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Easy Research: Strategy Towards Excellency and Unstressful Research

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Abstract: Is it true that a research is a burden and stressful job? By identifying the strengths of a research and apply appropriate strategies allows responsibility to research undertaken by all those involved (easy research) and reduce the stress borne by the lead researcher. By using the wisdom of lead researcher to arrange the right strategies can produce the large output. This study will reveal the components that need to be applied in research to achieve an effective strategy. The situation in which a researcher is to achieve excellence is called easy research.

Key words: Easy research, stress, strategies, output, excellence, burden, Malaysia

INTRODUCTION

There is evidence to suggest that research is only one of a number of possible areas of aspects of life which can give rise to the experience of stress. There has been an assumption that discrete, time limited life events requiring change or adaption are associated with the experience of stress and may contribute to a wide range of disorders. Many attempts have been made to identify and scale such stressful life events (Holmes and Rahe, 1967; Dohrenwend and Dohrenwend, 1974; Dohrenwend *et al*., 1988). While psychometric research into the nature and impact of stressful life is not without methodological problem, some progress has been made in determining the relative importance of different types of events. One particular example is handing or leading research project can cause mental stressful among the researchers and academician.

Research is the leader in the development and prosperity of a country. Through research, any problems can be solved and facilities could be established to enhance the socio-economic level and thus, contribute to the country's prosperity. The main research goal is to achieve the research objective called as a research results. A research if designed properly and using the right strategies can produce a variety of research results as publications (books, conference papers, journals, etc.), intellectual property (patent, copyright and trademark), awards (exhibitions, the best conference paper), formation of the new policy, collaboration and other contributions. However, research is tedious and requires a long time as well as commitment. Therefore, it is important in establishing and operating a non-pressure research. To produce quality and quantitative output, lead researchers must be wise in creating the momentum that leads to the achievement of this objective. They must identify the source of strength and implement the appropriate strategies for each branch of strength that can produce its own output.

In other words, all components involved jointly contribute the output and share the responsibility for research. Starting from the environment and culture, stimulating activities and effective technique is a strategy used to achieve research goals. Strength refers to the human resources that can work together to ensure that all objectives are achieved and that include students (postgraduate and undergraduate), research assistant, fellow researchers and others. According to the Mayo Clinics (2009) by sharing the burden faced, pressure and complication can be resolved by working through emotional support, physical and share experiences. This is a benefit from the support group. Every task performed

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by the researchers will be invited to the pressure and eventually lead to other problems such as heart disease, chaotic family life, decreased quality of work, less social and more and this is the negative impact faced by the researchers (Mayo Clinics, 2009; Smith *et al*., 2011). Among the ways for researchers to deal with the pressures is to take charge of their own thought, emotion, schedule, environment and the way they deal with the problems (Smith and Segal, 2011; Segal *et al*., 2011). Therefore, effective strategies need to be done to prevent the pressure in the field of research. This study will propose strategies to conduct research without the pressure with the strength and harness resources and facilities available along with the right strategy. The results obtained are the momentum that can lead to maximum output and it becomes a culture of research groups.

Identified the strength and resources: Identify the strengths and resources are listed on strength in a researcher which these resources will assist in generating information and scientific data. This listing is important to measure one's strength which enabled researchers to organize the next strategic in creating manuscripts later. Figure 1 shows an example of the strengths that can be used to generate information and scientific data. These resources are now available for lecturers and depend on them to evaluate and use it. The more resources more and more journals are able publishes. Determination is the starting point since, each manuscript journal to be developed requires the data either in quantitative or qualitative. All researchers have the resources that the question is whether a researcher using this resource effectively and maximum (Ab-Rahman *et al*., 2011d)? If these resources are used effectively, each lead researcher will be able to perform maximum results without doing too much and tough assignments. Each activity is done with clear objectives and will contribute to productivity.

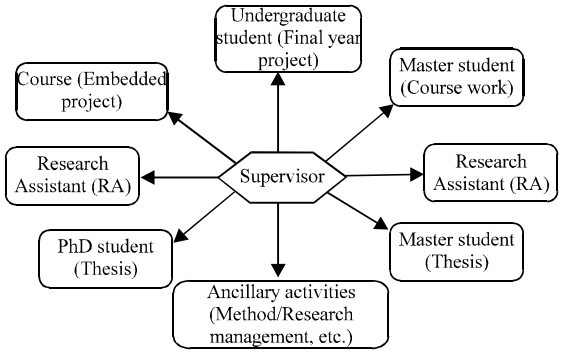

Fig. 1: Among the strengths and resources for a researcher is able to generate the result

Easy research: Easy research means using the resources of existing strengths and modifies to develop a strategy to achieve excellence in research. Some of the components to be used to achieve this purpose are effective techniques, culture motivated, catalyst activity and strength precision. All four of these components will produce other initiatives including the MDA, collaboration, workshops catalyst, out of campus style, monitoring, upgrades, research fellow, co-supervisor, students and others. By using this initiative, it will lead a research achieve its purpose and produce the maximum output (Fig. 2).

Fellow researcher: One of the strengths of the research is the research fellows. Normally, these research fellows appointed the PhD graduate students both local and overseas. Therefore, the best selection is important because soon they will be main key to the research team. Each local university provides a special scheme for the appointment of a fellow with the high cost of living allowance to help them and then together striving to improve the performance of research universities. Selection of fellows is a vital and if the proactive fellow is elected, the research will be steered by itself and then produce a good output.

Multi-dimensional assessment: Multi-dimensional assessment is an approach that can be used to maximize the results obtained from the research. It can be achieved through research and seeing the results (e.g., a graph) from a variety of different view and dimensions. Therefore, little research findings can be processed to produce large output. It requires creativity of researchers as well as extensive knowledge in a specific area or through collaboration with researchers from different fields. The result of different views can be translated into innovative products such as journal writing technical

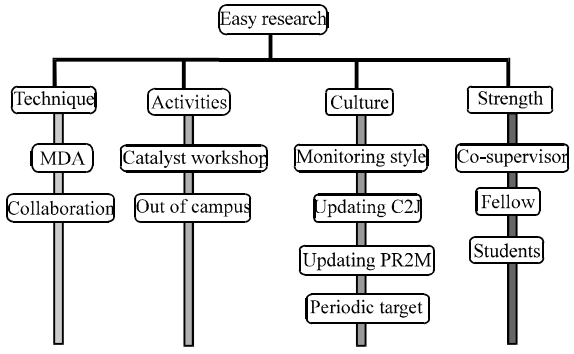

Fig. 2: Some of the components to be used to achieve easy research

papers, proceeding and patents. The combination of each chapter that tells each part can be edited into a book (Ab-Rahman *et al*., 2011a, e, f). Among the measures to be taken in applying MDA in the research:

- List the areas related to research carried out
- Obtaining the views of experts in different fields

By adapting the MDA in the study, researchers are able to produce a variety of research (and so can apply for research grants) and research findings. Each study has to do with other studies and the concentration can be given to one subject at a time. Similarly, the results reviewed at different angles will provide different perspectives and impact and subsequently served in a variety of research promotion (journals, conferences, exhibitions, etc.) (Fig. 3).

Research collaboration: Apart from the quality of journal content, there are several other locations as seen by the reviewers as assessing the quality and performance of research. It is also a contributing factor to the success to penetrate a high-quality journal.

The first location (List of researchers): Some researchers prefer to use this research method that involves scientists from abroad who are known in the same research field with the researchers. Their name is used as the ticket to penetrate the high-quality journals. But it should be noted that the co-researchers should be involved in a study before their names are placed in the list of researchers. Put someone's name in an article or manuscript with no knowledge and not directly involved in the research is wrong and a violation of ethics. Therefore, the researchers will need to plan well from the start before conducting a research. The manuscript consists of a collection of researchers from leading universities will highlight the quality of their research.

The second location (A list of references on publication of the same research): In determining the quality of a manuscript that is sent, the reviewers prefer to see the achievement of a researcher or a publication of the research. Usually, they will see a list of available references in the back of the manuscript. In addition, they also refer to the same researcher in the same survey, what publications have been done and the quality of each issue, whether they (researchers) have penetrated the other high quality journals. If yes, it will give a big bonus to the researchers. The reason is that the same research through a strict evaluation before they are published in journals. This will make the reviewers caution in providing assessment and they need to give reasons when the journal rejected for publication. However, the content and results of the research is an important success factor for publishing a manuscript. If the content and scientific results are manipulated and presented in the correct style and specified format, they will succeed to publish a manuscript in the quality journals.

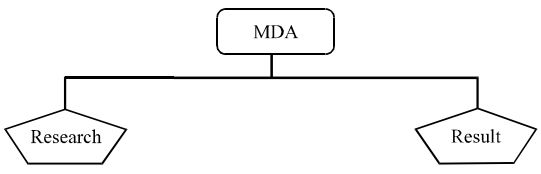

Fig. 3: MDA can be applied in research and result level

Upgrading C2J and updating PR2M: Monitoring is the best way to ensure that research is constantly moving forward. Various methods commonly used in the monitoring system include the provision of log books, preparation of forms or latest research reports in the form of soft copy or hard copy as well as student performances. Using the base that all research reports can be published, monitoring methods are no exception to produce a publication. Reports submitted by the students were patterned so that, it could contribute to proceedings or journal paper if it is achieved the standard and quality of a journal through several processes.

After the manuscript is upgraded, it can be sent for evaluation by expert with specific areas. If the manuscript is rejected, start over again write the journal with upgrade the information regarding the expert comments (Ab-Rahman *et al*., 2011c) (Fig. 4).

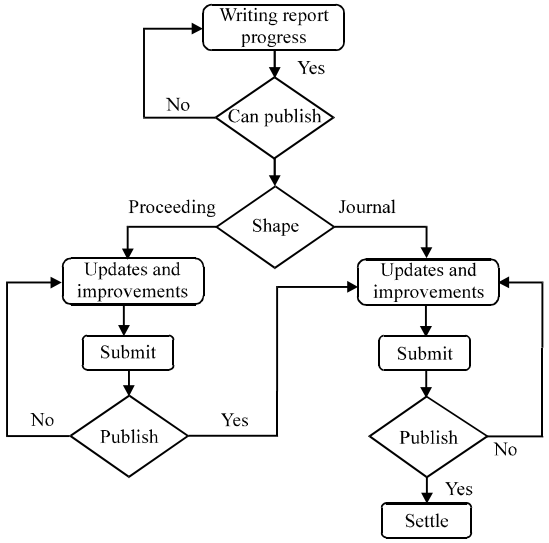

Fig. 4: Flow chart of the process of upgrading the progress report to the form of other publications such as conference papers and journals

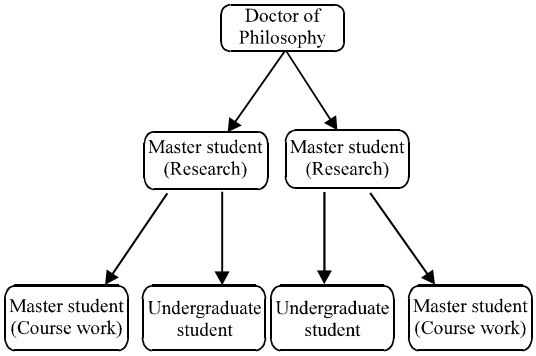

Fig. 5: Supervisory techniques that involve the support of students

Monitoring structures: Monitoring structures also play an important role in the success of a research group. It is means how we construct the students by level (pre-graduate and post-graduate and undergraduate conducting doctoral thesis) and their research topics. One of the best structures is a system in which the Mentee mentor system where the undergraduate students will be monitored by postgraduate students and postgraduate students will be monitored by a PhD (Doctor of Philosophy) student. Undergraduate student project is part of the contributors to the master project and master project is also part of topics that contribute to a PhD thesis project (Ab-Rahman *et al*., 2011b). With the implementation of a good monitoring system will save supervisor time and they can do the other activities. For examples, proposed monitoring structure is shown in Fig. 5. A PhD student is able to monitor two postgraduate students to support their research. Each postgraduate student may be assisted by an undergraduate student and a graduate student in course work. This regular structure is systematic and able to bring research towards excellence.

Workshop on publication stimulation: This workshop should focus on the objective to produce high quality publications whether high impact/indexed journals or a book. Every member of the research group and students should attend this workshop to discuss strategies on how to maximize and enhance the quality of articles produced. It is better if it is composed of a variety of propulsion under the same investigation.

Each participant is required to produce an article to be presented and discussed and even a more effective way is by inviting an experienced evaluator to provide guidance and constructive comments so articles of high quality can be produced. Target date of publication and name of the indexed journals and high impact should be

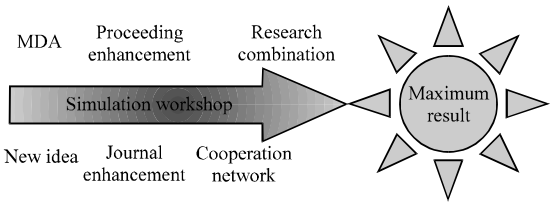

Fig. 6: Initiatives that can be used in publication stimulation workshop to maximize results from existing research

discussed in the workshops to ensure it is published as planned. If any research has 10 members in the relevant field, the group could target a minimum of 10 articles to be evaluated. Exposure to the correct way of writing and high-impact publications can help increase the number of high impact and indexed articles. This aim can be achieved by hosting a talk by an experienced facilitator. Proper writing techniques and quality should be implemented within the researchers to produce high-impact articles and one step to produce the article, not only in quantity but also high-impact.

One way to provide encouragement and form a good cooperation is by inserting fun activities. This can reduce the pressure and tension in the workplace/lab and some examples of the activities that can be done are as follows (Zain *et al*., 2011) (Fig. 6):

- Talk on high-impact journal writing
- Paper work presentation which is focused on improvement and idea generation
- Brainstorming on producing a technical paper
- Sports that can be done in groups

Results that are wished to be achieved by doing this workshop are:

- Quality upgrade in article writing and thus producing high-impact journals
- Application of proper techniques of journal writing
- Addition of information to the manuscript and republished as journal manuscript
- Integration of relevant fields for future project and writing

Monitoring pattern: Monitoring also means to achieve the desired goals. For example, students must submit a progress report to the supervisors in each week or any specified time period in a certain format for example, the contents of the report must have an abstract, theoretical layout of the apparatus, results, discussion, conclusions and references. The report has been prepared and has the

following elements and the potential to be issued in exchange for a journal and seminar papers. By this time to write and present research papers in journals and seminars can be reduced. Students will naturally need to know the other elements of the theory and background as well as the results of research studies.

Periodic target: Students who register will have the opportunity to enjoy the scheme of life support from their supervisor's research grant. To ensure that students are focused and motivated on their research, a condition should be set. The simple conditions as to produce a number of journals per semester. Set the number of journals and students who have reached the target will be provided with subsistence allowance for the following semester. In this way, each student will always be alert to their contribution to group performance indicators and also to the university in general. Students are able to publish in journals of higher quality (based on impact factor) will be awarded separately. In this way, the research group is no longer the responsibility of KPI lead researcher but also all the researchers in it including students.

Out of campus: Lecturers, meetings and workshops are inseparable. This workshop is usually held at a nice place and beautiful views. This workshop is usually held for 3 days and 2 nights and will reveal all the problems that arise in the same faculty either in the management or research area. In fact, this opportunity can also be used to bring students to carry out the hard effort to produce the target such as journal manuscripts or technical reports and progress of a project. Normally, each lecturer will be given facilities like a room with two beds for every workshop is organized. The hotel is also usually provided for two guests. While the lecturers participating in workshops organized in the meeting room, the student will be given the assignments and also the work. Therefore, by using one facility, the two results will be obtained.

Output generate larger output

Maximizing publication (One shoot multi-target): Some researchers think that the passion for publishing the journal is related to the pursuit of promotion. In other words, the number of publications and the quality is one of the criteria used in evaluation for promotion. Yes, I agree but we cannot narrow our minds because the issue of the journal not only contributes to one benefit but >10 other benefits. The more journals we published, the more benefits we get.

The research publicity: There are several methods used to publicize research results between internal and international exhibitions, promoting the website and most importantly, the technical report published as journal and proceedings. Through publication of journals, research and achievement information can be shared by other researchers around the world. At the same time, make the researchers known in the world of research based on their research field and achievements.

The research promotion: Through publications, the applied research based on producing a prototype can be promote and marketed. At present, a growing trend among manufacturers started looking for new products that are still raw and ready to work with researchers to commercial it. The main source for information is through latest journals and technical papers. Normally, the research results as the prototype found in these sources is still new and not yet sold. Below shows some examples of emails that showed interest from a company on a prototype produced by research. Although, it was an email, it is enough to show the influence of a journal publication to provide other benefits to the researchers.

The research group strength symbol: The strength of a research group depends on the infrastructure, the number of students and research, especially the number of publications and terms. The number of publications and terms will make the researcher will be remembered and their research laboratory is considered as an excellent laboratory. My research laboratory in UKM was originally a place to store the old CRT computer before disposal. Because there is too much need to do a research, I take the responsibility and turn the lab into the spectrum of technology research laboratory in <1 year. Today this laboratory is one of the assets of the university which has a master and doctorate students >26 people in the Department of Electrical, Electronic and Systems Engineering, Faculty of Engineering and the Built Environment. With an average of 25 journal publications per year were attributed to the Department's KPI and the superiority achieved in year, 2009 by 47 journals have been produced. This laboratory can be considered as a new asset of the university was originally an old computer store.

Improve University's KPI: There are eight criteria for the recognition of a RU decided by the Evaluator Committee of Research University where these criteria have been developed with a focus on aspects of R and D and C. It also used the criteria that have been adopted by several leading international rating agencies as shown in Table 1. One of the evaluation criteria in Research University (RU) and contributes the highest score is the quality and

Table 1: The criteria used to evaluate the universities for RU recognition

Bill	Criteria	Ballast (%)
1	Quantity and quality of researcher	25
2	Quantity and quality of research	30
3	Quantity of postgraduate students	10
4	Quality of postgraduate students	5
5	Innovation	10
6	Professional service and gifts	7
7	Network and link	8
8	Support facilities	5
	Amount	100

quantity of research. The quantity of research refers to research strength in terms of the number of researchers, financial assistance in the form of grants and the output of research including some publications that consider papers published in journals indexed in Scopus and ISI only.

The trigger for Global cooperation: Through publications, research and results can be shared by researchers around the world. Cooperation that exists in this relationship will trigger the global cooperation in research. Global cooperation is necessary for all researchers to improve research through the application of international grants, the departure of sabbatical and cooperation in carrying out a research such as the usage of tools, exchange of views and other benefits. Email below shows the influence of research on the ongoing research in other universities. Researchers at the university said that research findings from other research groups have benefited the research. Referring to the third email, the company also offers cooperation to use the prototype developed in the laboratory to add value to the system developed by the company.

Generate additional income sources: The publication reward scheme is bonus money given by the university to the issue of the journal according to the lecturer in certain conditions. Normally, these conditions are the journal that is published must be indexed in Scopus or ISI webmaster. However, the amount of which varies with the quality of journals published or based on the value of journal impact factors. For example, UKM's publication rewards based on the quality of journal publications that has been published and its value increases with the class journal. The value begins with RM1,000 for journals indexed in Scopus and up to almost RM10,000 for level 1 quality journals (Fig. 7).

Increase the H-index by the researchers and organization: Research quality expressed in the evaluation of term in order to observe the impact of a publication or research produced. If the use of terms/quotations for an institution of higher education is

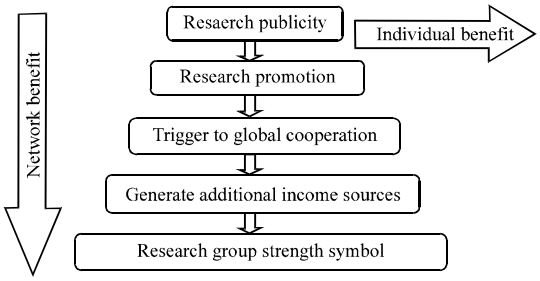

Fig. 7: Diversification benefits derived from the publication of journals either individually or network

high then the research in that institution will influence other research. Research quality is state in two forms, namely H-index and impact factor. H-index is a measure of terms in the researchers' article that were mentioned in other publications. If a researcher has H-index is equal to 10 that she/he has 10 papers mentioned at least 10 times. H-index can also be calculated to determine the productivity or the impact of the research group from the same department, university or country. Among the measures to increase the value of H-index is to publish the results of the study with a large quantity to increase the probability of the journal mentioned in any journal. To increase the annual research quantity may refer to this journal to learn effective techniques. Publications in large quantities are necessary in which a researcher will refer to and mention those articles have been published in the next publishing. Self-reference is also considered increasing the H-index.

CONCLUSION

Financial support, researchers and facilities is a component for research and subsequent research output. But to achieve the maximum output, these components are not sufficient therefore, a good strategy should also be applied together with the entry of the generator system in the research. This generator system consists of triple bottom line as effective technical, catalyst activity and cultural motivation. However, by implementing this strategy it still put a pressure on researchers. Therefore, this study proposes each lead researcher identify the respective strengths of human resources that can together develop the same research. Load distribution together with the strengthening of research strategy is known as easy research in which researchers excel without any pressure either physically and mentally. By applying strength to the research strategy allows the burden and responsibility of the research be shared and thus, reduce the pressure focused on the lead researcher.

This study has outlined a number of components such as culture, activities, techniques and sources of strength where there are initiatives that can be used to achieve easy research.

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