

The Role of Wikipedia in Research and Education

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ABSTRACT: *This research study aims to investigate the role of Wikipedia in contemporary knowledge production as it is viewed by the various users of such tools in Greece. Academics, scientists, scholars and professionals provide a variety of argumentation on the pros and cons of the role of Wikipedia in contemporary knowledge production some of them rather conflicting to each other. A pre-tested questionnaire was used for data collection. The data were collected at various establishments and a total of about 171 individuals from all walks of life, different backgrounds and age and cultures responded. The study results are clear. Wikipedia is a successful story, regardless of its credibility, despite its authors' anonymity and often lack a significant and/or particular academic or professional merit, but because it is a good start and a quick and easy source of finding free information that either will be confirmed by other more official sources or that can be used by "casual" info seekers. Many individuals in Greece make use of Wikipedia but no research was done so far as to the perception of its quality. Although this pilot study originated in Greece, E.U. but the authors suspect it is very likely the results apply to many other geographic regions and populations.*

Keywords: eEducation, Online Encyclopedia, Knowledge, Research Tool

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1. Introduction

Wikipedia, Facebook, Twitter, GoogleEarth, Rapidshare, Youtube and a few others are some of the main applications that brought the use of the information technology to such a level that quite often make users wonder how their everyday life would be without them. Wikipedia, one of the largest online open source encyclopedias, provides information about people, events, locations and history in many languages, has become worldwide famous over the internet. Its community expands by the minute from volunteers, and does not employ experts neither processes the articles through formal reviews. On the contrary, Wikipedia allows people to change the content of the articles at any time without even identifying themselves, so major issues emerged about its credibility and trustworthiness.

The site was founded by Jimmy Donal Wales and Larry Sanger on 15 January 2001 with the dream of creating a free source of information. It is based on a wiki format and started on 2001 with 123 articles and at the end of 2009 reached 16.6 million articles on more than 270 languages with 68 million visitors monthly as of January 2010. The English section is the largest and most known section of Wikipedia with its articles counting 3,234,176 on February 2010. On 2005 the British journal Nature stated that

Wikipedia's articles on science were on par with the articles of Britannica.

Despite its large recognition, due to its open source wiki format which made Wikipedia popular, it has also been its weak point allowing freely anyone create and edit its pages anonymously and as a result numerous fake, misleading and biased articles are posted. Wikipedia has taken action against them on controlling these malicious acts but it is unknown whether it is sufficient. So there are some major issues that arise:

- What do Wikipedia users think of its credibility for the purposes of accurate education and scientific research?
- How do Wikipedia users think its authors should benefit for their contribution?
- What is the audience that Wikipedia targets?

2. Aims and Objectives

The purpose of this pilot study is to examine the role of Wikipedia in contemporary knowledge production in Greece. The main objectives were:

- Examine the credibility and trustworthiness of Wikipedia articles from a users' viewpoint,
- Evaluate the rewards mechanism for the authors of Wikipedia seeking whether it is enough to ensure proper quality of the information it provides,
- Map the target audience of Wikipedia as a research and education tool.

3. Background

There are a couple of things that cannot be disputed concerning the story of Wikipedia. First, it is already among the top 10 of the most visited web sites not just in the English speaking world but in other regions as well [1]. It is not strange that some of the main web browsers suggest it as part of their browsers' main user interface. Indeed, its statistics are quite impressive with a few billion page hits per month from visitors speaking more than 270 languages in January 2010, more than double from the 120 languages in 2006. It has a wealth of more than 3 million articles, just counting the English-language entries, up from just more than one million back in 2006. This proves the second fact that is it has achieved a very high level of respect and acceptance from a very wide variety of information seekers from all walks of life and all around the world at least as high as other traditional brands like Encyclopedia Britannica (The New York Times, 2006).

There are, then, as it seems, only two issues about it that are quite controversial, one could argue, namely those on its credibility and its editorial mechanism. In one of the most serious studies contacted by the British journal Nature it was found that "*Wikipedia is about as accurate on scientific matters as the well-established encyclopedia Britannica*" with the main complain reported by the reviewers being the poor structure of the entries [2]. Britannica management responded to the conclusions of the study by putting in doubt not just the conclusions per se, which would be meaningless actually if not supported properly, but the methodology that the study was based on arguing that it had many flaws and, hence, the whole study was discredited and invalid [5].

This almost exponential growth of the usage of Wikipedia as a source of information by all sorts of people, from students to academics and professionals and from casual info seekers to researchers, that use it to find quickly and easily what they want and together with the suspicion, especially between academics and scholars, for either incomplete or not quite accurate information created the dilemma of whether it should be used and in what context. Many academic organizations of high standards like UCLA and University of Pennsylvania set the policy that Wikipedia info could be used only as "*background material*" to be checked and confirmed through other more credible sources [6]. Once a preliminary check of the info is made and the sources are verified it would be acceptable to have the reader directly refer to the source of the actual info from which the article, presumably, draws its data and even reference that source instead. This is actually a common practice between researchers when contacting a literature review on a subject under study. More surprising, even Jim Redmond, a Wikipedia administrator, underlined that Wikipedia articles should not be used by anyone, far more for students and academics/scholars/professionals as an original source of information. This statement by itself articulates the mentality of the people that launched the site and their general aim behind it.

The second issue under consideration is the editorial mechanism that Wikipedia articles are based on, rather the lack of a systematic one. The basic idea behind the whole concept is that Wikipedia is a free online encyclopedia where everyone and anyone can provide information s/he either knows or believes or even would like to think of being true on any subject of interest. This leaves a lot of room not only for the masses to “*shape*” the information as they want it but even to vandalize on it. Even more interesting is that it is not required even to sign the information provided which frequently leads to unknown authorship [4]. This editorial strategy, if it can be characterized as such, has its pros and cons.

One of the advantages is that in order for a person to be able and willing to offer insight or knowledge on a specific topic covered in Wikipedia a review of it is necessary. Then, either that individual agrees with the way the topic is covered or the information is presented or disagrees. It is likely that if that person agrees the most s/he will do is to improve the article in structure or style or knowledge depth. If s/he disagrees a change is quite possible and allowed. Multiply this practice by the hundreds or thousands of interested reviewers/authors and it is easy to understand why the Wikipedia founders believe this results in much more in-depth analysis of the actual information even on very controversial topics even though the articles are deemed to be never complete or finished [4].

On the “*cons*” side, Randall Stross argues that “*anonymous source is not the same as open source*” and implies “*that a middle-school student*” has undoubtedly not the same credibility with “*a Nobel laureate*” pointing to the need of putting in place an internal editorial expert that could be able to scrutinize the info input in the Wikipedia pages and, therefore, raise the level of its reputation. This is in direct contrast with the Wikipedia’s founders that claim the respect and credibility of encyclopedia Britannica’s articles does not come from the names of the authors that sign them but by the process followed which just make these articles maybe more verifiable but not more credible since Wikipedia’s process of scrutiny and editing is endless [7].

The question raised, then, is the people’s belief of the actual value of Wikipedia and its role in contemporary production of knowledge.

4. Methodology

This is mostly a qualitative pilot study with very few quantitative elements. A specific questionnaire was administered randomly to about 250 individuals in Thessaloniki, Central Macedonia, Northern Greece and 171 responses were collected providing an acceptable sample rate of 1.7 responses per 10,000 people.

After the first two demographic questions (q. 1-2) serving the purpose of making possible a cross-tabulation analysis based on age and education the rest of the questions 3-9 are directly addressing issues related with Wikipedia. Questions 3-6 are mainly quantitative seeking to find how the online users in Greece rank Wikipedia, if they find it credible enough, how often they find errors in its articles and how frequently they check sources of its articles. Questions 7-9 are qualitative in nature aiming to get participants’ responses on several issues related with quality elements. The full questionnaire is available at the appendix of the present document.

The results of the responses were recorded and stored in SPSS analysis tool for statistical analysis mainly cross-tabulation. Then the new results were imported into MS Excel spreadsheet in an attempt to provide improved charts and labeling of those results. The process of gathering the individuals’ responses took around 4 weeks and the time required for entering all the data for analysis and illustration (SPSS and MS Excel) took 2 more weeks. The findings are presented in the following sections.

5. Findings

5.1 Rank and trust

5.1.1. Rank of Wikipedia

Table 1 presents the rank of Wikipedia as a choice for online info search cross-tabulated with the user’s education and age whereas figure 1 illustrates the overall results of this ranking. It is rather remarkable to note that 58% of the respondents regard Wikipedia either as their first choice (15%) or among their first choices (43%) especially considering that the site is just 10 years old. Another 18% of them have it as one of the many choices they have when searching for information online. Just about 7% said they seldom use it only when they cannot find what they are searching for in other more trusted online sources or encyclopedias. A tiny 2% responded that they do not trust it at all, hence, they don’t use it at all and there was a 15% that would

not or could not say. This may be inclusive of those not aware of the site's existence or those that are not quite familiar with information technology.

Table 1: Rank of Wikipedia as a choice for online info search based on Education and Age (Sample size: 171)

Education	First choice		Among first choices		One of many choices		Seldom use it		Don't trust it		Don't know/ Can't say		Total
	choice	%	choices	%	choices	%	use it	%	trust it	%	Can't say	%	
High School/ Junior h.	3	9,1%	16	48,5%	4	12,1%	3	9,1%	0	0,0%	7	21,2%	33
Professional studies	1	5,6%	6	33,3%	6	33,3%	0	0,0%	1	5,6%	4	22,2%	18
Bachelor's degree	14	17,1%	34	41,5%	16	19,5%	7	8,5%	3	3,7%	8	9,8%	82
Master's/Ph.D	4	18,2%	10	45,5%	5	22,7%	2	9,1%	0	0,0%	1	4,5%	22
Other	3	18,8%	7	43,8%	0	0,0%	1	6,3%	0	0,0%	5	31,3%	16
Age													
Between 18 and 34	1	9,1%	5	45,5%	3	27,3%	0	0,0%	0	0,0%	2	18,2%	11
Between 35 and 49	13	11,8%	54	49,1%	21	19,1%	7	6,4%	4	3,6%	11	10,0%	110
Between 50 and 65	8	22,2%	10	27,8%	6	16,7%	5	13,9%	0	0,0%	7	19,4%	36
More than 65	0	0,0%	0	0,0%	0	0,0%	1	100,0%	0	0,0%	0	0,0%	1
Don't know/can't say	3	23,1%	4	30,8%	1	7,7%	0	0,0%	0	0,0%	5	38,5%	13
Total	25		73		31		13		4		25		171

Table 1. Rank of Wikipedia based on education and age

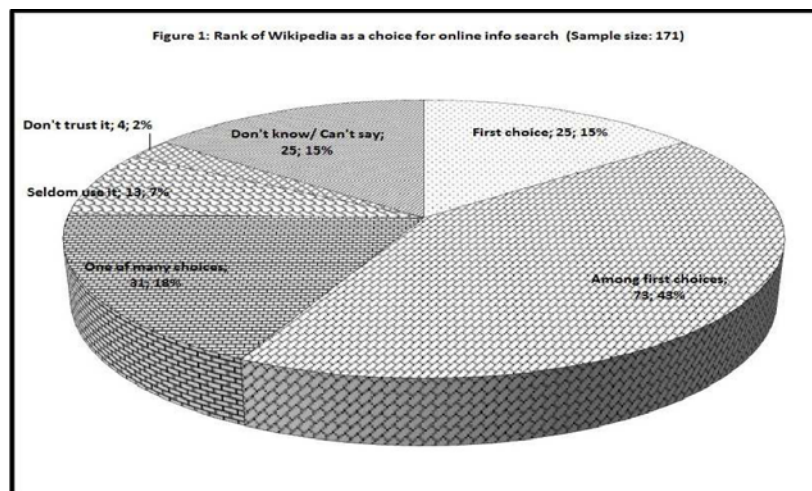


Figure 1. Rank of Wikipedia as a choice for online info search

Statistics of table 1 provide a more in-depth analysis of the previous general results cross-tabulated with users' education and age. In terms of education the main comment would be that it looks the more educated an individual is the more that person regards Wikipedia as the first choice among other credible sources of information. What is even more remarkable is that this seems to be true especially with the respondents holding some type of postgraduate degree, either master's or doctorate, suggesting that Wikipedia has won the respect of even highly educated people. Indeed, it is quite noteworthy that almost 2/3 of them consider it either their first choice (18.2%) or among the first ones (45.5%). Another element of the findings that further underlines the previous is that very few, less than 10%, of the respondents said they seldom use it only when they cannot find the info they seek elsewhere and even less, actually no one of those highly educated, don't trust it at all. There were, it should be noted, quite a few that did not express any opinion. As far as age is concerned, the statistics of table 1 do not provide as much a clear picture of a pattern except that the more grown-up a person is the more likely it is to consider it the first choice.

5.1.2 Trust of Wikipedia

Almost half of the sample population (46%) stated they do trust very much Wikipedia as a tool for searching credible info. About a third of them (31%) said they trust it a little, a very small and insignificant 5% don't trust it at all and a 18% them couldn't or wouldn't say maybe, again, because they are not familiar with it (table 2, figure 2).

Based on the respondents' education the results are, like in the previous analysis of Wikipedia, rather straightforward. The more educated the person the more the trust to Wikipedia. This is even more true for the highly educated individuals holding a

Table 2: Trust of Wikipedia as a tool for searching credible info based on Education and Age (Sample size: 171)

Education	Very much	%	A little	%	Not at all	%	Don't know/ Can't say	%	Total
High School/ Junior h.	14	42,4%	10	30,3%	0	0,0%	9	27,3%	33
Professional studies	7	38,9%	6	33,3%	0	0,0%	5	27,8%	18
Bachelor's degree	39	47,6%	23	28,0%	7	8,5%	13	15,9%	82
Master's/Ph.D	14	63,6%	8	36,4%	0	0,0%	0	0,0%	22
Other	5	31,3%	6	37,5%	1	6,3%	4	25,0%	16
Age									
Between 18 and 34	3	27,3%	5	45,5%	1	9,1%	2	18,2%	11
Between 35 and 49	53	48,2%	36	32,7%	6	5,5%	15	13,6%	110
Between 50 and 65	17	47,2%	8	22,2%	1	2,8%	10	27,8%	36
More than 65	0	0,0%	1	100,0%	0	0,0%	0	0,0%	1
Don't know/can't say	6	46,2%	3	23,1%	0	0,0%	4	30,8%	13
Total	79		53		8		31		171

Table 2. Trust of Wikipedia based on Education and Age

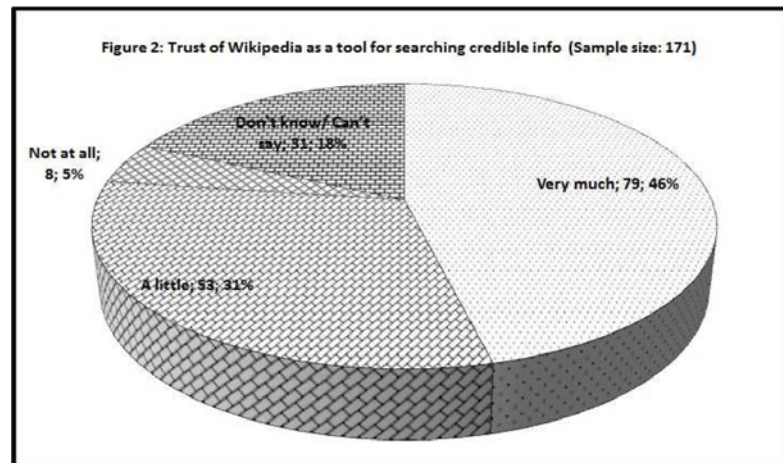


Figure 2. Trust of Wikipedia as a tool for searching credible info

postgraduate degree. Especially in their case they either trust it very much or a little but no one complained of not trusting it at all and there was no one who did not express opinion which suggests they are familiar with the technology.

The results of the analysis of the data cross-tabulated with the participants' age are not very conclusive. In general they follow the pattern described previously with the exception, one might say, of the younger individuals between 18 and 34 who it could be said are more reluctant than the rest. Moreover, there is a small but noteworthy percentage of them (9.1%) who mentioned they do not trust Wikipedia at all. Other than that the picture remains the same as before.

These findings suggest that despite Wikipedia's very short history it has achieved a considerably high percentage of acceptance and trust that is only matched by other well-established and broadly known traditional encyclopedias.

5.2 On the content of Wikipedia

5.2.1. Frequency of invalid or not completely accurate info

A very large part of the sample population reported they seldom or never found errors in the information provided by Wikipedia articles (43%). Another very significant 20% acknowledged that they came across such problems some times. This can be translated as having 2/3 of the population being either completely or enough satisfied by the content of Wikipedia and explains the very broad and global acceptance of Wikipedia despite its flaws given its free nature, the short period of time it is available and the fact that its articles are open to editing by anyone interesting in them. Only 10% of the respondents complained of finding errors quite often, a very small 6% said they don't trust it and, thus, they don't use it and just one person was upset for finding problems all the time. There was another 20% who could not or would not answer the question (figure 3).

Table 3: Frequency of invalid or not completely accurate info in Wikipedia based on Education and Age (Sample size: 171)

Education	All the time	%	Often	%	Some times	%	Seldom or never	%	Don't trust it	%	Don't know/ Can't say	%	Total
High School/ Junior h.	0	0,0%	3	9,1%	4	12,1%	15	45,5%	3	9,1%	8	24,2%	33
Professional studies	0	0,0%	2	11,1%	5	27,8%	4	22,2%	0	0,0%	7	38,9%	18
Bachelor's degree	1	1,2%	9	11,0%	17	20,7%	36	43,9%	7	8,5%	12	14,6%	82
Master's/Ph.D	0	0,0%	2	9,1%	5	22,7%	11	50,0%	0	0,0%	4	18,2%	22
Other	0	0,0%	1	6,3%	4	25,0%	7	43,8%	0	0,0%	4	25,0%	16
Age													
Between 18 and 34	0	0,0%	3	27,3%	0	0,0%	7	63,6%	0	0,0%	1	9,1%	11
Between 35 and 49	1	0,9%	14	12,7%	20	18,2%	50	45,5%	8	7,3%	17	15,5%	110
Between 50 and 65	0	0,0%	0	0,0%	9	25,0%	12	33,3%	2	5,6%	13	36,1%	36
More than 65	0	0,0%	0	0,0%	1	100,0%	0	0,0%	0	0,0%	0	0,0%	1
Don't know/can't say	0	0,0%	0	0,0%	5	38,5%	4	30,8%	0	0,0%	4	30,8%	13
Total	1		17		35		73		10		35		171

Table 3. Frequency of invalid info based on Education and Age

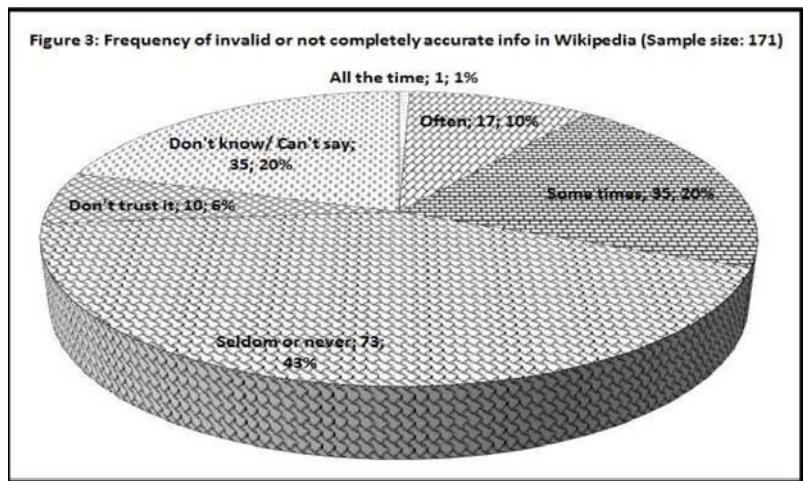


Figure 3. Frequency of invalid info in Wikipedia

Looking closer at the statistics after a cross-tabulated analysis of the frequency of invalid or not completely accurate info based on the education of the participants the picture provides some more quality elements. It is clear from this analysis that the argument Wikipedia articles are not good enough for academic and/or professional documents is not supported by the vast majority of the well educated people. As table 3 shows the more educated a person is the less frequently s/he finds invalid or not completely accurate information in Wikipedia articles. This is especially true for the very educated master's or doctorate degree holders and suggests they are mostly satisfied by the quality of the info provided. This is quite significant as they should probably be the ones, due to their academic background and familiarity with professional work, to complain for problems if they were to find several of them (table 3).

A similar cross-tabulated analysis based on the participants' age shows no change in the general pattern but just a small but clear qualitative shift towards the two major responses. In the case of younger individuals the shift is towards more satisfaction of the content as they "seldom or never" not find frequently invalid or not completely accurate info. On the other, side in the case of the elders the shift is towards less satisfaction as they tend to complain about finding errors "sometimes" in the Wikipedia articles (table 3). These are good results that lead to optimistic projections as to the future of Wikipedia because, although it has a short life, the vast majority of the younger or grown-up individuals are already not only familiar with it but comfortable as well and only the elder people complain a bit about its quality which, there is no doubt, its management is constantly working to improve.

Table 4: Frequency of checking Wikipedia sources based on Education and Age (Sample size: 171)

Education	All the time		Often		Some times		Seldom or never		Don't trust it		Don't know/ Can't say		Total
	1	%	1	%	7	%	15	%	5	%	4	%	
High School/ Junior h.	1	3,0%	1	3,0%	7	21,2%	15	45,5%	5	15,2%	4	12,1%	33
Professional studies	0	0,0%	5	27,8%	3	16,7%	4	22,2%	0	0,0%	6	33,3%	18
Bachelor's degree	2	2,4%	19	23,2%	14	17,1%	29	35,4%	10	12,2%	8	9,8%	82
Master's/Ph.D	2	9,1%	7	31,8%	4	18,2%	9	40,9%	0	0,0%	0	0,0%	22
Other	5	23,8%	4	19,0%	3	14,3%	5	23,8%	0	0,0%	4	19,0%	21
Age													
Between 18 and 34	0	0,0%	1	9,1%	2	18,2%	6	54,5%	1	9,1%	1	9,1%	11
Between 35 and 49	3	2,7%	31	28,2%	22	20,0%	33	30,0%	12	10,9%	9	8,2%	110
Between 50 and 65	1	2,8%	3	8,3%	3	8,3%	19	52,8%	2	5,6%	8	22,2%	36
More than 65	0	0,0%	0	0,0%	1	100,0%	0	0,0%	0	0,0%	0	0,0%	1
Don't know/can't say	1	7,7%	1	7,7%	3	23,1%	4	30,8%	0	0,0%	4	30,8%	13
Total	5		36		31		62		15		22		171

Table 4. Frequency of checking Wikipedia sources

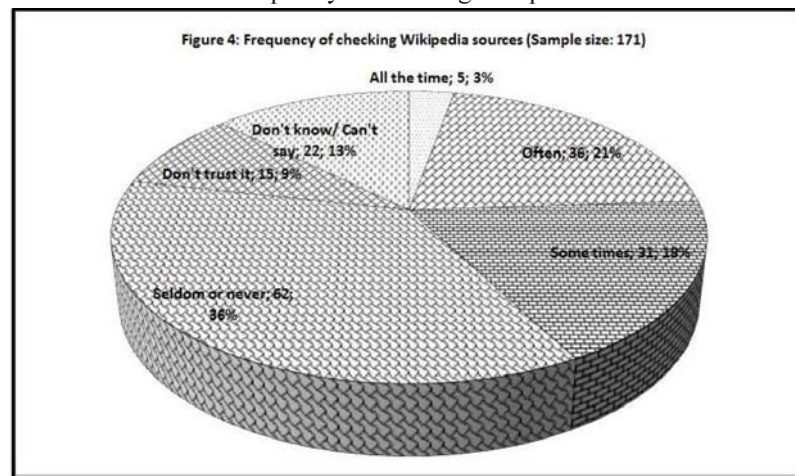


Figure 4. Frequency of checking Wikipedia sources

5.2.2. Frequency of checking Wikipedia sources

The participants were asked whether they check Wikipedia sources, when reading and/or using its articles, or not. Their responses are briefly illustrated in figure 4 and a cross-tabulation analysis fully presented in table 4. The results were quite equally balanced between two main categories. In the first, 42% of them do make the check either “*all the time*” (3%) or “*often*” (21%) or “*sometimes*” (18%). In the second, 45% of them said they either “*seldom or never*” check it (36%) or don’t trust it at all and, hence, they don’t bother to check it (9%). Especially in the former case, those that “*seldom or never*” check, it is not clear whether they just don’t read/use Wikipedia articles or they simply trust it so much they don’t hesitate to use it without any doubts. Finally, there was another significant part of the sample population (13%) that did not respond (figure 4).

Looking at things in more detail from an education-level viewpoint some more qualitative elements may, again, be extracted. First, in the case of individuals with lower education, i.e. high school or related, there is a shift towards “*seldom or never*” checking the sources (45.5%). There could be two different interpretations of this statistic. One might be that a few of them “*seldom or never use it*” anyway as it was found in previous results. The other could be because they are not trained, yet, for that. Also, a significant part of them (15.2%) they “*don't trust it*” and, therefore, don’t use it at all. Second, those with a professional or bachelor’s degree tend to follow the general pattern as described just before. Finally, the most educated, i.e. the master’s or doctorate holders, tend to check it closer (59.1%) which is translated to “*all the time*” (9.1%), or “*often*” (31.8%), or “*sometimes*” (18.2%). There is also another 40.9% that “*seldom or never*” check the sources but it is not safe to say why that is so as some of them “*don't use it*” at all whereas others may fully trust it beyond any doubt (table 4). As to the effect of age in this decision, the respondents’ opinions were scattered so much so that is not clear to draw any definite conclusions. This probably means that other factors, especially education as noted earlier, are affecting their decision.

Figure 5. Users' comments on Wikipedia based on Education

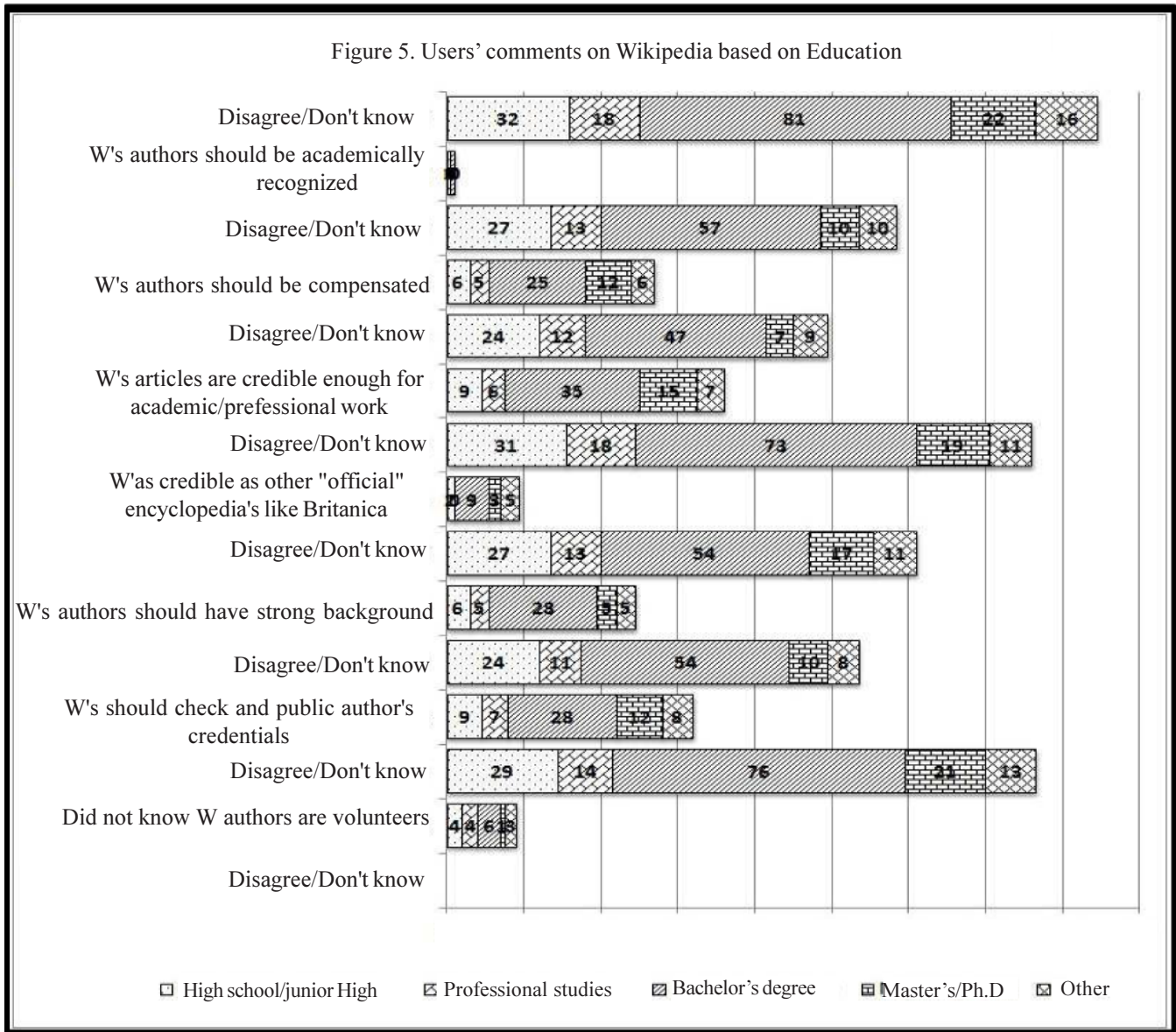


Figure 5. Users' comments on Wikipedia based on Education

5.3 Users' perception of Wikipedia quality and its target audience

Probably the most interesting part of the research study was the participants' responses on the questions associated with qualitative elements of Wikipedia. Figure 5 illustrates these responses based on their education. There is quite a balance between those who said they knew Wikipedia authors are volunteers and those who said they didn't regardless of their education. This could be explained by the fact that a large part of the population, at least in Greece, just uses the site without knowing much about it and some don't even use it at all.

The majority of the participants expressed their belief that Wikipedia should check and publish its authors' academic and/or professional credentials. This is true whether they are more or less educated. However it should be noted there is a very significant shift, much to the authors' surprise, towards having a balance with those who don't really care about these credentials as the respondents' education level increases. It is hard to interpret this particular shift, if that is a real one, and the only suggestion is that these very well educated individuals are quite focused on what they are looking in Wikipedia articles and their quality and can confirm/verify the actual information themselves without much need to do so indirectly through checking authors' credentials.

Figure 6. User's evaluation pf wikipedia's target audience based on education (Sample size: 171)

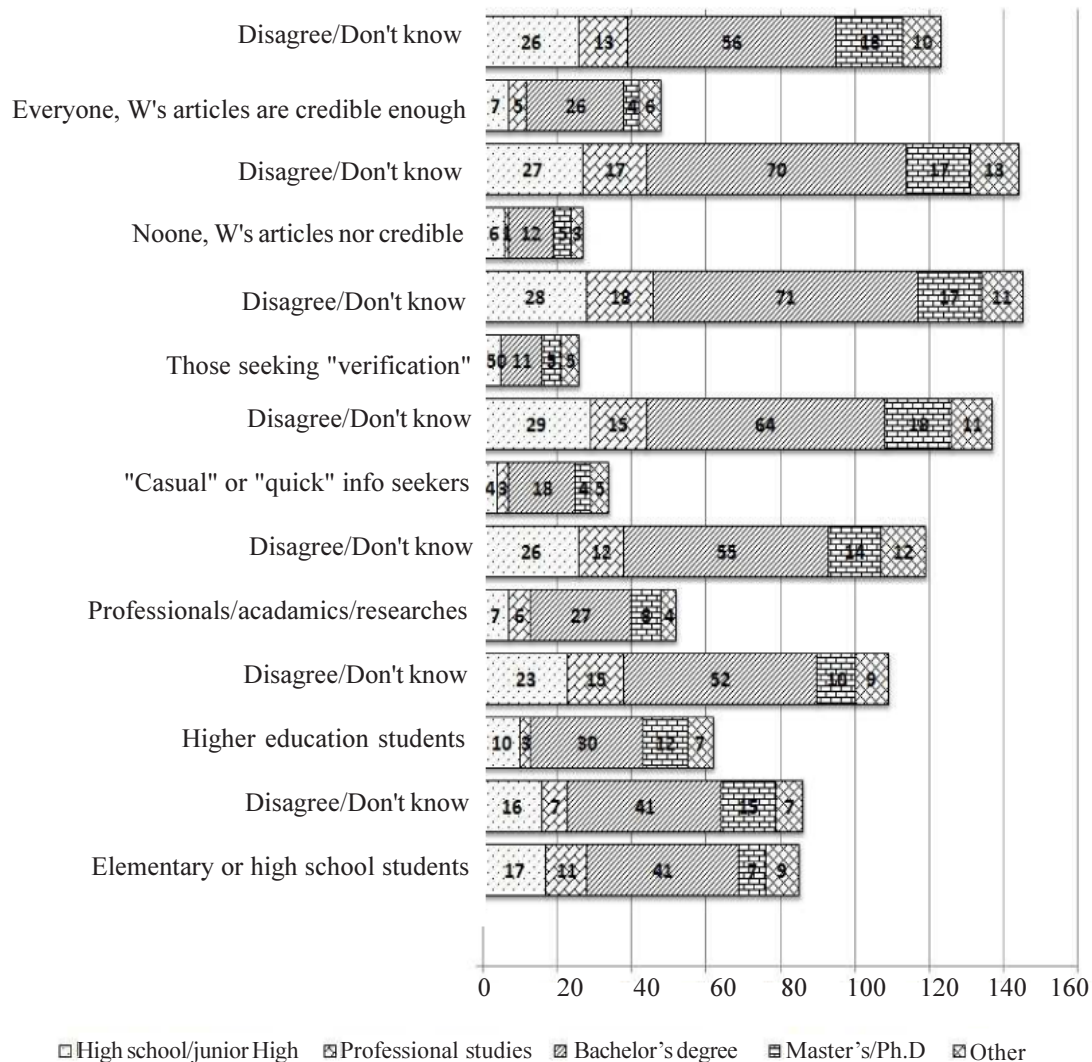


Figure 6. Users' evaluation of Wikipedia's target audience based on education

Another very important quality element of the findings, in direct contrast with Wikipedia rivals' argumentation line, is that clearly between the 2/3 and the 3/4 of the respondents, independent of their education did not agree with the requirement that Wikipedia authors should have a strong background or they didn't know if that was a real need. The "quick and easy" explanation to this statistic is, maybe, because these people are just looking for the information quickly and trust the process followed to provide it and some of them just don't have any opinion, positive or negative, about it.

The next finding, surprising as it is seemingly directly conflicting with all the previous, is that almost 4/5 of the participants admitted they don't consider Wikipedia and its articles as credible as other traditional and well-established printed or online encyclopedia's, like Britannica. A good explanation might be that Wikipedia users know quite well what Wikipedia stands for and they don't have misconceptions about its role as a secondary source of information only to be confirmed by other more credible sources especially when it comes to be used in highly professional or academic pieces of work. This interpretation is strongly supported by the next finding according to which very few of the responses were in agreement with the idea that Wikipedia articles are credible enough for academic and/or professional work.

Last, the vast majority, once again between the 2/3 and the 3/4, of the respondents either did not agree or did not have a reaction to the suggestion that the Wikipedia authors should either be compensated or should be academically recognized. This further stresses the nature of its articles as a source of info for casual readers or a secondary source in case a more in depth analysis of information is required for quality work. The aforementioned findings based on the education of the participants do not change significantly when looking things from a different viewpoint that of age statistics shows.

When asked about who they think is the target audience of Wikipedia, the participants, gave a very hazy picture full of mixed signals. Almost all disagreed, or did not say anything, that its articles are for elementary or high school students. All of them refused that the W articles are credible enough for everyone but 2/3 of them also disagreed that they are not credible enough and so no one should use them. Just a small 1/6 of them admitted they are only for “casual” or “quick” info seekers. A third of them believe the articles are intended for the higher education students, almost a fourth of them consider them useful for professionals, academics and/or researchers, and about close to 40% suggest them to those seeking to verify information they already have (figure 6).

The last question asked was whether the respondents believe Wikipedia marks the end of online or printed traditional encyclopedias. The majority of them (50%) simply disagreed, 34% did not or could not say and just a small 16% agreed with this suggestion. The more educated an individual is and the younger the closer or even above the aforementioned statistics in favor of the disagreement.

6. Discussion - Conclusions

It does not make any sense to doubt that Wikipedia is one of the great success stories originating from the idea of making the best use of the information technology and the Internet to freely disseminate information to the public through the web. This study has proved, the authors believe without any reasonable doubt, that not only it is well accepted by the vast majority of the Internet users but, as the quality characteristics of the sample population show, one should only expect that it will continuously improve its placement and respect against the other online or printed encyclopedias, traditional or not, well-established or not.

Whatever arguments against its credibility and trustworthiness are mainly the results of conflict of Interest and far less of actual proof that something is really wrong in the process Wikipedia management follows. The Internet users do trust it as a simple yet quite user-friendly and useful instrument to find the information they seek. This is even true in the case of academics and professionals who do not seriously complain about credibility problems related to its articles given that they don't support their work on these articles but rather the confirmation of the knowledge they already have or use it as a means to find more official information through the sources Wikipedia authors are using. In other words, and this is a very important conclusion coming out of the study, Wikipedia articles are not the final destination of a quest for a certain information but just the beginning or the means for it. Anyway, one should always keep in mind that even academics or scholars or highly ranking professional never claim to have achieved the perfect and undisputed truth on a specific topic they address no matter how respected they are in their field.

Wikipedia users like it a lot because of what it is and what it represents and the study shows they wouldn't really want to change its nature. They don't care that the authors are volunteers who are probably associated with it in a “casual” manner with no specific privileges and/or benefits but no obligations of any sort either. They are not concerned, actually, with who the authors are and if they are people with significant background or occupation or influential personal characteristics or not. They don't believe its articles are for everyone but they consider them credible enough to be used by most information seekers regardless of the educational level or their age or financial background etc.

The conflict between proponents and opponents of Wikipedia is meaningless. The decision of major academic institutions worldwide to allow their students, researchers and affiliates to use it as a secondary source of information only to find the origins of it is, the authors believe, the absolutely correct policy to follow. Wikipedia threatens the traditional well-established encyclopedias not because of its content but because of its ease of use and free nature. It is highly likely that other improved similar applications will follow this example of user-friendliness learning from Wikipedia's whatever mistakes. Traditional encyclopedias should become less “traditional” and follow the trend that directs to more user-oriented policies without losing their quality advantage, if any.

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Appendix: The Questionnaire

1. What is your education level (select the higher that applies):

- | | |
|---|---|
| <input type="checkbox"/> 1. Elementary education | <input type="checkbox"/> 2. High school/Junior high |
| <input type="checkbox"/> 3. Technical/professional education | <input type="checkbox"/> 4. Bachelor's degree |
| <input type="checkbox"/> 5. Postgraduate degree (Master's or PhD) | <input type="checkbox"/> 6. Other: |

2. What is your age:

- | | | |
|---|---|--|
| <input type="checkbox"/> 1. Less than 18 | <input type="checkbox"/> 2. Between 18 and 34 | <input type="checkbox"/> 3. Between 35 and 49 |
| <input type="checkbox"/> 4. Between 50 and 65 | <input type="checkbox"/> 5. More than 65 | <input type="checkbox"/> 6. Don't know/can't say |

3. Rank Wikipedia in comparison with the rest of the online choices when searching for information (Select the one that applies the most)

- | | | |
|---|--|---|
| <input type="checkbox"/> 1. First choice | <input type="checkbox"/> 2. Among first choices | <input type="checkbox"/> 3. One of the many choices |
| <input type="checkbox"/> 4. Seldom use it only when unable to find info in more trusted sources | <input type="checkbox"/> 5. Don't trust it, don't use it | |
| <input type="checkbox"/> 6. Don't know/Can't say | | |

4. How much do you trust Wikipedia as a credible source of information? (Select the one that applies the most)

- | | | | |
|---------------------------------------|--------------------------------------|--|--|
| <input type="checkbox"/> 1. Very much | <input type="checkbox"/> 2. A little | <input type="checkbox"/> 3. Not at all | <input type="checkbox"/> 4. Don't know/can't say |
|---------------------------------------|--------------------------------------|--|--|

5. How often have you located in Wikipedia information which was either inaccurate or completely wrong? (Select the one that applies the most)

- | | | |
|---|--|--|
| <input type="checkbox"/> 1. All the time | <input type="checkbox"/> 2. Often | <input type="checkbox"/> 3. Some times |
| <input type="checkbox"/> 4. Seldom or never | <input type="checkbox"/> 5. Don't use it | <input type="checkbox"/> 6. Don't know/can't say |

6. How often do you check Wikipedia sources? (Select the one that applies the most)

- | | | |
|---|--|--|
| <input type="checkbox"/> 1. All the time | <input type="checkbox"/> 2. Often | <input type="checkbox"/> 3. Some times |
| <input type="checkbox"/> 4. Seldom or never | <input type="checkbox"/> 5. Don't use it | <input type="checkbox"/> 6. Don't know/can't say |

7. Wikipedia articles are the volunteer contribution of its authors. Select one or more of the following statements that you agree with.

- | |
|---|
| <input type="checkbox"/> 1. I did not know about the volunteer contribution of articles to Wikipedia. |
| <input type="checkbox"/> 2. Wikipedia should check the profile of its authors and publish it in every one of their articles |
| <input type="checkbox"/> 3. Wikipedia authors should be checked to have a strong academic or professional background in order to "sign" their articles |
| <input type="checkbox"/> 4. Wikipedia can be compared, as to its credibility, with "official" encyclopedias like Britannica |
| <input type="checkbox"/> 5. Wikipedia articles may be used in academic or professional works of high quality |
| <input type="checkbox"/> 6. Wikipedia authors should be compensated financially to secure the quality of their contribution |
| <input type="checkbox"/> 7. Wikipedia authors should be recognized based on the academic-research standards of authorship to secure the quality of the contribution |
| <input type="checkbox"/> 8. Don't know/can't say |

8. The target audiences of Wikipedia articles are: (Select one or more of the following that apply).

- 1. Elementary, or secondary education students
- 2. Higher education or vocational/professional school students
- 3. Professionals/academics/researchers
- 4. "Casual" seekers of the "quick" information with no quality demands
- 5. Readers looking for confirmation of an information they already have
- 6. No one, these articles are not credible at all
- 7. Everyone, these articles are credible enough

9. Do you believe that Wikipedia marks the end of traditional online or printed encyclopedias?

- 1. Yes
- 2. No
- 3. Don't know/can't say