute positively to the school and community. Some means should be provided to help scouts link with other scouts across globe to communicate, share ideas, recognize, and respect the differences that exist between them and thereby build strong bond of friendship. It was also expressed that the school management should enhance stakeholder engagement in carrying out scouting program which is viewed as a strong mechanism for effective management of scouting program.

For the Do of the scouting program, it was expressed that the schools should include revitalized scouting activities that can cultivate good human values and provide life skills education. Some stimulating activities involving the community and parents should also be included to inculcate a sense of belongingness, social responsibility, and volunteerism. The schools should organize school-based camping for scouts and scout leaders to provide excellent outdoor experience and develop a positive sense of self-worth and practicality by sharing and applying their creativity and skills. An emphasis on activities based on Sustainable Development Goals was also recommended to equip scouts with competencies to be active citizens and contribute to creating a better world.

For the Check of the scouting program, it was expressed that the monitoring of school scouting program was recommended to be conducted for efficient management of the program and achieve its objective. Few standard indicators on management of school scouting program was suggested to be inserted in SPMSS (School Planning Management Support System) to ensure quality input for quality outcome. It was also recommended that there should be reliable instrument to monitor the progress of school scouting program for the wholesome development of students. The parents could also be asked for feedback that can help to formulate better decisions to improve the scouting program.

For the Act of the scouting program, it was recommended that the scouting program should be a whole school approach because the program not only enhances academic or intellectual learning but also other important learning needs such as leadership, citizenship building, social interaction, self-discipline, self-confidence, community relationship etc. The school activities were suggested to be included as part of scouting program so that all the children will get equal opportunity to participate and experience in all the activities. All the principals and teachers need to be trained and oriented in scouting to be aware of the program and to guide and support one another to improve the school scouting program. The school should provide financial support to execute the activities so that maximum benefits are reaped by our youths. The parents and stakeholders should be involved in the program which not only aids in human resource development but also complements in carrying out the activities as members of Community Based Scouts. The practice of rewarding and motivating performing Scouts and leaders should be encouraged to motivate all to achieve high quality performance and participation. The Principal as a manager was recommended to be a firm decision maker, inspiring, motivational and should play a key role in supporting the school scouting program.

2.7. Discussion

The results of this research can be discussed and used by the school managers and scout leaders to plan and develop effective strategies to strengthen the Scouting Program in the schools. The schools can also use Plan-Do- Check and Act (PDCA) model that provides a framework for the improvement of the process or system. Bhutan Scouts Association can apply the result of this study to develop effective strategies to further enhance the Scouting Program in the country and provide long term benefits to the education system. The discussion consists of 1) to study the management of Scouting Program in schools in Central Region, Bhutan. 2) to compare the management of Scouting Program in schools in Central Region as classified by gender of scout leaders and level of school. 3) to study the guidelines to enhance the management of Scouting Program in schools in Bhutan.

2.7.1. To study the management of Scouting Program in schools in Central Region, Bhutan.

The PDCA model (Plan, Do, Check and Act) for quality improvement introduced by Deming was identified after the literature review. The overall level of agreement on management of scouting program was at Agreed level with only the ‘Do’ of scouting program at strongly agreed level while the rest at agreed level, and the lowest mean was on
the ‘Act’ of Scouting Program. It depicts that the activities are conducted excellently well even when few components in the plan, check and act phases are not well considered. There is a little lack in monitoring and even more gap in the analysis and identification of issues for the improvement of the program.

It confirms the finding of Guruge and Berstecher [11] on the importance of planning, organizing, coordinating, commanding, and controlling for effective and efficient management which the schools have been managing well. Similar conclusion was made by Hunger and Wheelen [12] for strategic management in the education sector which reveals the importance of environmental scanning, strategy formulation, strategy implementation and evaluation and control. The budget planning to conduct scout activities with the least agreement is where the schools have to consider. According to Guruge and Berstecher [11] on Fayol elements elaborated that financial and human resources mobilization is one important element toward the accomplishment of a common goal. Similar conclusion was made by Hunger and Wheelen [12] model of elements of strategic management where Strategy implementation is the process by which strategies and processes are put into action through the development of programs, budgets, and procedures. The overall agreement on Do of Scouting Program at Agreed level depicts that the schools try to achieve the objective of Bhutan Scouts Association which is to support the wholesome development of youth through activities that emphasizes on developing personal values to pursue excellence and positive attitude towards life as enshrined in the scout promise and the law [13]. The item with the least agreement on awareness talk on scouting during the Parents-Teachers Meeting supports the findings of Wangchuk [14] who studied “Impact of Scouting program in Punakha District, on youth identity and self-esteem” where it was emphasized that success of scouting program to a great extend depends on a strong partnership between the various stakeholders. Hence, schools should also consider the importance of parents in enhancing the program.

The overall agreement on the Check of Scouting Program with all the items shown at Agreed level supports the finding of Helms [15] that Process Management should be the concern of every employee of every organization. Some of the essential elements in process management which the schools should be mindful of for enhancing the program are: Understanding process thinking, Identifying and satisfying customers’ requirements, establishing process baselines and measurement, Analysing and improving processes through the use of quality tools and Understanding how to use gradual, continuous process improvement.

The overall agreement on the Act of Scouting Program with all the items shown at Agreed level confirms the finding of Drucker who defines management as a system of interrelated elements that can be adapted and applied to educational management and should make people proficient of working together to accomplish common goals and values with provision of right incentives, training and capacity necessary to perform and respond to change [16]. Nevertheless, it is imperative that the scout leaders should gather after every few months to review on the effectiveness of the scouting program. It is said that management is to anticipate the future, and to balance between the short-term, medium-term, and long-term goals [17].

From the data it confirms that the management of scouting program in schools has been found imperative to strengthen the program and the findings revealed that it was greatly influenced by the Plan, Do, Check and Act of Scouting Program. Some important components like financial resources in “Plan” part while planning needed to be considered to support for effective management of the program. The result on the “check” part reveals the importance of maintaining checklists to monitor the implementation and progress of the program. Efforts should be taken to reflect the “act” part as the result shows it with the lowest mean indicating for reviewing the program with achievable goals and better strategies for effective management of the program.

2.7.2. Comparison of the Management of Scouting Program in schools under the Central Region, Bhutan as classified by Gender of the scout leaders and Level of School.

There were no significant differences on Plan, Do, Check and Act of the management of school scouting program as classified by gender of the scout leader and level of school. The overall difference in gender of scout leaders and level of schools showed no difference on management of scouting program in schools. The result revealed that it was a null hypothesis as there was no statistical significances between the variable in the hypothesis. It depicts that the differences in the gender of the scout leader and level of the school has no effect on the management of the scouting program. In fact, it is how the program is managed leads to how effective the program is carried out.

2.7.3. The guidelines to enhance effective management of scouting program in schools in Bhutan.

The guidelines to enhance the scouting program in schools based on PDCA model (Plan, Do, Check and Act) for quality improvement is found to be effective. Guruge and Berstecher [11] states educational management as an art of directing the activities of all educational stakeholders toward the accomplishment of a common goal. It supports the respondents’ expression on strategic planning for proper functioning of the school scouting program and importance of discussion on areas of development with expertise in field of scouting to provide a better insight in enhancing the program. The revitalized scouting activities was also recommended with an emphasis on Sustainable Development Goals which supports the view of World Scout Bureau that the young people should be provided opportunities to participate in programs, events, activities, and projects that contribute to their growth as active citizens. And through these initiatives, young people become agents of positive change [18]. Few standard indicators on management of school scouting program was also recommended to be inserted in SPMSS (School Planning Management Support System) and be monitored for quality outcome of the program. Deming [19] provided a similar acuity according to which quality improvement take place through four major steps: Plan-Do-Check and Act.
where the check phase includes studying the result and measuring effectiveness. The findings from the experts recommend that the scouting program should be a whole school approach because the scouting program not only enhances academic or intellectual learning but also other important learning needs such as leadership, citizenship building, social interaction, self-discipline, self-confidence, community relationship etc. It supports the policy enshrined in the National Education Policy, Draft [20], Article 13, section 14 which states that all schools shall institute scouting programs to support the holistic development of children and young people.

Conclusion

In conclusion, the guidelines to enhance management of scouting program in schools has been found imperative to strengthen the school scouting program. The findings revealed that the management of scouting program in schools was greatly influenced by the Plan, Do, Check and Act of Scouting Program. The schools can therefore use PDCA model (Plan-Do- Check and Act) that provides a guideline for the improvement of the program. Step 1 is the ‘Plan of scouting program’ which comprises the planning of the overall set of intended approaches and activities to achieve the goal and for the effective functioning of the school scouting program. Step 2 is the ‘Do of scouting program’ which encompasses the execution of the scouts’ activities using various scout methods as planned in the annual scout plan to get the optimum result. Step 3 is the ‘Check of Scouting Program’ which assesses how the scouting program is executed to the scouts using different scouting methods and instruction. Step 4 is the ‘Act of Scouting Program’ which reviews the effectiveness of scout activities, identifying challenges, and improving on it with achievable goals and methods. This study has some limitations in respect to its scope and methodology. The information collected through field survey and with the help of the questionnaires was limited to only the scout leaders in the sampled districts of central region, Bhutan. It was also not possible for “observation” and stay for Troop Meetings in the schools as the schools were closed because of the covid-19 pandemic. It was also beyond the scope to interview non scout leaders and non scouts although that would have added another dimension to the study. Schools are spread across the settlements and visiting individual schools to collect information was very difficult due to geographical constraints and the global pandemic. Two steps could be considered in the future: (1) Conduct a national study to examine the management of scouting program in schools and the roles and responsibilities of the scout leaders and the school scout commissioners who are also the principals of the school and (2) in depth study to determine the management of scouting program in schools classified by experience and level of the scout leaders.

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