

Factors Influencing Falsehood in Online Educational Research

Lina Gaiziuniene and Gintautas Cibulskas

Kaunas University of Technology
Donelaicio 73, LT-44029 Kaunas, Lithuania

crossref <http://dx.doi.org/10.5755/j01.ss.80.2.4846>

Abstract

The article dwells on scientific literature, investigating the factors which influence respondents' not telling the truth, induce falsehood, or provokes telling lies, in online educational research and, consequently, affect straightway the validity of quantitative investigation. As a result, the research presents a systemic model of these modifiers. The agents causing falsehood are being investigated in the light of three perspectives: quantitative research, online research, and educational research.

Keywords: falsehood in quantitative research, securing validity, factors influencing respondents' truth/sincerity and openness.

Introduction

The aim of research is to reveal the reality, its peculiarities, qualities, distinctive on-going processes, and the influencing factors. However, in fact, a large volume of investigation does not display the truth and can often be misleading (Porter, 2007). Frequently, research does not measure the issues it is supposed to. In those cases, the validity of investigation is not always granted, and the reality is not revealed. If the data acquired is false, not reliable or valid (data does not match research aims, its choice is researcher-biased, or the factual information is documented randomly), the reality, created on this basis, cannot be regarded as real and the problem cannot be regarded as solved (Bitinas, 2006). Such investigations are misleading for other researchers who use the previously obtained research results. Very often, surveys of public opinion are criticized, as they reflect not society views, but the opinions of separate individuals which often lack maturity or are not aware of a communication context (Gaidys, 2009). Most of the authors emphasise the importance of data quality in carrying out scientific research (Asmundson, Norton and Stein, 2002; Peat, Mellis and Williams, 2002; Litwin, 2003; D'Cruz and Jones, 2004; Heffner, 2004; Brewer and Hunter, 2006; Quinton and Smallbone, 2006; Robinson – Kurpius and Stafford, 2006; Porter, 2007; Keller and Casadevall – Keller, 2010). Naturally, there is a general striving in all spheres for better quality research. Technology development has affected data collection, as it often is carried out by means of the Internet (Nunan and Knox, 2011).

During any survey, respondent's answers take the central place, determining the quality and value of the research. Falsehood, untrue utterances during the investigation distort research results and misrepresent the reality. A number of factors make respondents lie, pretend, or avoid questions, thus, negatively shaping research results. Not revealing the truth is one of the aspects to be considered by researchers, as this decides the research value. If a respondent is neither open nor sincere, if he/she lies in his/her answers, the research is not only low quality, but it is worthless and senseless as not representing the fact. Telling lies or being dishonest is hard to measure and manage. Most researchers believe the respondents have not been lying, and take their answers as absolute truth. In scientific literature (Asmundson, Norton and Stein, 2002; Litwin, 2003; D'Cruz and Jones, 2004; Robinson – Kurpius and Stafford, 2006; Porter, 2007; Keller and Casadevall – Keller, 2010), it is often argued that research data validity and reliability should be guaranteed in research; however, the ways to reach the sameness in research results and the depiction of reality are not broadly discussed. In this context, it becomes important to investigate the factors which lead the respondent to not tell the truth during the investigation. Thus, the present article has its *aim* to reveal the factors influencing the provision of false information in online educational research.

The article employs the method of scientific literature research. It is comprised of three parts; the first part analyzes general contributors to not revealing the truth in quantitative investigations, as provided in scholarly literature. Further, the article deals with specific factors which induce falsehood during online investigations and in educational research.

Factors influencing falsehood in quantitative research

Validity has been among the most important issues in social science and in social research methodology (Denzin and Lincoln, 2002). Viewed classically, validity guarantees that a certain instrument measures what it is supposed to measure. It goes without saying that carrying out an investigation without having secured its validity is worthless, meaningless, as it would not reflect the reality. A research instrument has to be prepared so as not to create conditions for allowing falsehood; i.e. the instrument has to be valid. In reality, however, a large part of investigation

does not display the real truth and often are misleading (Porter, 2007). Numerous mistakes in carrying out research lead to this situation. Researchers today should be in quest of causes for this, which they should try to manage and change. This stand leads to the necessity of reviewing the issues which make respondents provide untrue statements and, thus, invalid research, as revealed in scientific literature.

A different understanding of the validity concept and its types has been one of the major issues, interfering with accurate representation of reality to which research refers. Varied theoretical and methodological approaches by scholars give grounds to different views towards validity and to the incompatibility in approaches (Porter, 2007). In the English language, validity is assumed as correctness and truth (Denzin and Lincoln, 2002). In the Lithuanian language, validity is often referred to as measurement or research conforming to its aims. As a matter of fact, this already reveals a certain discrepancy in authors' views towards a particular concept. Referring to typology, most researchers unanimously consider two types of validity: internal and external (Heffner, 2004; Quinton and Smallbone, 2006; Peat et al., 2002). However, a number of authors disagree about main types of validity which would guarantee measuring of what was intended to be measured. Some say, when seeking research quality, a scholar should secure the following major types of validity: face validity, content validity, concurrent validity, convergent validity, predictive validity, and discriminant validity (Asmundson et al., 2002). Others claim, main validity types are: content validity, criterion-related validity, concurrent and predictive validity, convergent and discriminant validity, and construct validity (Robinson-Kurpius and Stafford, 2006). Still other say, most important for research are the following four: internal validity, criterion-related validity, content validity, and construct validity (D'Cruz and Jones, 2004). Further, illustrating the theoretical discrepancy, Heffner (2004) claims, construct validity divides into concurrent, contents, and predictive validity. In the view of some scholars, face validity is the measurement validity (Peat et al., 2002); whereas Quinton and Smallbone (2006) claim that internal validity equals face validity, or measurement validity.

Also, there is an opinion that high quality research requires the consideration of all the existing validity types: face validity and content validity, convergent validity and predictive validity, discriminant validity, construct validity, and measurement validity (Brewer and Hunter, 2006). Furthermore, Peat et al. (2002) discuss face, content, criterion-related, construct, and measurement validity. Litwin (2003) introduces a peculiar typology, ascribing convergent and divergent validity to construct validity, and referring to convergent and predictive validity as criterion-related validity; he also distinguishes between content and face validity. Thus, the review presented above reveals the multiplicity of the validity typology issue. No wonder, this inconsistency leads to inconsequent and invalid research in the field. As a matter of fact, there is still ambiguity as to what typology should be followed and what validity should be secured for the investigation to be valid.

There has been scholarly labeling of validity as classical and contemporary. Traditionally, validity refers to a guarantee that an appropriate instrument correctly measures what it means to measure. In a contemporary view, validity is contextual, i.e., validity is not an inherent feature of a measurement instrument; it just refers to a definite instrument use in a definite situation, aiming at specific goals. Validity is a theoretical construct, and it can never actually be measured or precisely observed (Robinson – Kurpius and Stafford, 2006). The authors claim that, in a modern validity concept treatment, validity coefficient may mean that the data is valid only for certain respondents, under certain circumstances, in a certain environment. According to the Standards for Educational and Psychological Testing, validity is 'the degree to which evidence and theory support the interpretation of test scores entailed by proposed uses of tests' (AERA, APA, and NCME, 1999). Below are some of the more commonly employed means for providing evidence for validity:

- Evidence based on test content;
- Evidence based on response processes;
- Evidence based on internal structure;
- Evidence based on relations to other variables;
- Evidence based on consequences of testing.

They correspond to three types of validity: contents, investigation, and result, which encompass the whole range of factors to secure validity in designing research contents, preparing and carrying out the investigation, and analysing the results. Thus, on the one hand, the above-mentioned three validity types seem to be fundamental. On the other hand, it is evident that theoretical validity is missing, which is related to researcher's theoretical attitudes. Upon striving for complete validity in research, the concept of validity and the ways of reaching it should be universally agreed, since all the scholars, engaged in research, have to pursue similar goals.

Therefore, it could be summarized here that the present article relies on four major types of validity: theoretical, contents, investigation, and result which unify the above reviewed typologies, encountered in scholarly literature. Porter (2007) notes that reaching consensus in singling out fundamental validity types would greatly facilitate researchers' activities and enable them to reach a higher degree of research data validity. However, this would be difficult to achieve, since each researcher follows different theoretical stances. It is evident that acquiring valid research data might equal to art (Denzin and Lincoln, 2002) and requires much effort and time.

Providing misinformation during a survey might occur due to a variety of mistakes, impediments, researcher's weaknesses, or his/her competence flaws. The major threats to research data validity have been singled out by a number of scholars. Heffner (2004) describes the factors most frequently jeopardizing internal validity, such as researcher's theoretical attitudes, faulty sampling, better respondents' performance during second, or repeated testing, or use of results based on extreme scores or characteristics far from the mean, etc. Heffner also notes the factors which jeopardize external validity and have a negative impact upon results, such as inappropriately selected characteristics of survey modifiers or indicators,

researcher's impact upon the respondent, respondents' attempts to convey a better image, or his/her negative attitudes and feelings. Among the internal validity threats, a supposed attempt of an independent variable to influence a dependent one can be noted, and among the external validity threats – too small a sample (Quinton and Smallbone, 2006). Etchegaray and Fischer (2010) point out the importance of variable choice in an attempt to measure phenomena, features, characteristics, or objects. The authors suggest selecting more questions to measure each variable, reducing the number of questions to the most important ones after a pilot study, if necessary. Forecasting the bulk of results, possibly revealed by each criterion in the course of investigation, greatly facilitates the process (Etchegaray and Fischer, 2010). This allows specifying the research field, concentrating around certain criteria, and measuring those as accurately as possible; also, this enables to select the most significant research questions which measure the field, object, or phenomenon in the most accurate way.

Furthermore, in the context of providing falsehood by respondents, Vogt (2011) claims the importance of scientific works referred to in the investigation. Very often the quotes and citations, used for further research, are incorrect, which leads to faulty interpretations and misleading research results. Van Duzer (2012) recommends applying clarifying questions, using multiple versions of the same survey with each version asking respondents to provide ranking and explain it. This enables the respondent to reveal the connection and compatibility between statements, characteristics, and commentaries, making him/her think and limiting the chance of unintended answers (van Duzer, 2012). The variables of gender, nationality, ethnicity, or spiritual culture are also considered to be influencing factors (Atkinson and Delamont, 2010). Besides, data validity can be related to researcher's cognitive skills: thinking, intellectualizing, memorizing, interpreting, and summarizing (Kaplan, 2004). Adequate perception of individual weaknesses can restrain obtaining invalid research results. For instance, scholars tend to forget the influence of respondents' hidden thoughts upon research results (Atkinson and Delamont, 2010). Outhwaite and Turner (2007) affirm the importance of respondents' thoughts, beliefs, and attitudes in affecting their choices during the investigation, or respondents' expectations predetermining task completion, comprehension, and results. Porter (2007) is of the opinion that even respondents' attitude towards the investigation is very much important.

Validity is regarded as the basis for measurement, and instrument design allows estimating respondents' theoretical and empirical concerns (Raykov, 2011), which are difficult to measure, but their exploration and understanding allows reducing their negative impact upon research results. Complete achievement of research validity is an immense challenge (Keller and Casadevall-Keller, 2010). In spite of the fact that securing profound research data validity is practically unattainable (Robinson-Kurpius and Stafford, 2006), every researcher should aim at achieving high research data validity and

avoiding most frequent mistakes. Only then the depiction of the existing reality can be successful in research.

In relation to the issues of validity and falsehood or dishonesty in quantitative research, it could be concluded that numerous factors induce providing false information during the investigation, and those range from researchers' theoretical attitudes, understanding of the validity concept and the effort to achieve it, to respondents' psychological states and feelings, to their personality traits and beliefs, to situational factors. All the above are to be considered by every scholar seeking quality research and valuable data.

Factors influencing provision of false data in online research

Electronic mail and the internet provide broader facilities, pertinent not only to faster communication possibilities and access to information, but also to new space for research (Desai and Potter, 2006). Technology development has affected data collection, employing the internet more and more often (Nunan and Knox, 2010). Online research has become popular, as online surveys are practical and simple, allowing comfortable location and convenient time. Grover and Vriens (2006) claim that internet technologies for online research provide new possibilities for larger sampling and deeper involvement into research by means of various possibilities to engage and encourage respondents. The popularity of online research has also grown due to the possibility to reach specific and rare groups (Willig and Stainton-Rogers, 2008). Online research eliminates the authority of researchers above respondents; being in a safe, lone environment, survey participants are able to provide more explicit, open, and sincere answers (Spaulding, 2009). Unfortunately, among the controversial issues are the suppositions that respondents do not necessarily give true responses, but probably conceal their true identities. This makes it reasonable to finally undertake literature analysis with the aim of discerning the factors which influence falsehood and misreporting in online research.

A lack of positive attitude towards the internet and the deficit of trust in it are among the most often noted online research drawbacks, which result in lying during the investigation and in growing scale of non-response or premature termination. In fact, this stands at the root of falsehood in online research. It is common knowledge that fraud and deception are usual occurrences in cyberspace; people have multiple identities; they say and do things in virtual space that they would not ordinarily say or do in the face-to-face world. Therefore, separating truth from lies becomes difficult (Spaulding, 2009). Internet anonymity works wonders - people have the opportunity to separate their actions from their real world and identity which manifests itself in aggression, lying, and pretence (Yen et al., 2011). People know, others are not open and fraudulent; so, they loose trust in the internet and, guided by self-defense, stop being open themselves (Jones, Leonard and Riemenschneider, 2009). Lies, pretense, counterfeit, and dishonesty become obstacles for carrying out high quality research. The elderly, often being inexperienced internet users, encounter hindrances which,

in turn, induce suspicion concerning the internet (Atkinson and Delamont, 2010). Insufficient IT knowledge enhances hostility, preconceived notions, mistrust, and leads to decreasing honesty (Fielding, Lee, and Blank, 2008). Therefore, surveys should be simple and straight to be grasped by all the respondents. As a matter of fact, some people are inherently dubious and precautious, and they doubt all the information on the internet (Benbasat, Gefen and Pavlou, 2008). It should be remembered that personal disposition to trust directly influences the precision, depth, and sincerity of research results (Jones, Leonard and Riemenschneider, 2009).

In the opinion of Atkinson and Delamont (2010), another reason for distrust in online surveys is a lack of researchers' IT skills and abilities to prepare quality representative surveys. Since most of the population does not discriminate important and topical research, they tend to object it all (Nunan and Knox, 2010). A poorly prepared inquiry, survey, or quiz elicit perfunctory response. On the one hand, it is not always the problem of respondents, who are often criticized and mistrusted; Willing and Stainton-Rogers (2008) claim that it is a mistake to presume that all the respondents are dishonest and insincere. On the other hand, it is never clear if, or to what extent, the respondent is open and wholehearted in his/her readiness to provide truthful answers. Willing and Stainton-Rogers (2008) think, distrust on the internet causes counterfeit and encourages individuals to escape undesirable and embarrassing questions, or to provide false personal data. Even virtual anonymity does not guarantee safety; research suggests that respondents tend not to recognize their own dishonest behavior (Spaulding, 2009). Thus, anonymity is not necessarily an asset in online research, and it does not lead to reality representation in high quality research. Of course, this should not be generalized for all online samples. As a matter of fact, internet environment has been evolving, and individuals' IT skills have been developing which has positive influence upon human trust in cyberspace (Jones, Leonard and Riemenschneider, 2009). Yen et al. (2011) claim that, due to the fact that virtual hostility has been less than face-to-face antagonism, online research should not be considered unreliable.

Other important factors creating falsehood and negatively affecting truth and validity in online research are a lack of interpersonal researcher-respondent bond and insufficient incentives (or motivation). Deficiency or complete absence of communication between a scholar and a respondent in online inquiry does have negative influence on research results. Investigations via the internet may raise psychological barriers among the sample which, in turn, possibly reduces respondents' honesty when providing answers on the inquiry (Okazaki, 2007). Furthermore, a lack of understanding and supportive environment also elicits careless participation in online research (Desai and Potter, 2006). Fielding, Lee and Blank (2008) single out slight chances of control, insufficient communication, and lack of direct contact as other online research drawbacks. Also, it often occurs that the respondent finds it difficult to motivate himself/herself, or to comprehend the value of the research which can be only explained by the researcher. Moreover, respondents do not

consider the value of open and precise answering, and the researcher is able neither to observe the process and encourage the respondent when he/she needs it, nor to manage side effects which might jeopardize the whole survey process (Fielding, Lee and Blank, 2008). Willig and Stainton-Rogers (2008) also note the importance of establishing a bond with respondents since this allows getting more precise data. They say, a lack of connection hinders honesty, which does not benefit research results. The researcher is the best motivate, as he/she is mostly interested in the validity of his/her research results. Unfortunately, internet research cannot provide interpersonal contact and, thus, enable respondents' motivation (Desai and Potter, 2006). In fact, scholar's presence triggers immediate interest, boosts humbleness, and lessens resistance to participation in research. Therefore, online research should seek new means and solutions to secure the researcher-respondent bonding.

One of the dominant problems in online research is non-response or premature termination, as respondents often restrict themselves with apparent ease to skipping questions or quitting web questionnaires. Another urgent issue is the decline in respondent numbers; their engagement in online research has resulted in 50 percent loss during the last five years (Puleston, 2011). Besides, encountering a growing number of surveys and investigations, that increase the frequency with which respondents are expected to participate in surveys, inevitably leads to undesirable respondent behavior, such as careless consideration of both questions and the answer quality. These issues negatively affect research validity, therefore, there is an urgent need to look for new forms, for instance, creating a web questionnaire which does not allow skipping questions (Okazaki, 2007). However, researchers should not forget that each engaged respondent is valuable, and each bored respondent is worthless. Therefore, Puleston (2011) calls for more creativity in design, for presenting questions or tasks more attractively and visually, which may increase the engagement by 75 percent.

Still other factors related to providing false information in online research are sample formation and the peculiarities of sample selection. Technology growth has enabled an active access of most population to the computer and the internet indiscriminately. However, online surveys are not yet accessible by each and everyone; therefore, research conclusions cannot be widely applicable. A number of respondents still do not have permanent access to the internet (Willing and Stainton-Rogers, 2008). The internet builds a barrier between a researcher and respondent, since internet non-users cannot participate in such surveys and have to be reached by other means. Thus, it is difficult to estimate internet survey representativeness due to a specific population (internet users are often described as a specific group). Willig and Stainton-Rogers (2008) also remind that online investigation explores a specific sample with peculiar attributes. It is advisable to carry out online survey of registered users with a clearly defined survey population (Murauskas and Radavicius, 2011). However, even with this sample, survey results can be distorted in reflecting

characteristics of the population. A shift might occur, since online research is usually voluntary, and participant numbers might shrink (Murauskas and Radavicius, 2011). Also, surveys are often alike or given repeatedly, and a limited number of regular participants might become experts in a certain field. Naturally, his/her opinion greatly differs from that of a statistical respondent (Gaidys, 2009), and such responses significantly distort research results.

In an attempt to summarize the factors which impact lies told in online surveys or affect respondents providing false information during online investigations, insufficient trust in the internet and a lack of interpersonal contact or bonding appear to be the most important. Therefore, researchers could be advised to prepare high quality surveys which would raise respondents' trust and would lead to their openness, sincerity, and truth in research.

Factors influencing falsehood in educational research

Each branch of science, including educational research, has a particular research field and its own methodologies. Educational research also bears exceptional characteristics (Shavelson and Towne, 2003) which should be considered when singling out the main factors, making respondents not to reveal the truth, or provide false information.

Educational research is most often related to a student, an educator, and an educational – teaching or learning - process. The aim of an educational scholar is to find out the yet unknown, and to declare the new: truth, ideas, and ways of optimizing the activity; his/her mission is to create educational reality: develop the present one, and generate the future, still undiscovered (Bitinas, 2006). Educating is an indispensable part of educational research. In educational research, it is not sufficient to describe or explain the reality; it is necessary to develop it (Bitinas, 2006). Naturally, it is important to carry out high quality research both on the scientific level and on everyday life level. Thus, the investigation of educational research particularities and the most peculiar barriers for valid research follows, having the aim of helping achieve representative and valuable research.

Research context is of particular importance in educational research, since context factors very often dramatically impact research results (Shavelson and Towne, 2003). For instance, it is crucial to note respondents' feelings at school, his/her status, position, gender, the degree of getting along with the people round about, etc. The respondent may be threatened, may feel uneasy or defensive, which would not allow him/her to be sincere and honest, or would make him/her lie, being scared of the consequences if the information is publically revealed. Moreover, environment is crucially important in research, since it may reduce telling a lie during the interrogation. Another important modifier is anonymity. It is very important to grant anonymity in educational research due to several reasons. For instance, the educational environment is dominated by females, and

may be distinct in close contacts among the staff; therefore, it should be guaranteed that no survey information (e.g. survey answers) is revealed or possibly associated with a definite person (Cohen, Manion and Morrison, 2000). Anonymity increases trust in investigation, facilitates openness, and reduces falsehood and misreporting. Gender is another important issue in this context, since females constitute the majority in educational institutions, and it would be reasonable to make educational interrogations clear to a specific mind-set. Such an adaptation would probably reduce hostility towards research and non-response or premature termination.

As it has already been mentioned, context influence is greatly important, considering not only educators, but also pupils and students. In her review of the literature on child research methodology, Juodaityte (2011) points out that research is to reveal the peculiarities of social and cultural contexts where children acting as respondents. Namely, those contexts have to adequately match children's understanding of the situation and reduce the role of an experimenting researcher. Striving for validity, the investigation has to be attuned to each respondent group. Unfortunately, school pupils react negatively to surveys and testing, expressing resistance; the investigation, therefore, has to be interesting, attractive, and matching particular interests and age. Research methods applied should be attuned to age characteristics, to mental, social, and cultural peculiarities (Juodaityte, 2011) and should observe the borders of contact.

Literature analysis suggests that there is a gap between educational research and real practice. There are even opinions voiced claiming that educational research results are practically inapplicable and distant from reality. This leads to the conclusion that educational science is prompted to engage in self-service, i.e. use scientific research only for the purposes of degree-granting or promotion (Bitinas, 2006). As a matter of fact, researchers should establish a closer contact with the school community and strive for carrying out the research which depicts reality and is functional (Vanderlinde and van Braak, 2010). Only a close cooperation and rigorous inspection of challenging areas can help educational institutions and society carry out relevant research. Closer ties with school facilitate research validity, because the school, having conceived real benefits of research, may heartily unravel the truth.

In educational research, similarly to investigation in other branches of science, research quality and validity directly depend on researcher's skills and qualification. His/her attitudes towards conducting high quality research, the ability to gather and analyze data, to motivate respondents greatly impact research results and their generalization (Poggenpoel and Myburgh, 2003); consequently, they directly effect research validity. Empathy and scholar's ability to empathize with respondent's situation allow adapting the investigation to every respondent group (Cohen, Manion and Morrison, 2008).

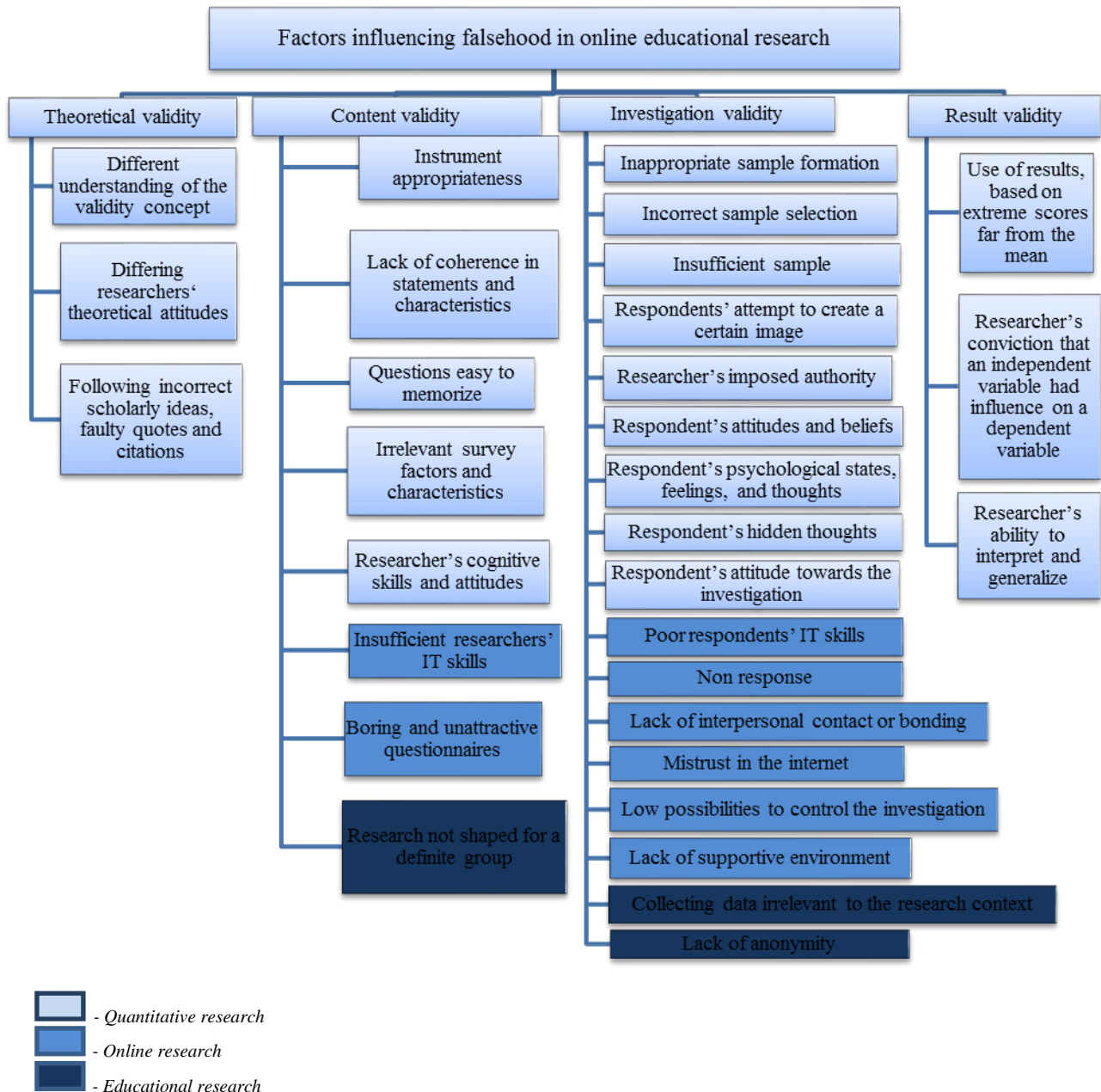


Figure 1. Systemic model of the factors influencing falsehood in online educational research (Gaiziuniene and Cibulskas, 2013)

Finally, summarizing the factors which impact falsehood in educational research, it can be noted that the most notable issues are the lack of anonymity in surveys, discrepancy between the issues in research and in reality, research inadaptability in relation to respondents' groups, and a gap between research context and data collection. All the factors, related to respondents' false or limited information in quantitative research, online investigation, and educational research can be systematized into a model, based on four major types of validity: theoretical, content, investigation, and result validity (Figure 1). All the other issues, related to researchers' theoretical attitudes, research content, research preparation and completion as well as result analysis and generalization can be distributed along this typology. The issues provided at the top of the model

relate to falsehood manifestation in quantitative research, as they are common for all the aforementioned types of investigation, including online research and educational research. Below, there are modifiers which negatively affect telling the truth in online investigation and educational research; those are specific for each kind of research. Researchers are to scrutinize their essence, as those are the issues to be sought in an attempt to receive flawless data in educational online research.

Conclusions

1. In research, the respondent and the answers provided by him/her take the central place; they shape the quality and value of the research. If in the course of

investigation respondents provide false or limited information, or even a lie, research results are badly distorted and do not reflect the reality. All this further leads to obtaining inaccurate and deviant data, not covering contemporary situation, a phenomenon, or the object.

2. Most researchers point out different factors which may cause respondents conceal the truth during online educational surveys. All of those have been systematized in the article according to four main types of validity: theoretical, contents, investigation, and result validity. The types, encompassing all theoretically investigated validity typologies, can secure research validity when applied towards considering researcher's theoretical attitudes, research contents, research preparation and completion as well as result analysis and generalization.
3. In quantitative research, a number of factors stipulate falsehood. Those are researchers' theoretical attitudes, the understanding of validity and ways of seeking it, respondents' psychological states and feelings, their personality traits and beliefs, and situational factors. The above-mentioned modifiers can also be systematized along the four validity types: theoretical, contents, investigation, and result.
4. Summarizing the modifiers causing lies or false information provision in online research, lack of trust and insufficient interpersonal bonding can be pointed out as the major ones. All the modifiers, singled out in the course of scientific research, have been added to the Model (Figure 1). Researchers are advised to prepare high quality surveys which build trust and lead to openness, honesty, and the revelation of truth.
5. The summary of scientific literature review on the factors, facilitating validity and encouraging telling the truth in educational research, allows stating their relation to a lack of anonymity in surveys, to the disparity between research and reality, to research inadaptability to respondents' groups, and to a gap between the research context and data collection.
6. The structural model has been designed along the four validity types (theoretical, contents, investigation, and result validity) and it combines all the factors, influencing falsehood, related to researchers' attitudes, research contents, preparation and accomplishment of the investigation as well as analysis and generalization of results. The proposed modifiers are common to all quantitative research and can be applied either on the web, or in educational research. In the last stage, the model reveals specific factors, relevant to a release of untrue information by the respondents in online research and educational surveys (Figure 1).

References

1. American Educational Research Association, American Psychological Association, and National Council on Measurement in Education (1999). Standards for Educational and Psychological Testing. Washington, DC: American Educational Research Association.
2. Asmundson, G.J.G., Norton, G.R., & Stein, M.B. (2002). Understanding Data. *Clinical Research in Mental Health: A Practical Guide*, 82-93.
3. Atkinson, P., & Delamont, S. (2010). *SAGE Qualitative Research Methods*. SAGE Research Methods Online.
4. Benbasat, I., Gefen, D., & Pavlou, P.A. (2008). Special Issue: Trust in Online Environments. *Journal of Management Information Systems*, 24, (4), 5-11. <http://dx.doi.org/10.2753/MIS0742-1222240400>
5. Bitinas, B. (2006). Edukologinių tyrimų metodologiniai vingiai. *Pedagogika*, 83, 9-15.
6. Brewer, J., & Hunter, A. (2006). Measuring Concepts and Assessing Measurement Validity. *Foundations of Multimethod Research*, 104-123.
7. Cohen, L., Manion, L., & Morrison, K. (2000). *Research Methods in Education*. London and NY: Routledge. <http://dx.doi.org/10.4324/9780203224342>
8. D'Cruz, H., & Jones, M. (2004). FOUR Methodology. *Social Work Research*, 59-81.
9. Denzin, N.K., & Lincoln, Y.S. (2002). The Social Construction of Validity. *The Qualitative Inquiry Reader*, 298-323.
10. Desai, V., & Potter, R.B. (2006). Using the World Wide Web for Development Research. *Doing Development Research*, 273-281.
11. Etchegaray, J.M., & Fischer, W.G. (2010). Understanding Evidence-Based Research Methods: Reliability and Validity Considerations in Survey Research. *Health Environments Research & Design Journal*, 4, (1), 131-135.
12. Fielding, N., Lee, R.M., & Blank, G. (2008). *The SAGE Handbook of Online Research Methods*. SAGE Research Methods Online.
13. Gaidys, V. (2009). Visuomenės nuomonės tyrimai besikeičiančioje visuomenėje. *Filosofija. Sociologija*, 20, (2), 114-121.
14. Grover, R., & Vriens, M. (2006). Advanced Techniques and Technologies in Online Research. *The Handbook of Marketing Research*, 132-158.
15. Heffner, Ch.L. (2004). Chapter 7: Variables, Validity, and Reliability. *Research Methods*. Retrieved 24 March, 2012, from <http://allpsych.com/researchmethods/researchcontents.html>
16. Hewson, C. (2003). How to Design and Implement an Internet Survey. *Internet Research Methods*, 78-105.
17. Jones, K., Leonard, L.N.K., & Riemenschneider, C.K. (2009). Trust Influencers On The Web. *Journal of Organizational Computing and Electronic Commerce*, 19, 196-213. <http://dx.doi.org/10.1080/10919390903041899>
18. Juodaitytė, A. (2011). Radikalaus pliuralizmo principų raiška į vaiką orientuotame ugdyme. *Pedagogika*, 2011, 101.
19. Ju-Yu Yen, M.D., Cheng-Fang Yen, M.D., Hsiu-Yi Wu, Ph.D., Chun-Jen Huang, B.S., & Chih-Hung Ko, M.D. (2011). Hostility in the Real World and Online: The Effect of Internet Addiction, Depression, and Online Activity. *Cyberpsychology, Behavior, And Social Networking*, 14, (11), 649-655. <http://dx.doi.org/10.1089/cyber.2010.0393>
20. Kaplan, D. (2004). Objectivity in Science and Structural Equation Modeling. *The SAGE Handbook of Quantitative Methodology for the Social Sciences*, 426-447.
21. Keller, D.K., & Casadevall-Keller, M.L. (2010). The Proposition's Restrictions. *The Tao of Research: A Path to Validity*, 2-29.

22. Litwin, M.S. (2003). Validity. *How to Assess and Interpret Survey Psychometrics*, 32-44.
23. Murauskas, G., & Radavičius, M. (2011). Studentų internetinės apklausos duomenų analizė. *Lietuvos matematikos rinkinys. LMD darbai*, 52, 321–326.
24. Nunan, D., & Knox, S. (2011). Can search engine advertising help access rare samples? *International Journal of Market Research*, 53, (4), 523-540. <http://dx.doi.org/10.2501/IJMR-53-4-523-540>
25. Okazaki, Sh. (2007). Assessing mobile-based online surveys. *International Journal of Market Research*, 49, (5), 651-675.
26. Outhwaite, W., & Turner, S.P. (2012). Rationality and Rationalist Approaches in the Social Sciences. *The SAGE Handbook of Social Science Methodology*, 282-301.
27. Peat, J.K., Mellis, C., & Williams, K. (2002). Section 3—Validity. *Health Science Research— A Handbook of Quantitative Methods*, 105-113.
28. Porter, S. (2007). Validity, trustworthiness and rigour: reasserting realism in qualitative research. *Journal of Advanced Nursing*, 60, (1), 79–86. <http://dx.doi.org/10.1111/j.1365-2648.2007.04360.x>
29. Poggenpoel, M., & Myburgh, C. (2003). The researcher as research instrument in educational research: A possible threat to trustworthiness? *Education*, 124, (4), 418–421.
30. Puleston, J. (2011). Online Research: Now & Next 2011. King's Fund, London conference notes. *International Journal of Market Research*, 53, (4), 557-560. <http://dx.doi.org/10.2501/IJMR-53-4-557-562>
31. Raykov, T. (2011). Scale validity evaluation with congeneric measures in hierarchical designs. *British Journal of Mathematical and Statistical Psychology*, 64, 427-438. <http://dx.doi.org/10.1348/000711009X484286>
32. Robinson-Kurpius, Sh.E., & Stafford, M.E. (2006). *Testing and Measurement*. SAGE Research Methods Online.
33. Shavelson, R.J., & Towne, L. (2002). *Scientific research in education*. Washington, DC: National Academy Press. Retrieved 27 January, 2013, http://www.nap.edu/openbook.php?record_id=10236&page=80
34. Spaulding, M. (2009). Perceptions of Academic Honesty in Online vs. Face-to-Face Classrooms. *Journal of Interactive Online Learning*, 8, (3), 183-198.
35. van Duzer, E. (2012). Random Qualitative Validation: A Mixed-Methods Approach to Survey Validation: Online Submission. Retrieved 10 June, 2012, from <http://www.eric.ed.gov/PDFS/ED531293.pdf>
36. Vogt, W.P. (2011). The validity of publication and citation counts for Sociology and other. *Sage Quantitative Research Methods*, 63-80. SAGE Research Methods Online.
37. Quinton, S., & Smallbone, T. (2006). Reliability, Validity and Generalization. *Postgraduate Research in Business*, 125-140. SAGE Research Methods Online.
38. Vanderlinde, R., & van Braak, J. (2010). The Gap between Educational research and Practice. *British Educational Research Journal*, 36 (2), 299-316. <http://dx.doi.org/10.1080/01411920902919257>
39. Willig, C., & Stainton-Rogers, W. (2008). Using the Internet for Qualitative Research. *The SAGE Handbook of Qualitative Research in Psychology*, 315-333. SAGE Research Methods Online.

L. Gaižiūniene, G. Cibulskas

Netiesos sakymui įtaką darantys veiksniai internetiniuose edukologiniuose tyrimuose

Santrauka

Tyrimai, o ypač empiriniai – vienas iš būdų gauti patikimus atsakymus į įvairius socialinėje realybėje kylančius klausimus. Svarbu, kad gauti atsakymai (duomenys) būtų svarūs, kokybiški ir susiję, atitiktų tikrovę. Atsakymai nėra amžini – jie gali kisti, todėl labai svarbu, kad jie būtų patikimi ir sudarytų tinkamą pagrindą tolimesniems tyrimams. Jeigu atliekant tyrimus yra vadovaujama nepatikimais šaltiniais ar duomenimis, tuomet tyrimo rezultatai iškreipia realybę ir neatspindi tikrovės. Tokiu atveju jie yra beverčiai. Technologijų tobulėjimas paveikė duomenų rinkimą, kadangi dabar jis vis dažniau atliekamas pasitelkiant internetą (Nunan, Knox, 2010). Šiais laikais yra populiarūs internetu atliekamos apklausos, nes išreikšti savo nuomonę yra paprasta ir patogiu, kadangi žmogus dalyvauti apklausoje gali sau patogioje vietoje ir jam patogiu laiku. Edukologijos moksle taip pat vis dažniau tyrimai yra organizuojami atliekant apklausas internetu. Tačiau nepriklausomai nuo tyrimo atlikimo būdo, tik kokybiškai atlikę apklausą, gausime reprezentatyvius duomenis, atskleidžiančius tam tikrą reiškinį ar situaciją. Kokybiško, reprezentatyvaus tyrimo atlikimas yra aktuali šiandieninė problema (Hewson, 2003).

Apklausoje metu respondentas ir jo atsakymai užima pačią svarbiausią vietą, nuo jų priklauso tyrimo kokybė ir vertė. Respondentų netiesos sakymas tyrimo metu stipriai iškreipia visus tyrimo rezultatus ir netinkamai atspindi egzistuojančią tikrovę. Veikiamas veiksnių įvairovės, respondentas gali meluoti, apsimetinėti, vengti įvairių klausimų, taip darydamas neigiamą įtaką tyrimo rezultatams. Netiesos sakymas yra vienas esminių tyrimo aspektų, į kuriuos turėtų atkreipti dėmesį tyrėjas, kadangi nuo to priklauso tyrimo vertė. Jeigu tyrimo metu respondentas nebuvo atviras, nuoširdus, sakė netiesą, tuomet toks tyrimas yra ne tik, kad nekokybiškas, bet ir visiškai nieko vertas bei beprasmis, kadangi visiškai neatspindi tikrovės.

Mokslinėje literatūroje (Asmundson, Norton ir Stein, 2002; Litwin, 2003; D'Cruz, Jones, 2004; Robinson-Kurpius, Stafford, 2006; Porter, 2007; Keller, Casadevall – Keller, 2010) dažnai tik akcentuojama, kad tyrimo metu turi būti užtikrinamas tyrimo duomenų tinkamumas (validumas) ir patikimumas, tačiau plačiai nediskutuojama ir netiriama, kokiais būdais ir kaip galima pasiekti, kad tyrimo rezultatai atitiktų tikrovės vaizdą. Tampa aktualu ištirti, kokių veiksnių vedamas respondentas teigė netiesą tyrimo metu, kokie veiksniai turėjo tam įtakos? Straipsnio tikslas – išskirti netiesos sakymui įtaką darančius veiksniai internetiniuose edukologijos tyrimuose.

Straipsnyje taikomas mokslinės literatūros analizės metodas. Straipsnis susideda iš trijų dalių. Pirmoje dalyje analizuojami bendri literatūroje aptariami netiesos sakymui įtaką darantys veiksniai kiekybiniuose tyrimuose. Kitose dvejose dalyse analizuojami ir išskiriami specifiniai veiksniai, kurie gali turėti įtakos netiesos sakymui internetiniuose tyrimuose ir edukologijos tyrimuose.

Mokslinės literatūros analizės metu išryškėjo, kad egzistuoja daugybė veiksnių kiekybiniuose tyrimuose, kurie turi įtakos netiesos sakymui tyrimo metu - pradedant nuo tyrėjų teorinių nuostatų, validumo sąvokos supratimo ir jo siekimo, baigiant tiriamųjų psichologine savijauta, asmenybės bruožais ar situaciniais veiksniais. Netiesos sakymą tyrimo metu, taip pat ir tyrimo rezultatus, gali paveikti įvairios klaidos, tyrimo trikdžiai, tyrėjo silpnybės ar kompetencijos trūkumas. Taip pat dažnai manoma, kad kiekybinių tyrimų rezultatus gali paveikti socialiniai, psichologiniai, religiniai veiksniai. Skirtingi autoriai išskiria, jų manymu, svarbiausius, didžiausius grėsmes tyrimo duomenų validumui.

Apibendrinant specifinius internetiniams tyrimams veiksniai, kurie turi įtakos netiesos sakymui ir tyrimų validumui internetinėse apklausoje, svarbiausiais veiksniais tampa pasitikėjimo internetu trūkumas ir tarpasmeninio ryšio stoka. Willig, Stainton-Rogers (2008) akcentuoja, kad žmonės nepasitiki internetu, todėl nėra atviri, nuoširdūs apklausų metu, stengiasi išsisukti nuo nepatogių klausimų, jų neatsakytų, dažnai klastoja asmeninius duomenis. Dažnai tiriamasis sunkiai save motyvuoja, sunkiai suvokia realią tyrimo naudą, kurią gali paaiškinti tyrėjas. Tiriamieji patys neatkreipia dėmesio į tai, kiek svarbu būti atviram ir tiksliai atsakyti į klausimus, nes tai yra tiesiogiai susiję su tyrimo rezultatais. Internetinių apklausų metu tyrėjas neturi galimybės stebėti tiriamąjį, jam padėti, kai kyla klausimų, paskatinti, kai to reikia ir valdyti pašalinių veiksnių, kurie neigiamai veikia tiriamąjį ar tyrimo rezultatus (Fielding, Lee ir Blank, 2008).

Aptariant edukologinių tyrimų specifinius netiesos sakymą skatinančius veiksnius, galima pastebėti, kad jie susiję su apklausų anonimiškumo stoka, su situacija, kad tyrimai yra atitolę nuo kasdieninių problemų, nepritaikyti kiekvienai tiriamųjų grupei ir duomenys renkami neatsižvelgiant į tyrimo kontekstą. Edukologijos tyrimuose svarbu atkreipti dėmesį į tyrimo kontekstą, kadangi konteksto veiksniai dažnai labai ryškiai veikia tyrimo rezultatus (Shavelson, Towne, 2003). Svarbu, kaip tiriamasis jaučiasi ugdymo institucijoje, koks jo statusas, pareigos, lytis, kaip sutaria su aplinkiniais ir kt. Tiriamasis gali būti įbaugintas, jaustis nejaukiai, gynybiškai, o dėl to nebūti nuoširdus ir atviras tyrimo metu, meluoti bijant pasekmių, jei jo pateikta tiesa būtų paskelbiama viešai. Tyrimui saugi aplinka yra ypač svarbi viso tyrimo metu. Ji mažina netiesos sakymą apklausos metu. Čia svarbiu aspektu tampa tyrimo anonimiškumas. Organizuojant edukologinius tyrimus derėtų užtikrinti jų anonimiškumą dėl kelių aspektų: ugdymo įstaigose dauguma dirbančiųjų yra moterys bei esant glaudžiam ryšiui tarp darbuotojų turi būti garantuojama, kad jų atsakymai nebus susiejami su konkrečiu žmogumi (nebus atkoduojama, kas ir kaip atsakė į klausimus) (Cohen, Manion ir Morrison, 2008). Anonimiškumas didina pasitikėjimą tyrimu, skatina atvirumą ir mažina netiesos sakymą.

Visus išskirtus veiksnius, kurie gali turėti įtakos netiesos sakymui kiekybiniuose, internetiniuose ir edukologiniuose tyrimuose galima susisteminti į modelį, remiantis keturiais pagrindiniais validumo tipais: teoriniu, turininiu, tyrimų ir rezultatų. Remiantis šiais keturiais tipais galima išskirstyti visus netiesos sakymui įtaką darančius veiksnius, kurie

yra susiję su tyrėjo nuostatomis, tyrimo turiniu, jo parengimu ir atlikimu bei rezultatų analize ir apibendrinimais. Šiame straipsnyje formuojamas modelis, kurio pradžioje pateikiami kiekybiniuose tyrimuose netiesos sakymui įtaką darantys veiksniai. Jie yra esminiai ir bendri visiems kiekybiniams tyrimams. Straipsnyje išskiriami veiksniai, kurie turi įtakos netiesos sakymui internetiniuose tyrimuose ir edukologiniuose tyrimuose. Jie yra specifiniai kiekvienai tyrimų rūšiai. Į šiuos susistemintus veiksnius vertėtų atkreipti dėmesį kiekvienam tyrėjui, siekiant atlikti kokybišką ir vertingą tyrimą bei užkirsti kelią netiesos sakymui tyrimo metu. Tyrėjams visuomet patariama stengtis parengti apklausas kuo kokybiškesnes, kad jos respondentams keltų pasitikėjimą, o tai daro įtaką jų atvirumui ir nuoširdumui bei tiesos sakymui.

Reikšminiai žodžiai: netiesos sakymas kiekybiniuose tyrimuose, validumo užtikrinimas, tyrimų validumo tipai, internetinės apklausos.

First received: June, 2013

Accepted for publication: June, 2013