Advantages and Disadvantages of using the website SurveyMonkey in a real study: Psychopathological profile in people with normal-weight, overweight and obesity in a community sample

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Abstract

The purpose of this study is to examine whether web-based surveys may be an attractive alternative to traditional survey methods (postal surveys, paper and pencil questionnaires and telephone interviews) and to analyze their advantages and disadvantages through a real study.

An investigation is carried out in order to assess differences in personality dimensions, coping strategies and eating behaviour in a community sample (n=152) of normal-weight (n=101), overweight (n=30) and obese people (n=21). The research presented here is an example of the application of an online survey and it was designed with the website SurveyMonkey.

Survey Monkey has provided some positive aspects, such as: easier access, avoidance of input and data coding errors, a faster distribution and saving time and cost. However, some negative characteristics have been detected, for instance: response rates and the length of the questionnaire.

Key words: data collection, health information, internet, web-based surveys, *SurveyMonkey*

Introduction

The number of Internet users has increased rapidly in the last years (Kwak, & Radler, 2002). In 2015, 46.4% of the world population used the Internet. Europe occupies the second place in the ranking with 73.5% of Internet users (*Internet World Stats*, 2015); to be more specific, in Spain 69.2% of people go on-line (*Ministerio de Educación, Cultura y Deporte*, 2015).

New technologies and especially the Internet provide novel opportunities to collect lifestyle and health information from broad segments of the population (Ekman, Klint, Dickman, Adami, & Litton, 2007). For instance, web-based surveys present many advantages with respect to the traditional methods of collecting data, such as face-to-face or telephone interviews and paper and pencil questionnaires (Ekman, & Litton, 2007).

Nowadays, there are many websites where it is possible to create an online survey, such as Loop11, GoogleDocs or SurveyMonkey (Symonds, 2011). In this article, the focus is on SurveyMonkey because, in comparison with other programs, there is no need to install additional software programs (Symonds, 2011) and we have used it in a previous study. Afterwards, we discuss the advantages and disadvantages of web-based surveys, focusing on those provided by SurveyMonkey.

The literature reveals several advantages related to the use of web-surveys:

An avoidance of errors in the process of data entry and coding (Van Gelder, Bretveld, & Roeleveld, 2010) while compilation of results is automatic (Schleyer, & Forrest, 2000). SurveyMonkey allows researchers to save and export data in multiple formats (Symonds, 2011). Therefore, there is a facilitation of subsequent statistical analysis and with less presence of human error (McPeake, Bateson, & O'Neill, 2014).

It can hide non-relevant follow-up questions and organize questions randomly (Van Gelder, et al., 2010).

Improve data quality: It is possible to include checks, alarms or prompts when subjects enter incomplete answers (Van Gelder, et al., 2010). SurveyMonkey has an optional box to avoid unanswered questions; when a person is responding the survey leaves an empty question, the program generates an automatic message.

Web-based questionnaires are returned more rapidly than postal questionnaires, with more respondents per day. Besides, they allow simultaneous administration, so many people can respond at the same time (Aerny-Perreten, Domín-

guez-Berjón, Esteban-Vasallo, & García-Riolobos, 2015; Van Gelder, et al., 2010). SurveyMonkey provides graphics, which show the volume of answers per month. If the researcher wants to know when each participant has completed the survey, it is possible to access this information through the "Individual Answers" section. SurveyMonkey records the day, the starting and finishing times as well as the total time taken to complete the survey (Symonds, 2011).

Web-based surveys provide clear directions on how to respond to each question (Schleyer, & Forrest, 2000). SurveyMonkey has a wide variety of default formats of questions, which allow simple and understandable survey designs.

Web-based surveys result in a substantial reduction of cost (Aerny-Perreten, et al., 2015; Ekman, & Litton, 2007; McPeake, et al., 2014; Schleyer, & Forrest, 2000; Van Gelder, et al., 2010), including time and human resources because a smaller number of instructors is required (McPeake, et al., 2014; Symonds, 2011; Van Gelder, et al., 2010). People responsible for collecting data save time in distributing the survey and entering data. Moreover, web-based surveys are more ecological than traditional methods, e.g. by less use of paper.

Easier access (Aerny-Perreten, et al., 2015) and distribution (McPeake, et al., 2014). The use of social networks by health professionals has been a great help in this regard (Bramstedt, Ierna, & Woodcroft-Brown, 2015). SurveyMonkey creates a personal web link to directly access the survey. E-mail and social networks are the main sources for distribution (McPeake, et al., 2014). The researchers must check institutional websites and health professionals e-mail address, because they often change and they are accurate only for short periods of time (Braithwaite, Emery, de Lusignan, & Sutton, 2003; McPeake et al., 2014).

It is possible to use a data management system to automatically send e-mail reminders and invitations to study participants (Van Gelder, et al., 2010). Reminders might be a solution for the low response rates (Aerny-Perreten, et al., 2015; McPeake, et al., 2014). 9) Accurate security programs and firewalls are essential for handling personal records over the internet (Ekman, & Litton, 2007).

In relation to the disadvantages, the literature shows the following:

Electronic surveys present lower response rates than traditional mail surveys (Kwak, & Radler, 2002). A response rate can be generally defined as the proportion of individuals selected in a sample who are eligible and ultimately participate in the survey (Johnson, & Wislar, 2012). Higher response rates will produce better findings concerning the population of interest. The threshold of acceptability and the measure to validate the survey quality has a response rate of 60% (McPeake, et al., 2014; Johnson, & Wislar, 2012). Some reasons for lower response rates in web surveys may be: a) Characteristics of the population being surveyed (McPeake, et al., 2014); b) Possible lack of familiarity with the web (McPeake, et al., 2014); c) Inconsistent reliability of internet access, particularly in remote areas (McPeake, et al., 2014); and d) In the case of healthcare professionals, especially physicians (Aerny-Perreten, et al., 2015), there might be a survey saturation because they are regularly asked to complete surveys.

Nonresponse bias is useful for understanding survey limitations (Johnson & Wislar, 2012). There are two main types of nonresponse (Wagner, & Kemmer-

ling, 2010). The first, unit nonresponse, is the failure to gather any information from an approached unit of the sampling frame. Causes of unit nonresponse are the inability to deliver the questionnaire to intended respondent, for example, because of incorrect contact information, delivery errors or the respondent's temporary addressor ineligibility. It is also possible that the person will simply refuse to respond, because of strict firm policies against participating in surveys, time constraints or lack interest in the survey topic (Wagner, & Kemmerling, 2010).

The second type of nonresponse is item nonresponse. In this case, those approached complete the survey but one or more items are incomplete. Major sources of item nonresponse include lacking the knowledge to answer a question, unintentional oversight, and intentional nonobservance because the item demands disclosure of sensitive information (Wagner, & Kemmerling, 2010).

An affectation of reliability and validity of the data, for various reasons: web-based surveys are suspected of yielding larger amounts of measurement error than the traditional methods of data collection (Manfreda, Batagelj, & Vehovar, 2002). In this regard, it is important to consider the following aspects: a) Self-reported data (Van Gelder, et al., 2010); b) Bad questionnaire design (Van Gelder, et al., 2010): and c) Subjects' not scrolling to find all questions and answering options or reading too fast (Van Gelder, et al., 2010).

In those studies where the researchers decide to use an incentive, it could be difficult to preserve anonymity (Pit, Vo, & Pyakurel, 2014), because it is necessary to demand a telephone number, an address or an email.

The aim of the present article is twofold: 1) to examine whether web-based surveys may be an easier and faster method of data collection; and 2) to analyze their advantages and disadvantages through real research, where the website chosen to design the study is SurveyMonkey.

Methodology and Method

Presentation of the study. *Design with SurveyMonkey.* The website Survey-Monkey provides different formats of questions to make easier the creation of the survey (multiple choice, matrix/rating scale, ranking, matrix of dropdown menus, etc.). In the present study, the first screen shows the informant's consent, explains the conditions of the study, the instructions to complete the survey and the use of collected data in the future. Before starting the questionnaire, participants must sign their informed consent pressing the button at the end of the screen. Moreover, they must introduce an alphanumeric code instead of their names to protect participants' anonymity and to ensure respondents were not machines.

Following the presentation, the survey contains a sociodemographic questionnaire and three instruments in the Spanish version: the Temperament Character Inventory Revised (TCI-R) (Gutierrez-Zotes, et al., 2004), the Coping Strategies Inventory (CSI) (Cano, Rodríguez, & García, 2007) and the Dutch Eating Behaviour Questionnaire (DEBQ) (Cebolla, Barrada, van Strien, Oliver, & Baños, 2014). We describe these tools in detail later. Altogether, the survey has 488 items and the time estimated to complete it is between 45-60 minutes.

Method. The Bioethics Committee of the University of Barcelona approved the study used to illustrate this article.

Participants. To illustrate the aforementioned goals, we present a study to assess differences in personality dimensions, coping strategies and eating behaviour in three community samples with normal-weight, overweight and obesity, through an online survey designed with the website SurveyMonkey. Initially, 355 participants answered the survey. The final sample, after applying inclusion criteria (age between 18-70, Body Mass Index over 18.5 kg/m^2 and the survey must be completed) and exclusion criteria (presence of an eating disorder, psychopathological disorder, metabolic disease or being in treatment), there were 152 participants: 73% of those were women, 101 were normal-weight (18.5 to 24.99 kg/m^2), 30 were overweight (24.99 to 29.99 kg/m^2) and 21 were obese (> 30 kg/m^2).

Instruments. The survey designed with SurveyMonkey was to select the participants, included the subsequent instruments:

Temperament Character Inventory Revised (TCI-R) (Gutierrez-Zotes et al., 2004): This questionnaire assesses personality. It is a self-administered inventory with 240 items answered by a 5 points Likert scale. It includes seven dimensions of personality, four of Temperament (Novelty Seeking, Harm Avoidance, Reward Dependence and Persistence) and three of Character (Self-Directedness, Cooperativeness and Self-Transcendence).

Coping Strategies Inventory (CSI) (Cano, et al., 2007). It is a self-administered questionnaire with 40 items responded by a 5 points Likert scale. It assesses eight coping strategies: Problem Resolution, Self-Criticism, Emotional Expression, Wishful Thinking, Social Support, Cognitive Restructuring, Problem Avoidance and Social Withdrawal.

Dutch Eating Behaviour Questionnaire (DEBQ) (Cebolla, et al., 2014). It is a self-administered instrument with 33 items answered by a 5 points Likert Scale. It assesses eating behaviour and identifies three types of intake: Emotional Intake, External Intake and Restrictive Intake.

Data analysis. Descriptive results are presented by means and SDs, for continue variables, and by frequencies and percentages, for categorical variables. A MANOVA is used to compare the groups on the TCI-R, CSI and DEBQ average scores taking into account BMI and sex. The index *d* of Cohen is calculated to verify the magnitude of the effect. Data are analyzed using SPSS.15.0 for Windows.

RESULTS

Results related to the use of SurveyMonkey. The use of SurveyMonkey allows the collection of a great number of subjects in a brief period of time, two and a half months. However, we must comment on some aspects related with the selection of participants and the response rate.

We published the survey on the twenty first of December 2014 on Facebook, and three people shared it the same day. Since the end of December, seven other people shared the survey, for this reason we recruited the majority of participants (57.98%) in this month. At the beginning of January 2015, we posted a reminder

on Facebook, 75.75% of replies collected in this month occurred the week after the post. Finally, on the seventeenth of February 2015, we updated the last reminder on Facebook, 78.20% of the people, who participated in the survey in February, responded after the reminder. In March, only three people replied to the survey.

Finally, the response rate was 42.81%, which is less than 60%. Item nonresponse was the most prevalent in our study, it was easy to access to the survey but more than a half of participants did not reach the final part. The percentages of missing replies was 50.5% in the normal-weight group, 46.43% in the overweight group and 39.39% in the obese group. In spite of a greater missing data in normal-weight group, the damage was worse for the other groups because the initial number of participants was much smaller, 56 overweight and 33 obese participants against 204 normal-weight subjects.

Results related to the study. With the final 152 participants divided in three groups by BMI, we find statistically significant results in the three main areas of research: personality, coping strategies and eating behaviour.

Table 1 shows the different groups of the sample, the number of subjects per group and the data for each group in sociodemographic variables.

Table 1
Sociodemographic Variables

		NW (n=101)	OW (n=30)	OB (n=21)	Total (n=152)
BMI (M, SD)[1]		21.60 (1.80)	27.33 (1.58)	34.61 (4.06)	24.53 (5.12)
Age (M, SD)[1]		28.05 (10.3)	41.27 (12.82)	41.48 (14.62)	32.51 (13.03)
Age Range		18-57	20-60	23-68	18-68
Sex (n, %)[2]					
	Men	23 (15.2)	9 (5.9)	9 (5.9)	41 (27,0)
	Women	78 (51.3)	21 (13.8)	12 (7.9)	111 (73,0)
Ethnicity (n, %)[2]					
	White	98 (64.5)	30 (19.7)	21 (13.8)	149 (98,0)
	Black	1 (0.7)	-	-	1 (0.7)
	Native	1 (0.7)	-	-	1 (0.7)
	Mix	1 (0.7)	-	-	1 (0.7)
Civil Status (n, %)[2]					
	Single	80 (52.6)	16 (10.5)	7 (4.6)	103 (67.8)
	Married	16 (10.5)	13 (8.6)	11 (7.2)	40 (26.3)
	Widowed	-	-	1 (0.7)	1 (0.7)
	Divorced	1 (0.7)	1 (0.7)	-	2 (1.3)
	Common-law partner	4 (2.6)	-	2 (1.3)	6 (3.9)
Study Level (n, %)[2]					

		NW (*n*=101)	OW (*n*=30)	OB (*n*=21)	Total (*n*=152)
	Elementary	4 (2.6)	1 (0.7)	-	5 (3.3)
	Secondary	32 (21.1)	7 (4.6)	6 (3.9)	45 (29.6)
	Higher	65 (42.8)	22 (14.5)	15 (9.9)	102 (67.1)
Income (n, %)[2]					
	No income	58 (38.2)	5 (3.3)	2 (1.3)	65 (42.8)
	< 1MW	15 (9.9)	5 (3.3)	2 (1.3)	22 (14.5)
	1MW – 2MW	6 (3.9)	7 (4.6)	5 (3.3)	18 (11.8)
	2MW – 3MW	4 (2.6)	3 (2.0)	4 (2.6)	11 (7.2)
	3MW – 4MW	14 (9.2)	7 (4.6)	4 (2.6)	25 (16.4)
	4MW – 5MW	1 (0.7)	2 (1.3)	3 (2.0)	6 (3.9)
	> 5MW	3 (2.0)	1 (0.7)	1 (0.7)	5 (3.3)
Employment Status (n, %)[2]					
	Unemployment	5 (3.3)	-	-	5 (3.3)
	Not work	2 (1.3)	1 (0.7)	-	3 (2.0)
	Student	62 (40.8)	7 (4.6)	4 (2.6)	73 (48.0)
	Salaried	29 (19.1)	20 (13.2)	14 (9.2)	63 (41.4)
	Autonomous	3 (2.0)	2 (1.3)	1 (0.7)	6 (3.9)
	Retired	-	-	2 (1.3)	2 (1.3)

Note: [1] Data expressed as mean and standard deviation; [2] Data expressed as number of subjects and percentage. NW=Normal-weight; OW=Overweight; OB= Obesity; M= Mean; SD= Standard Deviation; MW=Minimum Salary.

Source: Own research

In personality, there are not significant differences, except in the trait Exploratory Excitability which belongs to Novelty Seeking dimension (Table 2).

Table 2
Significant differences in Personality dimensions and traits by BMI

Groups BMI	NW (*n*=101)	OW (*n*=30)	OB (*n*=21)	MANO-VA	Tukey Comparison	*d*
NS1	33.09 (5.09)	30.27 (6.27)	31.24 (4.43)	$F(2, 151)=$ 3.80*	NW>OW*	0.49

Note: Data expressed as mean and standard deviation. BMI=Body Mass Index; NW=Normal-weight; OW=Overweight; OB=Obesity; *d*= Cohen Index about difference magnitude; NS1: Exploratory Excitability. *$p<0.05$

Source: Own research

Related to sex, it is possible to observe significant differences in Self-Acceptance. Overweight men obtain higher scores than overweight women in Self--Acceptance; however, obese women score higher than obese men, for the same trait (Figure 1).
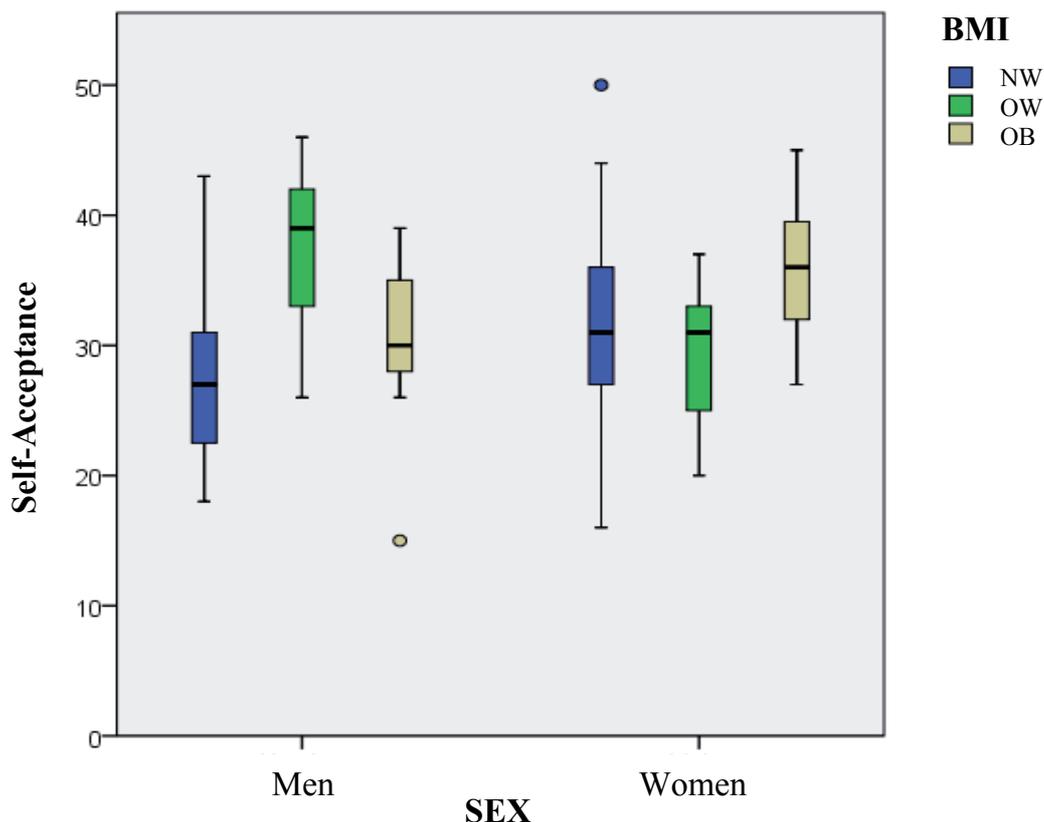
Fig. 1. Differences in trait Self-Acceptance by BMI and sex.
Source: Own research

In relation to Coping Strategies, we observe a tendency to passive coping strategies like Wishful Thinking in high BMI groups, while normal-weight subjects prefer active coping strategies, such as social support (Table 3).

Table 3
Significant Differences in Coping Strategies by BMI

Groups BMI	NW (*n*=101)	OW (*n*=30)	OB (*n*=21)	MANOVA	Tukey Comparison	*d*
PS	12.12 (5.07)	11.83 (4.44)	10.86 (5.80)	$F(2, 151)= 0.542$		
SC	5.76 (5.32)	6.67 (6.06)	6.48 (6.26)	$F(2, 151)= 0.375$		
EE	9.39 (4.87)	8.60 (3.88)	8.62 (5.78)	$F(2, 151)= 0.440$		
WT	11.12 (5.59)	13.27 (5.29)	14.19 (4.79)	$F(2, 151)= 3.853*$	OB>NW*	0.59
SS	12.28 (4.95)	10.87 (4.47)	8.57 (6.69)	$F(2, 151)= 4.805*$	NW>OB*	0.64
CR	10.12 (5.14)	9.57 (5.12)	8.24 (5.16)	$F(2, 151)= 1.202$		
PA	5.80 (3.50)	5.50 (4.61)	5.05 (3.33)	$F(2, 151)= 0.384$		
SW	4.27 (4.36)	4.67 (3.78)	6.43 (5.03)	$F(2, 151)= 2.142$		

Note: Data expressed as mean and standard deviation. BMI=Body Mass Index; NW=Normal-weight; OW=Overweight; OB=Obesity; *d*= Cohen Index about difference magnitude; PS=Problem Solving; SC=Self-Criticism; EE=Emotional Expression; WT=Wishful Thinking; SS=Social Support; CR=Cognitive Restructuration; PA=Problem Avoidance; SW=Social Withdrawal.

*p<0.05

Source: Own research

Table 4 shows results related to coping strategies by sex. Whereas in men there are not any significant results, it is possible to see how obese women obtained higher scores in Wishful Thinking and Social Withdrawal than normal-weight women.

Table 4
Significant differences in Coping Strategies by BMI and sex

Groups BMI	NW	OW	OB	MANOVA	Tukey Comparison	d
Women	**(n=78)**	**(n=21)**	**(n=12)**			
PS	11.44 (5.53)	13.28 (4.92)	15.67 (3.45)	$F(2, 101)= 3.896*$	OB > NW*	0.94
SW	3.92 (4.25)	4.95 (3.88)	8.00 (5.74)	$F(2, 101)= 4.645*$	OB > NW*	0.82

Note: Data expressed as mean and standard deviation. BMI=Body Mass Index; NW= Normal-weight; OW= Overweight; OB=Obesity; *d*= Cohen Index about difference magnitude; PS=Problem Solving; PA=Problem Avoidance; SW=Social Withdrawal.

*p<0.05

Source: Own research

Finally, in respect of eating behaviour we observe a tendency to score higher in Emotional Intake by overweight and obese groups (Table 5), especially women. (Figure 2).

Table 5
Significant differences in Eating Behaviors by BMI

Groups BMI	NW (*n*=101)	OW (*n*=30)	OB (*n*=21)	MANOVA	Tukey Comparison	d
EI	28.26 (11.24)	34.70 (14.18)	38.14 (15.74)	$F(2, 151)= 7.127*$	OW>NW*	0.47
					OB>NW*	0.76
EXI	29.80 (7.18)	31.30 (6.40)	29.76 (8.65)	$F(2, 151)= 0.518$		
RI	22.03 (7.32)	26.70 (7.44)	25.76 (7.17)	$F(2, 151)= 5.895*$	OW>NW*	0.57
Total	80.09 (20.19)	92.70 (20.10)	93.67 (27.31)	$F(2, 151)= 6.351*$	OW> NW*	0.60
					OB>NW*	0.55

Note: Data expressed as mean and standard deviation. BMI=Body Mass Index; NW= Normal-weight; OW= Overweight; OB=Obesity; *d*= Cohen Index about difference magnitude; EI= Emotional; EXI= External Intake; RI= Restrictive Intake.

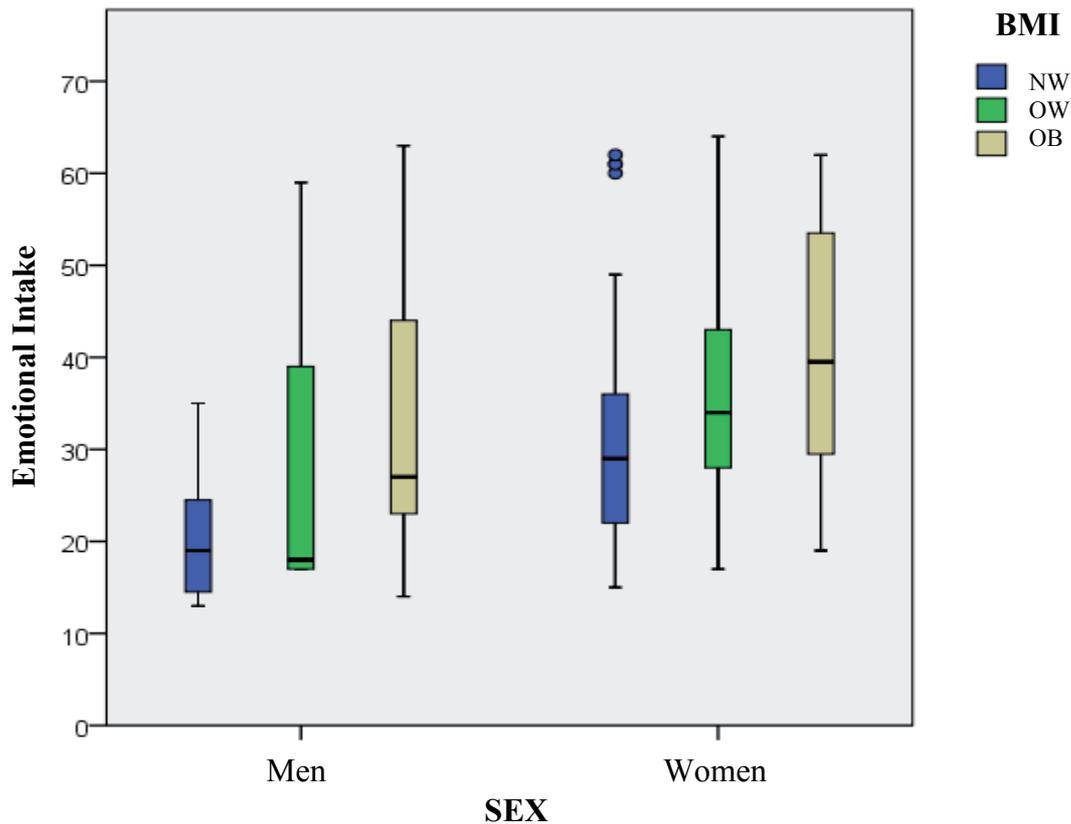**p<0.05*

Source: Own research

Fig. 2. Differences in Emotional Intake by BMI and Sex.
Source: Own research

Discussion

The aim of the present study is: 1) to examine whether web-based surveys may be an easier and faster method of data collection; and 2) to analyze their advantages and disadvantages through a real study, using website SurveyMonkey to design the survey.

The number of people that access to Internet is increasing in our society and worldwide (Ekman, & Litton, 2007). For this reason, research should take advantage of this situation and get all possible profits from new technologies. An adequate use of these new tools could provide great benefits in many important fields such as health care.

An important part of health care research is the collection of data, and web-based surveys might be a new option for this task. However, we must design web-based surveys carefully (Van Gelder, et al., 2010).

Certainly, SurveyMonkey provides many benefits in our study. An easier access and distribution, so people could access in their homes without the need for an instructor watching them (Aerny-Perreten, et al., 2015; Bramstedt, et al., 2015; McPeake, et al., 2014). Consequently, the cost was very low because there was no need to print the survey and distribute it around (Aerny-Perreten, et al., 2015; Ekman, & Litton, 2007; McPeake, et al., 2014; Schleyer, & Forrest, 2000; Van Gelder, et al., 2010). The different formats for the questions available in Survey-

Monkey facilitated the study design (Van Gelder, et al., 2010) and the use of alarms helped to avoid incomplete answers (Van Gelder, et al., 2010).

The faster response and feedback allowed us to recruit a lot of replies in a brief period of time (Aerny-Perreten, et al., 2015; Schleyer, & Forrest, 2000; Van Gelder, et al., 2010) and the automatic compilation of data resulted in less errors in entry and coding data (McPeake, et al., 2014; Schleyer, & Forrest, 2000; Symonds, 2011; Van Gelder, et al., 2010)

In our study, the possibility to send automatic remainders was very useful to increase the size of the sample (Aerny-Perreten, et al., 2015; McPeake, et al., 2014; Van Gelder, et al., 2010). And finally, the fact that the survey was online resulted in more sense of anonymity to answer the survey honestly (Ekman, & Litton, 2007).

Nonetheless, some limitations must be taken into account because they might affect the results. In our research, the main obstacle was the length of the survey, which triggered the majority of dropouts. To minimize the problem, participants could see the amount of survey they had answered thanks a progress bar in the top of the screen (Van Gelder, et al., 2010) and time required is specified at the beginning of the survey (McPeake, et al., 2014).

The use of TCI-R could be the reason for the problem of length, because it is too long, its 240 items are divided in two screens with 120 items but this fact might be confusing. When participants finish the first part, they find out that there are 120 items more to finish which demotivated them from continuing. One solution could be a reduction of items in the sociodemographic questionnaire, as we did not use some of them in this study.

Another point is the lower rate of response with a major impact on groups of overweight and obese (Van Gelder, et al., 2010). People with high BMI normally prefer web-surveys to traditional surveys (Van Gelder, et al., 2010) but, in general, these participants tend to be more tired because of answering earlier questionnaires than normal-weight groups. Also, it is possible that overweight and obese subjects feel uncomfortable when they are answering questions related to food, weight, body shape, etc. In this way, we published the study's survey close to Christmas time; this is a period characterized by overeating. This could be a reason to feel uncomfortable answering questions about this topic. Despite this fact, many people were encouraged to participate.

Nevertheless, we find statistically significant differences in the three main research areas and most of them are supported by previous investigations. For future researches the attention should be focused on the recruitment of a representative sample (Braithwaite, et al., 2003; Johnson, & Wislar, 2012), ensuring a good distribution of the survey to get a 60% response rate with three balanced groups and improve the quality of the study (Aerny-Perreten, et al., 2015; Bramstedt, et al., 2015; McPeake, et al., 2014).

Finally, although there are researches in which it is proved that self-reported measurements are reliable and present high correlations with directly measured data (Lora-Cortez, & Saucedo-Molina, 2006). It is possible that people with high BMI feel ashamed when they inform about their weight and may change it, which could interfere with the correct classification of participants in different groups.

The main reasons are social pressure and discrimination, which are not included in the study but will be taken into account in subsequent studies (Puhl, & Brownell, 2002; Rivera, & Paredez, 2014).

To conclude, there are no reasons to think that Web-based surveys are not a great alternative to traditional methods of collecting data. Some limitations must be taken into account and there are still people from the community and researchers who prefer paper and pencil methods because they find new technologies difficult for them. Nevertheless, these new issues are a good way to contact with new generations and bring them closer to science. In the coming years, practical application and comparison with more traditional survey techniques should reveal whether Web-based questionnaires can fulfill their expectations, but the first results seem promising.

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