Introduction to Research
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Lecture – 41
Research in Management Studies

Prof. Prathap Haridoss: We are very happy to have with us today Dr. Usha Mohan from the Department of Management Studies here at IIT Madras and of course, the management is something that you know a lot of people are very interested in and it's you know at least professionally a lot of people pick up degrees in management at some point or the other, especially in an industrial setting or a corporate setting. Of course here, we are taking about research into the areas of management. Dr. Usha Mohan has been here at as a faculty in IIT, Madras for 6 years. Before that she was a faculty in the University of Hyderabad.

Her areas of research, areas of expertise include polyhedral combinatorics, supply chain, risk management, optimization and quantitative models in supply chain management. So, variety of areas that she works on and she also works with the incoming students in the department of management studies to help them get into the research process in a smooth manner. So particularly, she is well qualified and well experienced in addressing the types of aspects that we are going to discuss in this module. So, thank you for joining us.

Prof. Usha Mohan: Welcome.

Prof. Prathap Haridoss: So, I would like to start with this general question we ofcourse, think of management as something that is on the field I mean in a corporate setting and so on. Managing various activities that from going on there and so on. But in terms of research, are there areas of research in your field which are considered you know traditional areas of research, which have been there for a long time where may be there is lot of literature out there that people can refer to?

Prof. Usha Mohan: Yeah, see, I think at this point of time I need to mention that at parent department of this humanities and sciences, social sciences. The department of management studies was born out of this parent department. So, even prior to the research from the department of management studies a lot of our faculty, senior faculty where associated with the humanities department and if you look at the traditional areas of research at that point of time were mainly people who came from an industrial engineering background. We have; we did have finance and HR and this branched out now into 6 areas of functional areas of management once the department of management studies was born.

So, you can put the traditional areas, one into organizational behavior, human resources management, the next is financial management and third would be marketing. The forth is operations and production management, the fifth is systems information systems and then sixth area which you called as integrative management where basically a lot of interdisciplinary within the management studies is addressed to; so this are the traditional areas in 6 functional silos.

Prof. Prathap Haridoss: Ok

Prof. Usha Mohan: Now, if I look at each silo in an organizational behavior in human resources, the typical problems they addressed are motivation, job satisfaction and they look how to come up, they understand organizational ==citizenship== behavior and this is the work-life balance, these are the type of problems they address. In financial, it has been typically investment analysis then they look at commodity price modeling, financial risk analysis etcetera. Marketing, it has been analysis of advertisement and media with market segmentation, consumer behavior. These have been the traditional areas of research.

Operation and production management, I think this ==owes== a lot to the industrial engineering and industrial management background with which the senior faculty came with problems which were mainly focused on resource scheduling, algorithms, coming up with facility planning, transportation and network problems. I am talking about the traditional areas and I think very soon we will be talking about the new areas of research

also. Information systems again, analysis of ERP systems, effectiveness of information systems and integrative; we are trying to come up alogorithms with modeling and analysis of virtual organizations, knowledge management processes these have been the traditional areas.

Prof. Prathap Haridoss: Ok, great. That's a very I mean elaborate, detailed layout of what are; what is happening in the general field of management studies in terms of research and so on and as you mentioned you know like with the engineering I presume that even with management there are areas of research that are considered relatively recent in terms of, you know with the way the people have given attention to it and so on.

Prof. Usha Mohan: Yes.

Prof. Prathap Haridoss: Maybe the last 5, 10 years and so on. So what of sort of areas are there in that context?

Prof. Usha Mohan: Yeah, again you can see that as I mentioned that the typically, I will start with the operations. Operations has been more in industrial engineering and production engineering motivated operations management and over the last 5 to 6 years we have seen the shift towards more quantitative modeling and where the methodologies have been more game theoretic methodologies. So, we have both contributions to game theory and we have more game theoretic models like people have been taking about incentive mechanisms and understanding business situation, typically supply chain situations from game theory point of view, game theoretic modeling, how do you model certain situations using game theory? Now, again marketing digital marketing as the new area and we have faculty who have been working in digital marketing as well, sorry and then after sustainability being an important issue. So, we have faculty of working in sustainability, apart from this we have faculty who have been integrating spirituality into psychology of work.

Prof. Prathap Haridoss: Ok.

Prof. Usha Mohan: And all of that so, these are the new areas.

Prof. Prathap Haridoss: New areas that.

Prof. Usha Mohan: Where a lot of faculty have found interest and some very healthy development is lot of people are trying to integrate among areas and we have people who are from two, for example, we have people from HR and analytics coming together to come up with something and say, knowledge management and things like that we do have health care analytics, data analytics and health care operations wise and looking at it from different dimensions, but analytics means the (Refer Time: 06:30).

Prof. Prathap Haridoss: That's very nice to know, The I think again as I mentioned may be and what is probably there in the public perception is of course, a management candidate; a person with the degree in management is often quite well sort after in many various you know settings associated with corporate world, with even you know new entrepreneurial ventures and so on, but in terms of the research that goes on in the area of the management, are there specific areas of research that the industries sort of you know almost immediately interested in? It's quite likely that almost any area of research may be little later they may be interested in out in the future and so on. But are they currently interested in some specific activities that you, in your opinion that you feel is of you know current interest?

Prof. Usha Mohan: Yeah, I think when it comes to the industry though we did have a flagship program which was the MS entrepreneurship program. It was housed in the department of management studies, still I think last year it became an institute wide program and this was very well sort after and if you look at the candidates because we are housed in an Indian Institute of Technology, I think most of our resource scholars and the way we structure our courses itself has an analytical component, no matter which functional area you belong to. So, even if we find the type of jobs the industry seeks from our resource scholars are definitely; they except them to be in an analytical position and that is where people are trying to go, be it HR analytics or marketing analytics or OM analytics that is so the typical job profiles are more of an analyst type of a profile which people, if they are go into this one, but we have an equal number who get into academics also.

Prof. Prathap Haridoss: Ok. So that also, in fact that was something that I want to touch upon.

Prof. Usha Mohan: Yeah.

Prof. Prathap Haridoss: So those are the kind of positions that people.

Prof. Usha Mohan: Yes we have.

Prof. Prathap Haridoss: Graduate, post graduate students.

Prof. Usha Mohan: In fact, this last batch who graduated last week, 3 of them have gone to the new IIMs; IIM, Kozhikode; IIM, Kashipur and one of the measures

Prof. Prathap Haridoss: Teaching positions.

Prof. Usha Mohan: Teaching positions, yeah.

Prof. Prathap Haridoss: Academic positions.

Prof. Usha Mohan: Academic positions, 4 of them have taken academic positions.

Prof. Prathap Haridoss: Ok ok . And in general.

Prof. Usha Mohan: Yeah.

Prof. Prathap Haridoss: And ok in general and certainly maybe in association with what you see in the set of students that you meet during your you know post graduate program in management studies, how do you see or how will you advise them to measure success in research? I mean they are used to an academic setting or may be, they have done some courses before they came here. So, they have had always had a different metric on how they measure success or their own success.

Prof. Usha Mohan: Yeah.

Prof. Prathap Haridoss: In a research settings, specifically with respect to say management activities, is there anything that you would suggest is a better way for them to measures their success at progress?

Prof. Usha Mohan: Yeah, see since I deal with and interact a lot with new scholars, the first thing we try and tell the scholars is the shift from being a taught course to a research course and once both are MS by a research and PhD, what we try and tell them is ownership is extremely important, ownership to the problem and ownership to the process everything. So, every all your ethics and everything come in there and the way we would like them to define successes rather than, then it should be 'aha' movement, first of all that is something which we except them feel good about what you are doing and do not chase numbers. The matrices' yes; obviously, publications we strongly encourage this scholars to publish in highly rated journals not just for the numbers and not just for the number of a publication, but the choice of journals is also equally important. So, that is something which we are emphasizing.

So, short term goals might be perhaps publications, good conferences; choose wisely choose conferences, attend good conferences which are rated well by the peers that is something which we strongly just not any conference. So, we try to rather than been counting it should be more by choice, choose wisely that we something which we try and encourage right from day one then after words, there are also minor awards, presentations, best paper awards this is sort of pattern the back and ague to perform better. So, we do have scholars who present both at a national level and international level and regularly obtain awards. So, these are short term. Long term; obviously, would be invitations to chair conference sessions, give plenary talks, but that would be more at a faculty level, but at a scholar level I think the short terms gains, which is to get hold of a good understanding of the research and wide acceptance, wide acceptance could be through conferences or publications.

Prof. Prathap Haridoss: Ok great, I think that that probably applies to a lot of disciplines and so on maybe on a mundane note even you when you when we are talking of a

measuring the search success in research and so on. I think the transformation from you know students life as an undergraduate student or postgraduate student life there is a lot of activity associated with the group that makes a big impact in how successful the student is in their research carrier. So in this context, what do you think is a you know good guideline for; how often students should be meeting their adviser or guide and how does it maybe change with time or what is your opinion on this?

Prof. Usha Mohan: Yeah, I think we can put it as different stages of research. The initial stages anything between meeting the guide once a fortnight to once a month because what we have done in a department now is we have strengthened this course structure. The way we are strengthend the course structure is because department of management studies unlike other core engineering in disciplines, where you get core M. Tech to get into PhD we get a more diverse audience, we get a more diverse group who want to do a PhD management studies.

Now to address this, we have come up with the three prompt course structures in which we have prescribed three sets three courses which form the course research. So, any scholar who is graduating from the department of management studies has to take three courses, earn the credits of which there are three courses which are core. The core is a research methodology which is against, which sort of it is making of a researcher which introduces a researcher to what is expected out of a researcher, how do you deal with problems and all of it's a methodology course.

Of course, we have separate functional areas research methodologies but this is a broad thing the other is data analysis research because we believe that no matter what is your functional area, you should have knowledge of data analytics and the third thing which is academic writing. So, it is making of a researcher, the methodology course and how do you present your research. So, this is what we have termed as a core curriculum. Now, again from management studies it's very important to have a breadth knowledge also, breadth knowledge of at least three of the functional areas against the functional areas are marketing, operations, finance, HR, OV systems and integrative.

So, we have said that student who is from a management study should have breadth knowledge also. So, we have divided into core, breadth and depth and depth is where you dig deeper and you take courses. So this is how we have designed our courses. Any students in the first year we expect them to really focus on this core. So, get yourself prepared to do research. In the first year, we are encouraging scholars to take a lot of course and prepare themselves a research rather than deep dive itself. So, once you gain that maturity which we feel would take at least 6 months to a year, after that your guide starts playing a role. So, first is get hold of your necessary ammunition and then you start deep dive.

Prof. Prathap Haridoss: Ok.

Prof. Usha Mohan: So once that is; that varies between the problem, the guide we have we do have a lot of part-time, external.

Prof. Prathap Haridoss: Ok.

Prof. Usha Mohan: But at that point of time it would be more regular, but the first year is generally getting hold of the course work.

Prof. Prathap Haridoss: Ok.

Prof. Usha Mohan: Preparing you to be a good researcher, we rather put the making of a researcher is the first year is spent for that and then it the frequency keeps increasing. So, at your literature review it would become fortnightly, then it would become to a month then it would be fortnightly to a week and then the thesis writing stage perhaps the thing would become much much more frequent.

Prof. Prathap Haridoss: Great, nice to know these insights. So, maybe I will conclude with this little bit of general question.

Prof. Usha Mohan: Yeah, sure.

Prof. Prathap Haridoss: What are your words of advice for an aspiring student in who wants to do post graduate study in management, an aspiring post graduate student?

Prof. Usha Mohan: Yes

Prof. Prathap Haridoss: For management studies.

Prof. Usha Mohan: The first thing is I think for any researcher, the key quality we look is passion. If a person is not passionate about the research I don't think any researcher would survive because for person with passion it will keep the fire alive, ignite your passion. So, that is something which you have I think one of the key qualities we look for because research is, it's not time bound it can take anything between 3 to 6 years. So, that you should be willing to, we should have both the robust nature and you should have the tenacity to overcome hurdles and look for better things positivity. These are qualities, attributes which we look for and once you have the passion I think everything else falls in place.

How do you develop the passion I think it is a very individualistic goal and that passion and commitment I think these are the two things; commitment to research, these are the two main things which have been and once you have the passion I think everything else will fall on place that's what I would say.

Prof. Prathap Haridoss: But is there any, I think that you feel that is maybe specific to management in this.

Prof. Usha Mohan: See management studies I think it is very, very important that we articulate what the business needs in terms of abstract.

Prof. Prathap Haridoss: Ok Fine.

Prof. Usha Mohan: With because nobody is going to define that for us.

Prof. Prathap Haridoss: Ok.

Prof. Usha Mohan: And the minute that is the idea, there is business requirement; are we going to articulate that into? So, the first transformation happens when you are articulating or translating a business or a decision need; you are abstracting that into an academic environment, you are working in that academic environment. So, all that thing whenever you are working, you need to constantly see that you are not doing it just for the abstract nature, but then after it should lead to something meaningful and again the last stage is to whatever you are developed in the abstract world you will have to get back to the business.

Prof. Prathap Haridoss: Get back for the business, ok.

Prof. Usha Mohan: I think these two things are equally important. How are you translating a business needs to abstract and how are you going to represent in the business world?

Prof. Prathap Haridoss: Ok.

Prof. Usha Mohan: And once that becomes then your research becomes meaningful in a management setup.

Prof. Prathap Haridoss: Okay great. So, thank you Dr. Usha.

Prof. Usha Mohan: Welcome, Yeah.

Prof. Prathap Haridoss: For joining us and sharing so much of insight into a field that you know maybe especially engineers may be not very familiar with, there is a lot of curiosity always about management studies and so on. I thank you very much for joining us.

Prof. Usha Mohan: Thank you.

Prof. Prathap Haridoss: And sharing this.

Prof. Usha Mohan: Thank you.