

Using the Checklist for Reporting Results of Internet E-Surveys with the CMMN Online Survey

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Checklist for Reporting Results of Internet E-Surveys

This document provides the Checklist for Reporting Results of Internet E-Surveys (CHERRIES) [Eys12] for the online survey and tutorial.

Item Category	Checklist Item	
Design	Describe survey design	The subjects in the survey were a convenience sample of professionals participating on online BPM or case management forums. In addition, a chain referral sampling was used by asking each subject to invite others to take the survey. Participation was world wide due to the nature of the online forums used.
IRB (Institutional Review Board)	IRB approval	Initial versions of the survey instrument and experiment description was provided to the College of Science, Engineering and Technology (CSET) Research and Ethics Committee as part of the ethical clearance application. The research was approved by the CSET Research and Ethics Committee.
	Informed consent	The first page of the survey contained a detailed description of the experiment including the expected duration and number of pages of the survey. In addition, an informed consent question that subjects had to answer 'yes' to proceed with the survey.
	Data protection	No personal information was collected from the subjects.

Development and pre-testing	Development and testing	The survey instrument was created using LimeSurvey [Lim16b], and the tutorial using eXeLearning [eXe15]. Both the tutorial and the survey were tested during a week pilot, from May 31 to June 8 2016. 14 subjects participated in the pilot by completing the survey and tutorial and submitting comments. The tutorial was also further reviewed by two experts in the subject.
Recruitment process and description of the sample having access to the questionnaire	Open survey versus closed survey	The survey was an open survey. Subjects were invited in LinkedIn groups, and asked to invite others. In addition, a post in the Column 2 blog [Kem16], and a BPTrend short article in BPTrends [Mar16] were also used to reach subjects.
	Contact mode	For most subjects, initial contact was done by a post in an Internet forum, or in a web site blog [Kem16], or a web site short article [Mar16]. Other subjects were invited via email.
	Advertising the survey	The survey invitation was posted in a set of LinkedIn forums, a blog, and a short article. Some subjects were invited via email by other subjects. All tree documents are included in the attached DVD.
Survey administration	Web / E-mail	The survey and tutorial were hosted in a web page. Subjects were directed to the online survey using a link in the invitation.
	Context	The online survey was hosted by the LimeService Online Service [Lim16a], which specializes in hosting online surveys.
	Mandatory / voluntary	This was a voluntary survey, and subjects had the ability to stop participation at any moment. Most questions were optional There were only three required questions (informed consent, completed the tutorial, and compare the two models).

Incentives	As appreciation for completing the survey, subjects had the ability to select a charity (last page of the survey) to which the researcher donated six dollars. In addition, the last page of the survey contained an email address for the subjects interested in the result of the survey to request the results of the study. Interested subjects, were advised to use an alias email address when sending email to request the results of the survey. This protocol guarantees that researchers cannot match email addresses with survey responses, as no email addresses were collected in the survey.
Time / Date	The survey was conducted from June 15, 20016 to August 15, 2016.
Randomization of items or questionnaires	Most questions consisted of multiple choice answers, and the choices were presented in a random order.
Adaptive questioning	The survey made use of adaptive questioning on the tutorial question (completed the tutorial). In the situation where the subject did not completed the tutorial, and additional question was asked. In addition, each subject was presented with only two of the six models in the experiment.
Number of Items	The less number of questions in a page were one (informed consent and tutorial pages), the maximum was twelve questions (notation complexity page). Other pages had six and nine questions.
Number of screens (pages)	The subject arriving to the site will first see a short introduction to the survey, if they decide to continue to the survey, the first informed consent page of the survey will be presented. Including the informed consent, the subjects will navigate seven pages of the survey, plus 23 pages of the optional tutorial.
Completeness check	The majority of questions were optional, and the questions had a non-response default option. Therefore, completeness check was not done during the survey. Completeness check was done during the data analysis, and only surveys that provided information to answer at least one hypothesis were used.

	Review step	Subjects were able to review and change their responses in a particular page. However, subjects were not allow to go back to previous pages.
Response rates	Unique site visitor	This feature was not available for the survey.
	View rate (Ratio of unique survey visitors / unique site visitors)	This feature was not available for the survey.
	Participation rate (Ratio of unique visitors who agreed to participate / unique first survey page visitors)	333 visitors looked at the informed consent page. 257 of them agreed to the informed consent terms and started the survey. Therefore, the participation rate was 0.77.
	Completion rate (Ratio of users who finished the survey / users who agreed to participate)	Of the 257 subjects that agreed to the informed consent, only 150 completed the last page of the survey. Therefore, the completion rate was 0.58.
Preventing multiple entries from the same individual	Cookies used	Cookies were not used.
	IP check	IP addresses were not used or collected.
	Log file analysis	Log file analysis was not used.
	Registration	There was no registration required to complete the survey. Subjects that decided to complete the survey in more than one session, were asked to register a name to be able to retrieve the survey at a later date. These names were not collected.
Analysis	Handling of incomplete questionnaires	Incomplete surveys that provided information for at least one hypothesis were used (four partial surveys were used). Completed surveys that only answered the required questions were not used (two completed surveys were not used).

Questionnaires submitted with an atypical timestamp	Two pages of the survey were timed (the two model pages). These two pages contained six questions each. Responses from subjects that answered the six questions in less than two minutes were discarded.
Statistical correction	Statistical correction was not used.

References

- [eXe15] eXeLearning Development Team. *eXeLearning version 2.0.4*. 2015 (cit. on p. 2).
- [Eys12] G. Eysenbach. “Improving the quality of Web surveys: the Checklist for Reporting Results of Internet E-Surveys (CHERRIES)”. In: *Journal of Medical Internet Research* 14 (1 2012), p. 34. DOI: 10.2196/jmir.6.3.e34 (cit. on p. 1).
- [Kem16] S. Kemsley. *Take Mike Marin’s CMMN survey: learn something and help CMMN research*. Accessed: October 06, 2016. 2016. URL: <https://column2.com/2016/07/take-mike-marins-cmmn-survey-learn-something-and-help-cmmn-research/> (cit. on p. 2).
- [Lim16a] LimeService. *LimeService Online Service*. Accessed: October 10, 2015. 2016. URL: <https://www.limeservice.com/en/> (cit. on p. 2).
- [Lim16b] LimeSurvey Development Team. *LimeSurvey version 2.06 LTS*. 2016 (cit. on p. 2).
- [Mar16] M. A. Marin. *Looking at the Case Management Modeling and Notation (CMMN) from a Research Perspective*. Accessed: October 06, 2016. 2016. URL: <http://www.bptrends.com/looking-at-the-case-management-modeling-and-notation-cmmn-from-a-research-perspective/> (cit. on p. 2).