

# Attitude of Physiotherapy Students towards Responses to Questionnaires

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## ABSTRACT

Self-administered questionnaires are a good way of conducting research and gathering information. With the advent of technology, the questionnaire can be more easily circulated and a lot more data can be collected with online surveys. However, a common limitation of the responses is that they may be incomplete, biased or not valid and meaningful. The present study was conducted to find the attitude of physiotherapy students when they fill out online research questionnaires.

An observational study was conducted at SBB College of Physiotherapy. An online questionnaire was generated and validated by experts. It was sent to post-graduate students, interns, and final-year undergraduate students of various physiotherapy colleges to find the attitude toward responses to questionnaires using convenience and snowball sampling.

96.6% of participants had responded to a questionnaire before this study. 65.9% of participants had knowledge about the topic on which they were answering questions. 9.1% were not sure if they understood the questions prior to responding to a survey and 4.5% had not completely understood the questions which they had answered. 88.6% of the participants agreed that they completely read the questions before answering. 38.6% of participants search the internet or have searched on the internet prior to answering questionnaires.

The study brings out the need to establish methods to improve the quality of responses obtained via an online questionnaire.

**Keywords:** Online questionnaires, data cleaning, careless responses

## INTRODUCTION

Surveys are an established method to gather information and data. Traditionally surveys were conducted telephonically or face-to-face. Survey research is defined as "the collecting of information from a sample of persons through their responses to questions". This type of study allows for a wide range of ways for recruiting participants, collecting data, and using various instrumentation techniques. Surveys conducted are one of the easily available methods of collecting samples of available immense population. Surveys can be

conducted using various methods such as online platforms, offline pen and paper-based surveys, telephonic surveys, kiosk surveys, focus groups, etc. In survey research, the survey mode has become increasingly popular.

With recent advances in technology, online forms are generated which are passed or circulated using snowball or convenience sampling.<sup>1</sup> This method is widely used now because of the ease of data collection-large amount of data can be collected and the ease in analysis of this data which comes with online forms. Far-off and hard-to-reach

populations can be included in an online questionnaire via commonly used social media platforms. Respondent-administered internet surveys are valued by academic and clinical practitioners as a cost-effective and efficient way to collect data.

Questions in a survey are usually validated by experts in the field and the population to which it will be administered. Explanations of the limitations and benefits of web-based surveys are contained in Identification of Invalid Records in Internet Surveys. Meaningless responses make the questions invalid for analyzing. Meaningless responses are a serious threat to online surveys. The elements which define a meaningful response are the respondent's intention and ability (i.e., intelligence and linguistic ability) to give a qualified answer to a question.

The goal of the study was to determine whether the online surveys conducted by the researchers, as well as the questions contained in the online forms, were understood and filled out with focus and concentration, or if they were filled out randomly and without any focus. This research was conducted to determine the willingness and attitude of the subject towards the topic and the form.

## MATERIALS & METHODS

The observational study was conducted at the SBB College of Physiotherapy. A self-administered questionnaire was generated by the authors where in total 8 random questions regarding the topic of research had been added. It was then given to five physiotherapy college teachers for their expert opinion on the questions. A pilot study was conducted on 15 physiotherapy students. The authors modified the questionnaire according to the comments of the participants. The survey was conducted by circulating an online form, using social media platforms to students at various physiotherapy colleges in Ahmedabad, India. Physiotherapy students at various colleges, pursuing final year bachelor's or master's in physiotherapy or were doing

their internship were included in the study by convenience and snowball sampling.

## RESULT

The form was filled by 88 physiotherapy students including interns (34), final-year undergraduate students of physiotherapy (6), and postgraduate students (48).

96.6% of participants had responded to a questionnaire before this study. From all the students screened 65.9% of participants said yes to the fact that they had knowledge about the topic on which they were answering questions, 9.1% were not sure if they understood the questions prior to answering while responding to a survey and 4.5% had completely not understood the questions which they had answered while responding to previous questionnaires. 88.6% of the students or interns agreed they completely read the questions before answering; others were not sure or said no. Also, as shown in figure 1, we found that 38.6% of participants did or had done an internet search before responding to surveys. Figure 2 describes the responses to 'if they get confused with the questions of a questionnaire'. Figure 3 shows the responses to the question if filling out questionnaires was time-consuming. Figure 4 gives the responses to the question if filling the questionnaire is interesting.

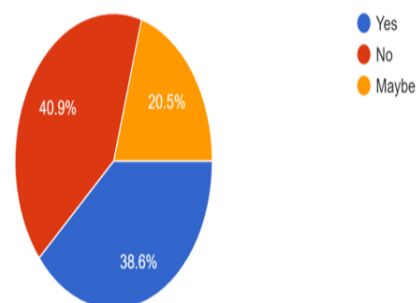


Figure 1: Response to 'whether they have searched the internet for the answer'

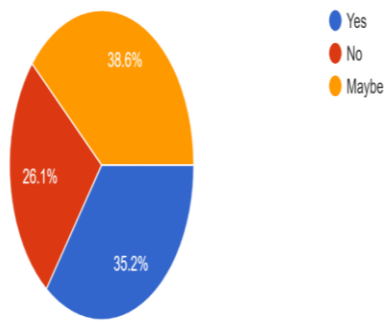


Figure 2: Response to 'if they get confused with the questions of a questionnaire'

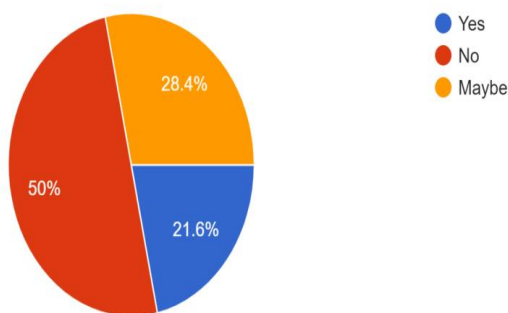


Figure 3: Response to 'if filling out questionnaires is time-consuming.'

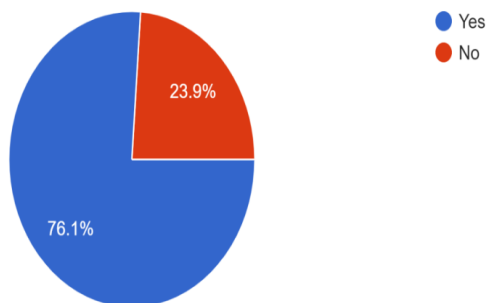


Figure 4: Response to 'the question if filling the questionnaire is interesting'

## DISCUSSION

This study brings out the fact that majority of interns and post-graduate students have filled out a questionnaire at least once in their study tenure. But it may be possible when answering, not everyone knows the subject they are answering the questions of or read the question completely. Some search on the internet before answering the question also suggests that the answers given are not authentic nor may reflect the participants own view.

Ideally while conducting research, one would assume the responses obtained are valid and meaningful.<sup>3</sup> But the reality is slightly different as shown in this study. Berry et al had reported that as high as 60% of the responders give careless responses to a survey.<sup>4</sup> Various literature suggests that at least 5% or more of responses are careless or given without understanding the meaning of the question.<sup>5</sup> Our study shows 38.6% search for the answer on the internet and 4.5% do not understand the questions they answer. Apart from lack of understanding, another reason for careless responses could be lack of interest as 23.9% found filling out questionnaires is not interesting.

Although compared to the conventional pen-and-paper survey the online questionnaire has significantly more completed responses and a faster completion rate.<sup>3</sup> But the threat of nonserious, false, meaningless responses is high with online survey. Oppenheimer et al. found evidence that the exclusion of participants failing the instructional manipulation check can improve the data quality obtained in a questionnaire. This method can be used to improve the quality of data collected.<sup>3</sup> Fidell et al has suggested another way to combat this problem that is a to delete cases with inappropriate responses is commonly and some studies say it is recommended part of the data analytic process.<sup>6</sup> Various methods to mitigate careless responses have been reported such as consistency indices which will match items that are similar, and lack of consistency will be reported based on the deviations with Pearson's correlation across item pairs. Various indices such as this are available that can help to identify responses that are not consistent across a similar item.<sup>7</sup>

Attention checks have become a popular method in survey design to ensure quality samples and hence the validity of scale measurement. Lack of attention in answering the question could be due to the length of the questionnaire as our study suggests only 50% of people did not find

questionnaires time-consuming. Reverse wording of questions has also been used to improve the quality of responses.<sup>8</sup>

## CONCLUSION

Students of physiotherapy commonly fill out online questionnaires, but many do not pay attention to the question, understand the options and tend to find the answers via internet before answering. This may be a serious threat to the validity of the responses obtained.

### Declaration by Authors

**Ethical Approval:** NA

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**Conflict of Interest:** The authors declare no conflict of interest.

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