

# Good Researcher: Development of a Mnemonic as Quick Note for Novice Researchers

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## ABSTRACT

Research is an integral part of the healthcare system. Generating good research based evidences have improved the quality of healthcare provided. In the current era, the authenticity of a produced work is at times questionable due to the rise in unethical practices. It is time to curb it in order to stop the finger pointing culture towards scientific authors as those who lack international credibility and integrity. Where to start? We need to start while young. Molding the novice researchers while they are postgraduate students will pave the way for a brighter research future. The writers framed a mnemonic “Good Researcher” in order to reach the novice researchers and what qualities and skills they ideally need to acquire in their professional life and implement into practice to meet the ethical standards.

**Keywords:** novice, research ethics, scientific integrity, plagiarism.

## BACKGROUND

*“No one is born with skill. It is developed through exercise, through repetition, through a blend of learning and reflection that’s both painstaking and rewarding. And it takes time”– Twyla Tharp.*

Today’s world we live in is surrounded by an invisible net of evidences. Any action specifically in the field of medicine demands a strong research based evidence. Every field is looking forward to implement a proven solution for a better outcome. Gone are those days of trial and error especially in the healthcare sectors where the safety of the client is essential. The consumers of healthcare, our clients in the hospitals are equipped with knowledge from the Internet. They seek clarifications often when a healthcare professional wants to implement any specific intervention. Hence there is a widespread need to be updated to recent evidence based practices and adorn the role of a researcher to

contribute to the scientific body of knowledge.

Research is a growing field where a variety of contributions can be made to one’s profession but most often research is seen upon as an extra burden due to varied reasons like lack of time, lack of appropriate knowledge of how to go about with it or simply because of lack of interest. In order to improve research productivity in a positive way the organizations have included them as a criterion in their performance appraisal as well. Promotions are based on publications too. <sup>(1)</sup> Academicians and researchers are gearing forward in scholarly publications and achievements it is quite essential to reflect the way one chooses to achieve it.

Plagiarism which is the “Cut Copy Paste Culture” is on the rise and hence it questions the authenticity of the data published. Many other practices are academic text recycling, <sup>(2)</sup> ghost authoring, <sup>(3)</sup> salami slicing of one research that’s

conducted and making multiple papers. <sup>(4)</sup> Plagiarism is considered as a top rated fraudulent activity among all unethical research practices. Research literature highlighted the increase in academic fraud globally. <sup>(5)</sup> An article that did a bibliometric analysis highlighted the data on plagiarism in India between 2000 and 2016 which concludes that most Indian authors quit their trial to publish in good international journals which have strict peer reviews and take long time for publications instead sort for mushrooming journals which are not appropriately indexed and also publish based on rapid payments. <sup>(6)</sup> The University Grants Commission (UGC) of India came up with their four tier system based on the similarity index with first tier stating if similarity index less than 10 percent, no penalty, if between 10 to 40 percent then the manuscript to be revised, if 40 to 60 percent suspension of student while debarring faculty from supervising the thesis for 2 years and if plagiarized more than 60 percent then the student is removed from the programme and faculty will lose two years annual pay and cannot supervise students for three years. <sup>(7)</sup> Though there were oppositions to this system and its outcomes but still it is essential at any cost to instill the moral culture in research and publication from the grass root level which is at the university level.

### **Developing characteristics of a researcher.**

Results of a comparative study highlighted that the practices of plagiarism seem to originate mostly at university levels. <sup>(8)</sup> A study conducted in Australia comparing the plagiarism practices between their local Australian Students and Asian International Students revealed that students irrespective of cultural differences were involved in plagiarism activities and also revealed that Australian students were found to plagiarize more often than Asian Students proving their proposed hypothesis wrong. <sup>(9)</sup> Every novice researcher is like a small child who requires molding to develop innate

qualities of a good researcher. Choosing the unacceptable research behaviors that could affect one's morale and cause harm in the field is prevalent due to varied reasons. Stealing one's idea and claiming it as one's own work, not taking a conscious effort to do a research but just delegating the work and getting it done, inappropriate data collection and manipulating results for the sake of acceptable publications, non-acceptance of negative findings in the project are a few among them. Dermot Mulroney, an American Actor rightly quoted "*What people now actually refer to research is just googling*". Adding on to this, the rate of plagiarism is increasing among the young generation who needs to be sensitized about the need to acknowledge the work of others and ensure that they produce their own words in their work. <sup>(10)</sup>

Nobody is a born researcher but certainly, the skills can be acquired, nurtured and refined to mold oneself into a researcher with morals and values. We have explored the nature of a good researcher from our own views and experiences and have shared them. Published scientific articles featuring characteristics of researchers were also reviewed for key points. <sup>(11-16)</sup> Time Management is the key for balancing work and research. Research and publication needs commitment, good time planning right from the birth of the problem statement until publishing the data. It should never be done in a hurried manner or under pressure. Research and other scholarly activities are one of the evaluation criteria for most academicians, hence to work in a research team and to do research needs a passionate approach. Teamwork produces better results. Identifying and merging with colleagues of similar interests and good wavelength helps smoothen the team approach. If one chooses to be the Principal Investigator, then he or she would be the anchor of their team demonstrating sound ethical behavior, fair delegation without bias, committed towards achieving the goal and respectful towards team members. They are liable to keep the team

involved of the progress of the project undertaken ensuring equal contribution from all involved.

### Framing the Mnemonic- Good Researcher

Most new researchers find writing an article as overwhelming, time consuming and at times demotivating for which they need to be guided in the right direction. (17) A novice researcher should associate themselves with experts in their fields to learn and refine their research skills. Originality and Relevance are mandatory while pursuing a research problem. Being inquisitive to seek answers and solve problems helps them to develop good analytical skills and critical thinking too. The authors framed a mnemonic for the novice researchers and the upcoming graduates as to who is a “GOOD RESEARCHER” and explained the mnemonic as Give “More” of quality time and detailed attention, Originality Matters – Be truthful to the research one does, Obtain Thorough Knowledge in Research Process and Basic Statistical Principles, Delegate Fairly while working in a team which enhances team spirit. Responsible and Resourceful in contributing towards the best outcomes. Ethically Sound Behavior, Spirit of Inquiry – work more to know in depth about the problem, Exercise Apathy – Accept success and failure, Articulate Well – Communication is important, Respect the team as well as the participants, Consistence, Commitment and Critical Thinking are essential traits, Honesty pays, Exempt from manipulation and fabrication of data and details, Reflection – Developing a reflexive attitude helps to learn from mistakes. Research being an integral part of every curriculum at collegiate level be it any field the responsibilities are vested on the academicians to be models and mould ethically and morally accepted researchers who will bring change through the best evidence based practices. (11-16) The same is represented in Table I.

Table I : Mnemonics “Good Researcher”
G- Give Quality Time.
O-Originality Matters.
O-Obtain Knowledge in Research and Statistical Methods.
D-Delegate Fairly.
R-Responsible and Resourceful
E-Ethically Sound Behavior.
S-Spirit of Inquiry.
E-Exercise Apathy.
A-Articulate Well .
R-Respect the team.
C-Consistence, Commitment and Critical Thinking
H- Honest.
E-Exempt from Fabrication.
R- Reflect Always.

### CONCLUSION

The academicians have a responsible role in guiding the undergraduate and postgraduate students to learn the ethical practices in research and sustain it through their professional career. They also serve as role models. Research is a tedious process and this mnemonic can serve as reminder to the roles and expectations of all researchers as well as a self-evaluator checklist to refine the areas or characteristics to be a researcher in their respective field.

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