

Research Methods in Health Promotion
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Lecture 57: Report writing in health Promotion: An Overview

In the previous lecture, we discussed about the health promotion research designs and how to prepare the proposal for our health promotion research, how to prepare the proposal for getting funding all these aspects. So, the proposal aspects we discussed. Now, in this lecture, we will focus on the report writing part. So, this is again an important part of scientific writing. Report writing means how do you prepare your report or how do you prepare your journal article because in the journals you will be disseminating the findings that you get from your health promotion research that you have conducted, may be funded, may be you got certain external sponsors, may be from with the help of other collaborators like this, but ultimately it is the journal publications through which you are going to showcase your research to the world. So, the concepts that will be covering in this lecture are basically the selection of appropriate outlet for the research that means, how do we select the journals.

Next the structure of a research manuscript. See in previous lecture, we discussed the structure of a research proposal. Now, we will be discussing the structure of a research manuscript typically the report of a research and we will understand how do we critique a published literature. The first question then is how do we select an appropriate journal for our publication because if the the journal that we have selected is not appropriate enough, there are several limitations then.

Firstly, the the journal publisher, the journal editorial board may outright reject your article that no this is not appropriate for us. So, if somehow you end up choosing some predatory journals, then the ultimately the the credibility of your research even though you have performed it in a very good way may not be considered as high as other researchers. So, there are certain considerations based on which we select the different journals for our publication. We often you know choose the journal that aligns best with the research topic, the methodology and the perspective. So, first when choosing a journal, we should consider our research topic and we should also consider whether that matches with the aims and objectives or the of the journal or not.

Next question is we have to try to select the journal that will provide sorry yeah that will provide the maximum impact for both the topic and the practical significance of the study findings. Health promotion is a practical discipline and by health promotion research, we are inducing behavior change and also we are proposing for certain policy changes, we are proposing for certain advocacy etcetera. So, for from a practical aspect, it is not really about the topic that needs to be disseminated, it is also the practical significance that needs to be

disseminated. So, the the journal that we select that should focus or that should have a good impact because ultimately we need that the topic and also the significance or the way forward from this research to get disseminated among the among the larger group of audience right. So, when we assess the impact for when we assess the journal impact, we have to assess whether the journal is going to impact both the topic and also the practical significance or not.

Usually what happens is for a health promotion research, if we select if we focus on particular topic and an aligned you know aligned significance, then the journals that we get to select they focus on both of these issues simultaneously. Next we have to select whether we go for open access or the subscription only journals. What happens is if you choose for a subscription only journal, then your research will be limited and will be accessed by only the subscribers of the journal. But if if you choose an open access journal, then anybody who has access to the journal through digital media or in the print form, you typically usually the open access journals they follow the digital form or the internet or the web. So, they can access your article free of cost and without any subscription fee.

So, open access gives your article or gives your research report a larger view and a larger audience. So, again open access has some fees associated with it. So, you have to be very careful depending on your budget, depending on your availability of funds on what to choose and also depending on the topic and also availability of the journal in your selected domain whether you go for open access or subscription only. The journal should be selected for a readership that is interested and invested in the outcomes of this study. So, the basic essence is that whoever in whichever journal we are going to publish our article, we should be very much certain that the readers of that particular journal are very much interested and invested in the topic that you are going to present.

See because health promotion is a multidisciplinary thing and it involves in experts and the concepts from many more disciplines. So, while presenting your health promotion research to a journal you have to be very specific on which area you have focused on whether the journal that you are presenting your article to is focusing on that core area of health promotion or not because you may not be able to find one typical journal which focuses on all the health promotion issues. There are certain journals which focus on health promotion as a whole, but again they have their focus area. So, your research should be aligned with that focus area so that the audience to whom you are actually presenting your research they are interested in your study topic and if they are interested in your study topic then obviously, the editorial board will also be interested in your research and chances of getting published will also go higher. Now, a typical thing is regarding this interest and investment of the audience is whether they are able to understand your research or not.

See if you are going to present your health promotion core health behavior related issues to a journal which is mostly dealing with the molecular level or the genetic level of certain elements in say blood or serum like this. So, what happens in that scenario is that will in no

way interest the readership of the journal and that and in that situation your article is not a good fit altogether for the journal. So, this is a very very I mean broad example, but I hope you can understand the basic concept behind choosing choosing the journal in such a way that the readers are interested and the topic that you have presented is understandable to the readers. Now, the next question is what are the sections of a manuscript that you are going to present? A manuscript typically has certain discrete sections again it depends on the journal guidelines certain journals will ask the abstract section perhaps to be in a structured format, but typically we call it the MRAT format the introduction methods results discussion and references. Now, see certain journals may have a conclusion segment which is separate from the discussion.

So, that is why the journal guidelines they are very much important. Now come to the discussion regarding abstract. Abstract in your research you know in your research article it typically similar to the abstract or the summary in your research proposal. Here also you have a word limit and because of the word limit you have to very precisely and concisely present the objectives, the methods, the results and the future directions that you have gained from from your research. Now, see the objectives, methods, results, conclusions of your research these are the different segments that some journals may ask you to structure your abstracting.

Typically the abstracts they they have a limitation in the abstract section some journals those who prefer unstructured abstract may have a limitation of 150 words to 200 words some journals preferring the structured abstracts they may have a limitation of 250 to 350 words like this. So, this varies depending on the journals that you choose. Next comes is the question of introduction here from introduction part the main text of your of your research article starts. So, same as in your research proposal in the introduction you present the key gaps in the existing literature. See your research proposal comes first then you conduct the research and then you finally, publish the article or the report of of your research.

So, the key gaps that you already have you already have done the literature review and you already have found out the gaps why your research is necessary during the proposal phase. You just pull all the data and present over here in the introduction segment and comprehensively present why I mean what chain of research actually led to this current exercise of yours. An effective way of introduction is you know you have you can start in in a broader way like you have you can start with the scope in terms of an international context then you can narrow down the scope to a national context and then you can narrow down a scope to your particular study area or study setting. This can be a one one way of looking at the the you know presenting the introduction section and also presenting the research question that you are actually going to investigate. Remember in the introduction section you have to present the study objectives that that dictated your study area through which you have developed your research proposal while presenting this to the journal ok.

So, that is the difference in the research proposal you present Emsen objectives as a separate segment, but for a research article you present the Emsen objectives after the research question

and that you present in the introduction section. And based on the objective section now you design objectives in the introduction section now you design the methods. So, the methods similarly will have description of the study sample, it will have the description of how you have collected data, but see after the study sample that means, the all the eligibility the inclusion exclusion the sampling the sample size all the information that you have presented in the study sample in the data collection part. Here you are not actually you know presenting what data were collected in the data collection part how you data how you collect the data it should be described ok. And what data were collected this comes under the measures part because you are what data were collected is part of measurement of the different variables or the measurements in your study ok.

Here you have to justify the constructs this is very important from a health promotion and health behavior research perspective because mostly we are dealing with the constructs the concepts the theories and everything. So, in the measurement part why and how you are measuring the constructs in a certain way as you are doing for example, you are using a Likert scale to measure the the self efficacy see what what we did what data we took we took data through Likert scale we took data on a Likert scale that is what we did and we are we that is used for measurement of self efficacy and that information we are presenting in the measure measure section ok. Now in the analysis segment here you should briefly inform that what are the techniques that you have utilized for analyzing all the measurements that you have taken and all the data that you have gathered through the measurement. Be sure to mention all the technical details of analysis because if you have detailed only part of it for example, you have detailed only the descriptive part of your analysis and midway through your result section you introduce certain analytical components like you have not discussed that you have you are going to utilize the multivariate techniques and the different you know the the parameters that you have utilized in the multivariate techniques, but midway in the results the we as a reader the readers find out that you have utilized different regression techniques and you represent the regression results then it will be very much confusing because you have to present the validity of the techniques that you have used in the data analysis component as well. That means, you have to present how good the regression models were or the fitness statistic as we usually call them all these you have to present in the data analysis segment also you have to mention the variables that you have included in the in your model.

So, these are all very important considerations in your data analysis. Now for the qualitative data analysis we qualitative and mixed methods sections we have a whole different lecture devoted to it. So, there are also certain considerations for data analysis the key area is you have to mention all the techniques that you have mentioned that you have used in your study in the data analysis segment. Now in the results this is comparatively straightforward you have to first characterize the sample depending on the journal guidelines the characteristics of the sample may go up in the part of method section where you have a separate section for dedicated for the sample or the participants that depends on the journals. This is a purely descriptive section who are your study participants you describe.

Next you describe the findings these are related to your objectives this part is typically a technical writing this should not be like jargon free or a simple lucid description this should be technically presented you should use appropriate statistics and also it should be in line with the objective often a very good practice is to utilize sub headings that align with the objectives. Here it is essential to use appropriate tables and figures the tables and figures should be presented in such a way that they are self sufficient the readers can understand what is presented there in the tables and figures they should have a title they should have certain footnotes the column headers row headers or the legends in the figures like this. So, that we can easily understand what data or what information is presented in the in the tables and figures, but be very sure to do to not duplicate the information presented in tables and figures and the text of your results segment. So, this is again a good practice and often the journals they ask you to not duplicate the same thing in tables and also in the text. In the discussion these are the general guidelines for the discussion you have an opening paragraph here you summarize the findings typically without utilizing the statistic that you have you have utilized in the result section or the values that you have utilized you generally summarize you provide a general summary of your findings what actually you have gathered.

Next after the opening paragraph you keep on discussing with the existing literature that you have found out and also find some other literature during the course of implementation of your study. So, now, you have a pool of literature against which you can compare. So, the comparison is again a very important part in discussion you can you can ultimately come up with your own theory through this through the discussion segment you also need to discuss why certain findings were in line with the findings of other studies and why some findings were in contradiction with the with the findings in similar other studies. You also must have to mention why certain hypothesis that you have put forward in early in the study were not achieved or were not you know proved and why some why the certain hypothesis that you proposed were found appropriate through the course of your analysis. So, both of the things why the results were in line and why they were not in line with certain the findings or the hypothesis or the literature everything you have to describe here in the discussion section after the opening statement.

So, the discussion basically gives the explanation of what actually transpired in the study and what is your interpretation. Finally you have to present the limitations after presenting all the discussion of all the explanations the limitations also puts context of the findings the readers will be able to understand why certain things certain findings were not maybe in line with your hypothesis although the limitations are a weakness to your study, but still if you present the limitations that you did this and you were not able to perform this because of some reason and you if you mention this clearly this is highly acknowledged in the scientific community because again this puts a perspective to your research. Finally conclusion it may come under the discussion section or it may be another section as a whole it is basically the crux of the manuscript and typically a single paragraph with two or three sentences that is sufficient to provide the conclusion. Your conclusion should be direct in nature that means, we found out this that the self efficacy is related to intention so that means, you should present your call to an action that if we can change the self efficacy or our intervention changes self efficacy and

by that it changes the intention or the behavior like this it should be direct in nature and because of the directness you can promote the call of to an action. References section it again depends on the guidelines of the journal you put typically at the end of the manuscript the guideline that they have put either you have to follow the Vancouver AP AMA there are different styles of referencing you put all the cited articles in this segment.

The last section for this discussion is how do we critique a journal article. Now you have understood what are the components that we present typically in a research manuscript. So first we have certain general criteria is it well written, is it meeting the criteria of being concise, parsimonious, grammatically correct, well organized, logical, free of jargon and free of biased language. These are the important considerations when you are critiquing an article and that is why whenever you are writing an article you should also be very much careful about these points. So, in a way the critique of a journal article provides you with an important checklist on what are the things you should consider when you are preparing your own manuscript.

Next another general criteria is whether the topic is timely and relevant to the health promotion and the health promotion as a multidisciplinary thing. So, the multidisciplinary and the practice and the practical approaches of health promotion should be focused in your article because again I repeat that health promotion is a practical thing and it focuses on the on the on the problems being solved through through research advocacy and the policies. So, that should be focused. The specific criteria we have a few does the introduction segment, the introduction has certain areas like the extent of problem or the burden does it and discuss the burden, does it make the audience understand the problem, does the literature sufficient literature is cited in the introduction segment or not, whether the author has been able to identify the gaps that are there, whether the hypothesis that you have put forward in the article, whether they are appropriate based on the based on the research question and the literature review and the background statement that you have provided in the background that also comes as a critique of your of your journal article. Next whether the method section so, this is for the introduction next whether the method section it should it provides a description of the study sample.

See the description of the study sample here means the criteria usually what we have used, how we have selected the study sample and what are the number of samples, the sampling technique etcetera, but for some journals it may so happen that you find the characteristic of the study population for example, typically the demographic characteristic mentioned in the method section as well. So, look out for the journal guidelines as well whenever you are critiquing an article. Now sampling the recruitment methodology we already discussed the research designs that have been employed because it should be directly correlated with the objective that you have, then the measures that you have administered whether the measures were valid, whether the reliability statements were mentioned, whether the data collection process and the analytical techniques including the reliability of the techniques that you have utilized for analysis of the data whether all of these are mentioned or not these are important considerations. In the results section whether it provides the direct linkage with the research

question with the objectives whether the results are described in line with the objectives, whether appropriate tables and figures are provided these are all your considerations when you are critiquing a particular journal article. In the discussion section first look out for whether they have provided a concise overview of their finding, then whether they have appropriately discussed with the existing literature with the sufficient literature again is cited in the discussion section or not is again a very important consideration.

And whether the explanations that the authors have provided first check for the explanations whether any explanation the authors have provided or not because it is very important for the authors of a health promotion article to provide explanations and certain future directions or way forwards or hypothesis or postulates through to provide through the discussion section check for that. If they are provided something consider whether those are plausible or whether those are actually feasible or not ok. Then consider the set of limitations of the research whether actually they are the limitations of the research whether any bias is there because of the research because of those limitations or whether the limitations are I mean they are too large to hamper the integrity of the research all these has to be considered in this discussion section. Also during the conclusion they are providing the significance and relevance to the study findings. So, during the end of the discussion section see whether the relevance the significance to the field of health promotion whether all these all these issues are discussed or not because again this is very important otherwise the study loses its context.

So, in conclusion we discussed that how to choose a particular journal for a health promotion research we discussed what are the different structural guidelines of the article that we are going to publish or present to a particular journal and we also discussed how do we critique a particular article. Now it is important for us to understand that the last segment that we discussed that the critique usually we critique an article based on the segments of the particular manuscript and the critique usually enhances the value of the manuscript. See the peer review process that we that each and every article undergoes is basically in a sense the critique of a particular journal article and through that the robustness and also the presentation it improves and it adds a flavor of scientific integrity in the journal article. So, these are the issues that we must consider as an overview to it. In the next lecture we will be discussing about the different techniques different guidelines that we have for presentation of the quantitative findings.

So, that is all for this lecture. Thank you.