

Informational Citing Conformity: A Motivation for Citation to Multi-Author Articles

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Abstract

It has been seen in many studies that there is a significant relation between the number of authors in an article and its amount of perceived citations. In other words, the more the number of the authors, the more the possibility of perceiving citations. The present study thus is going to explain a kind of behavior, which is based on Citing Conformity factor. The research has been done in two parts: 1. Survey Method 2. Citation analysis method. The findings obtained from regression analysis test suggest that according to Informational Citing Conformity factor, 26% of changes in this type of behavior are predictable. It means, having a motivation for healthy thoughts and honesty and also selecting more credible source of information, the authors resort to cite the articles which were written by more authors. The results also indicated that Normative Citing Conformity is not a suitable predictor for this kind of motivation. The relationship between Citing Conformity Factors (Normative, Informational) and the motivation to cite multi author articles has been analyzed in this research for the first time.

Keywords: Citation, Informational Citing Conformity, Normative Citing Conformity, Citing Behaviors, Multi-Author Articles, Citing Motivations, authors' behavior, social psychology.

Introduction

Nowadays, many people do their work while having the motivation of healthy thoughts, honesty, and in vague situations, they try to consider the society as a standard for making right decisions. Whenever a physical fact gets increasingly unclear and vague, people rely more on social realities and most likely conform whatever others have done since group behavior provides them with some valuable information about other people's expectations (Aronson, 2008, p.54, Translated by Shokrkon).

This type of social behavior is called Informational Conformity. In the social influence hierarchy (Obedience, Identification and Internalization), Aronson (2008) has put this type in the Internalization category.

Internalizing a value or belief is the deepest response to social influence. The motivation for internalizing a special belief is based on the tendency to have right, accurate behaviors and

thoughts. Therefore, the reward of accepting that belief is an internal one. If we trust the influential person and accredit his/her judgment, we will agree with the idea that s/he supports and integrates it with our value system. However, as that idea joins our belief system, it becomes independent of its origin and resists strongly against any changes. Internalization is the most constant response to social influence since it is based on the person's motivation for being accurate, and this motivation is a strong permanent power which, unlike obedience, does not depend on continuous supervision of rewards or punishment agents or, unlike identification, it does not depend on continuous respect for another person or group (Aronson, 2008, pp. 61-65, Translated by Shokrkon).

What is Conformity?

Conformity can be defined as a change in a person's behavior or beliefs as a result of real or imaginary pressures used by another person or a group of people (Aronson, 1999, p. 47, translated by Shokrkon). Conformity is a kind of social influence under which people change their attitudes (and/or behaviors) in order to follow other people and the norms to which they belong as well as to fulfill their expectations (Barron & Byrne, 1987, quoted in Ahmadi, 2003, p. 93).

Researchers believe that Informational Conformity and Normative Conformity are the main goal and motivation of conformity. The former is based on informational influence while the latter is based on normative influence (Karimi, 2008, p. 94). When a person is conformed for the reason that he/she thinks the group has a true idea preferable to their ideas, it is said that Informational Conformity has occurred. However, if he/she is conformed for the reason that he/she is scared of the negative consequences of being against others or if he/she enjoys companying others, Normative Conformity has occurred. It means, the person is sure of his idea to be true and the others' to be false; but he/she intentionally shows conformity with others in order not to make a negative image of himself/herself for them.

Several research have been conducted on the effect of Social Conformity on Informational Behavior. Wang & Lin (2003) investigated Social Conformity facing with informational overload and information filtering. They experimentally compared various mechanisms of information filtering in order to promote the quality of the users' decision-making when facing with informational overload, especially in new virtual and Internet environments. The four mechanisms suggested by them to be compared in the study are as follows: pure conformity filtering, target conformity filtering, collaborative filtering and no filtering.

Wang & Lin stated that in many cases, the user fell being drowned in lots of information and s/he fell lack of positiveness. In this case, the user might prefer to make a decision based on the group's opinion (in order to select related information and remove unwanted one) and this is the Social Conformity. In the present study, different mechanisms of information filtering and the quality of decision-making were considered as the independent and dependent variables, respectively.

The findings from their studies suggested that the filtering mechanism based on conformity would lead to higher-quality decision-makings.

Cinnirella & Green (2007) conducted an experimental research on the possible existence

of Social Conformity factor in users' behavior in virtual and Internet environments. They modeled Ash's experiments on Social Conformity factor in both virtual and real environments and in order to measure culture variable, they selected various groups of participants belonging to a group as well as an individual culture. In order to increase the research control, they selected a group as the witness group.

The findings of their research indicated that the participants in both virtual as well as real environments gained a higher conformity rank than that of the control group. Moreover, Social Conformity was reported to be more in the real environment than it was in the virtual one. Regarding the role of an individual and the group cultures, the findings presented that in real conditions based on face-to-face communications, the people belonging to group cultures showed higher conformity compared to those belonging to individual cultures. However, in the virtual environment based on computer communications, no difference was seen in conformity of the groups belonging to different cultures.

Whitworth, Gallupe and McQueen (2000), as well analyzed the Conformity in computer-based group interactions.

By doing some research, researchers presented a cognitive three-dimensional model of computer-based group interactions. The model was presented with regard to three dimensions of communicating with others, group identification and work objectives. These three dimensions have somehow taken into account the Informational, Identification, and Normative social influences.

Citing Conformity

Citing conformity describes a situation in which an author is under real or imaginary pressures by special people or groups which changes his/her citation behavior as well as motivation (Ebrahimi & Osareh, 2014). If in the process of generating scientific information, a researcher cites informational resources in order to gain rewards or avoid the punishment, Normative Citing Conformity has occurred, while if he/she selects people and social groups for his/her decision-making with the aim of choosing a true informational resource for the citation, it is an Informational Citing Conformity (Osareh, Farajpahlou, Shahni & Ebrahimi, 2012).

Normative Citing Conformity

As mentioned above, Normative Citing Conformity describes a kind of citing behavior which is encouraged in order to gain rewards or avoid punishments. Usually, this behavior lasts until there exist some promises for rewards or punishments (Ebrahimi & Osareh, 2015). This type of conformity is the least constant level of social influence and has the least effect on people's permanent behavior since the author, just for gaining rewards or avoiding punishments, cites a source that s/he does not believe it is necessary to be cited in her/his research article. The author is aware of what happens in some special situations and changes his/her behavior in the absence of those situations. The important element in this type is often the source of power and a person's or group's power that can give the rewards or do the punishments.

It is applicable when an author admits as a source of power, the agents of a scientific

journal (editorial board, reviewers and the editor) in which he is going to send his article for publication. In this case he tries to use some methods in the process of citation that conform their expectations in order to make a positive attitude in their judgment. For instance, the author tries to cite various articles of the same journal and if it is during the accepting process of the article, the journal agents will ask the author to cite some particular articles, and hence the author obeys them and reluctantly adopts some kind of Normative Citing Conformity due to admitting their social influence.

Vinkler (1987) has suggested that the authors' citing behaviors are sometimes determined with the aim of attracting and getting attention of some people like a specific author, a journal editor, an article reviewer or some scientific colleagues. Besides, Miller (2002) and Sevinc (2004) have reported that many reviewers directly ask the authors to add some unrelated articles from the same journal to their own article.

Studies, which were done by Shadish et al (1995), Mohammadi & Mottaghi Dadgar (2007), and Shahryari & Osareh (2003) acknowledge the issues mentioned above.

Another evidence of Normative Citing Conformity is citation to articles written by the colleagues or acquaintances to whose expectations the author responds and cites their articles in order to keep a proper interaction as a social reward. The findings of the research by White (2001) indicate that the authors remarkably cite the works of other authors with whom they are personally familiar. In addition, Cronin (2005) suggests that when personal relationships are strengthened, mutual exchange of citations will be expected as time passes. Citation to colleagues and acquaintances is affected by the connection factor since connection is an important determining factor for conformity and surrendering to social pressures (Baron, Byrne, Burnscumb (2009) p.506, translated by Karimi).

This class of researches propounds the hypothesis suggesting that Normative Citing Conformity affects authors' citing behaviors.

Informational Citing Conformity

As mentioned before, authors show different behaviors during the citation process. Sometimes conforming to group norms and sometimes the tendency towards healthy thoughts and honesty is the motivation for authors' citing behaviors. Whenever an author who wants to make a correct decision regarding people or social groups and makes decisions based on their behaviors, it is said that Informational Citing Conformity has occurred (Ebrahimi, 2012).

Reviewing the research on authors' citing behaviors reveals some models for authors' citing behavior which are mainly based on their tendency towards the accuracy and validity of citing references. For instance, Inhaber & Alvo (1978) conducted a research on 18 countries that produce 95% of all scientific information in the world. The findings showed that the United States of America was the first country regarding self-citation (citation by authors of a country to scientific information produced in the same country). Besides, the authors from other countries cite the authors from the United States more than being cited by the authors from that country.

Having conducted some research, Beaver (2004) found that there is a positive relation between the number of perceived citations in an article and the number of co-authors in writing an article. Walters (2006) investigated 128 articles published in 2003 in 12 criminal

psychology journals of Social Science Citation Index in order to determine the predicting variables of citation. The first 15 variables decreased to 9 predicting variables through agent analysis method. The results obtained from the regression test showed that the amount of citations to the first author's articles during current years is one of the important and significant predictors for attracting the citations so as this variable is more important than the article's publication duration variable. Doing a study for determining the predictors of an article's citing effects, Haslam (2008) investigated the factors related to social psychology in the following four categories: the author's characteristics, institutional factors, the article's organizing features and research approaches. The multi-variable analysis of these factors showed several strong predictors amongst in which the most important ones were as follows: prominence of the first author, high-ranked co-authors, prominence of the journal, number of references and their novelty.

This class of research propounds the hypothesis suggesting that Informational Citing Conformity affects authors' citing behaviors. According to the hypothesis of the present study, When an author's reputation, an author's prominence and the number of article authors are considered as a criterion for selecting information resources, a kind of Informational Citing Conformity has occurred.

Multi-author Articles

Scientific articles are usually published in two ways: either individually or as group cooperation. Although this is not accepted as a principle, it is assumed that multi-author articles are more credible since different studies suggested that this kind of articles have a higher admission rate in journals (Smart & Bayer, 1986). Various research also indicated that there is a significant positive relation between an article's number of authors and its amount of perceived citations. For example, Iribarren-Maestro, Lascrain-Sanches & Sanz-casado (2009) conducted some research to investigate the multi-author articles. The findings of their work showed that there is a significant positive relation between multi-national multi-authorship and the amount of citation.

Glanzel & Thijs (2004), emphasized on the existence of a relationship between multi-authorship and the article's effect coefficient as well. Moreover, the findings of Beaver's work (2004) confirm it.

Therefore, in the past decade, a dominant tendency to publish articles resulted from the cooperation between some authors have appeared.

King (2012) stated that in the recent years, the number of article authors has remarkably increased. He suggested that the number of authors is more than 50 and in some cases it even reaches 1000. In 2012 alone, over 1000 articles were written by at least 50 authors which were all published in Thomson Reuter's database. In 2010, in the same data base, 17 articles were published by at least 1000 authors, while it reached to 140 articles in 2011. According to Science Watch, the average number of authors in 2007 was 3/8 whereas in 2011 it reached 4/5.

In his research, Brid (1997) showed that recently, the tendency for doing multi-author research has significantly increased. Amongst the reasons, he counts the growth of electronic communication channels as well as the increase of competitions in attracting the research

fund.

On the other hand, the authors' citing behaviors and motivations in many situations tried to select the best and the most credible source for citation. An author who has conducted a research tried to refer to more credible sources in order to be able to defend his findings against his addressee in the scientific community or according to Satisfying Theory, to satisfy the scientific community regarding the expressions. Hence, selecting the most credible sources is one of the common approaches in authors' citing behaviors. The questions arise here hence are as follows: Do authors consider multi-author articles as more credible sources in the citation process? Do the authors' citations to multi-author articles resulted from their tendency towards the accuracy of thoughts and behaviors, or following the group norms determine this behavior of the authors?

Research Hypotheses

1. The authors' citing behavior motivations in "citation to multi-author articles" are affected by Informational Citing Conformity.
2. The authors' citing behavior motivations in "citation to multi-author articles" are affected by Normative Citing Conformity.

Research Methodology

The present research is a basic one and in order to examine the research hypothesis, two separate studies have been conducted.

1. **The first study:** This study that is to measure informational as well as normative citing conformity variables has been done through a survey method in which citing conformity rate of the sample has been measured. The population under study in this research includes all Iranian authors who have published at least two articles during 2001 to 2010 in the journals that are under the support of Art & Humanities Citation Index and Social Science Citation Index databases.

In order to access such kind of data, the two mentioned databases were searched through Advanced Search of Web of Science during 2001 to 2010 based on $CU = (IRAN)$ formula. Then, by using the advanced analyze tool of the database, the list of presented articles (3347 articles) were analyzed based on the author's index. A list included of 2860 authors, which was then extracted. After its filtration, about 2310 authors remained as the research population who had at least two articles at the time interval of the investigation.

Since many variables interfere with the Scientometrics and one of the most important variables is the field type or scientific major variable (to have more control over this variable in the present study), the two databases of Art & Humanities Citation Index and Social Science Citation Index were selected that have more things in common comparing to Sciences Citation Index database.

On the other hand, two articles were chosen from each author, as far as in the second stage of the research, the selected articles should be investigated in order to extract the variables of the citation model to multi-author articles

The samples were selected through systematic random method. The sample size in this stage was 150 people who were selected among the research population by the above-

mentioned method. The sample size was selected based on statistical research method, which were regression and correlation. As Houman (2005, p.68) suggested, the sample size in regression and correlation studies should be at least 100 people. Tabachnick & Fidell (2001) determined the sample size in multi-regression studies based on the formula of $104+m$ in which m is the number of predicting variables of the research (Tabachnick & Fidell, 2001, p. 117, quoted in Simon & Goes, 2012).

J. P. Stevens (2002) presented another method for this purpose. In this method it is stated that there would exist 15 observations per each predicting variable (J. P. Stevens, 2002, p. 143, quoted in Simon & Goes, 2012). Hence, regarding the existence of two predicting variables in this study, the selected sample size seems acceptable.

The data collection instrument has been a 5-choice-Likert Scale in the form of 34 elements created by Ebrahimi & Osareh (2014), validated through Factor Analysis Method and Cronbach's Coefficient Alpha. This instrument measures three kinds of Citing Conformity: Normative (13 choices), Informational (13 choices) and Identificational (8 choices) Citing Conformity. Since the variables considered in this study were Informational as well as Normative Citing Conformity variables, only these two parts of the questionnaire were the scales for measuring the predicting variables. The ranking of these two variables differed from 13 to 60.

According to the results of measurement scale factor analysis, the KMO coefficient was 0/726 and the Bartlett Sphericity coefficient was 2431/91 ($P < 0/0001$) which proved that sampling was sufficient and the results were reliable. The Cronbach's Alpha Coefficients for Normative, Informational and Identificational Citing Conformity factors are 0.86, 0.81 and 0.85, respectively, which indicate that the research instrument has enjoyed the necessary stability (Ebrahimi & Osareh, 2014).

The scoring of the elements in this criterion is from 1 to 5 directly. Score 1 belongs to the choice "I completely disagree" while score 5 belongs to the choice "I completely agree".

The sample element for Normative Citing Conformity: Some authors do not refer to the findings and results of the research in which there is a disagreement.

The sample element for Informational Citing Conformity: I am interested in citing the articles written by those who are theoreticians in a certain field.

For collecting the data in this part, two electronic and postal methods were used. In the first stage, a website was designed and its related questionnaire was loaded. The e-mail address of all the sample members were collected from the website "Web of Science", and in cases that the website was not retrievable, the addresses were collected through searching in the web. Then an e-mail was sent to all the members in the three stages (one main stage and two following stages) and they were asked to visit the related website link to fill the questionnaire. After finishing the delivery as well as the two electronic and telephone following stages, about 117 questionnaires (78%) were finally completed by the people and were considered in the first stage of the research.

2. The second study: This study has been done through citation analysis and the scientific articles of the first study sample group have been investigated through citation analysis method. The aim of this study was to extract the variable relating to the model of citation to multi-author articles. The population under study in this part of the research is the

scientific articles of the first study authors, which were published in the journals under the support of the mentioned databases in the same time interval.

The sampling was done through purposive method. The reason for the purposive selection of the articles was to select the ones in which the authors had the most responsibility and played the greatest role so that it would be possible to carefully relate the citing models of the articles to their authors. Hence, the prior articles to be selected were those whose single author was the author under study. As the next step based on the articles, which were written by more than an author, the prior articles were the ones whose first or responsible author was the author under study. In the case that the authors had published several articles based on the above-mentioned priorities, the next priority had been the selection of the most recent articles, because the latest articles had usually better determined the author's current approach in citation, as far as the authors' citing behaviors change with their research experiments.

In his research on the investigation of authors' citing motivations, Kim (2004) has considered the authors' responsibility as the criterion for selecting their articles. Kim selected some articles whose first author was the one under the study. He stated that in case that an author has had more than one article with these conditions, his/her last article has been selected as the investigating criterion.

The sample size was 234 articles (2 articles for each author) which was based on citing behavior literature reviews. In his study, Vinkler (1987) investigated 20 articles from 20 authors. Conducting a research on 42 authors of engineering field, Cano (1989) investigated two of the latest articles of the authors. Kim (2004), investigated one of the latest articles of each author in the same field as well.

After the purposive selection of 234 articles, the citation analysis was done on all the references of the 234 articles in order to extract the variable "citation to multi-author articles". Since accessing to the references of 10 authors' articles was impossible due to technical problems of the Web of Science databases, eventually the references of 214 articles belonging to 107 authors were investigated. The investigated articles had totally 5380 references which were all manually investigated and the data related to the variable "citation to multi-author" was entered into the investigation checklist.

The collected data from the first and the second studies were analyzed using SPSS 20 software. The Pierson Correlation and the multi-regression were used to analyze and test the research hypothesis. The Regression analyses have been done based on the Enter and Stepwise Method.

Research Findings

The findings obtained from the research suggested that the average scores of Informational as well as Normative Citing Conformity in the population are 44 and 42/6, respectively (Table1). The results revealed that the research population is influenced by both variables of Informational and Normative Citing Conformity.

Table 1

Descriptive findings related to research variables

variable	average	Standard Deviation	minimum	maximum	Number
Normative Citing Conformity	42/6	8.6	21	63	117
Informational Citing Conformity	44	7.01	21	58	117
Model of citation to multi-author articles	12.81	5.39	0	26	107

Table 2
correlation matrix of research variables

Variable	(1)	(2)	(3)
1. Normative Citing Conformity	1		
2. Informational Citing Conformity	**/34	1	
3. model of citation to multi-author articles	*/20	**/52	1

The findings also indicated that there is a significant relation between both Informational Citing Conformity ($r=0/52$, $p<0/01$) and Normative Citing Conformity ($r=0/20$, $p<0/05$) and citation to multi-author articles variable (table 2).

As the figures in table 3 indicate, the linear combination of variables Informational Citing Conformity and Normative Citing Conformity with the model of citation to multi-author articles is $0/52$, the R-squared is $0/27$ and the F ratio is $19/3$ which is significant at $p<0/001$ level.

The figures in table 3 illustrate that in this regression model, among Citing Conformity variables, only Informational Citing Conformity ($\beta =0/027$, $p<0/001$) has significant predicting power and the Normative Citing Conformity variable can not be considered as a predicting factor for behavioral model of citing multi-author articles.

The R-squared in this relation is $0/27$ and this indicates that $0/27$ changes of the variable Citing multi-author articles are predicted by Informational Citing Conformity predicting variable (table 3).

Table 3

The results of multiple-regression between Citing Conformity variables (Normative, Informational) as the predicting variables and the model of citation to multi-author articles as the criterion variable through the Enter Method

criterion variable	Statistical indexes Predicting variables	Multiple-Regression coefficient MR	R-squared RS	F ratio P-value	Regression Coefficients		
					1	2	
The model of citation to multi-author articles	Normative Citing Conformity	0.20	0.04	4.3 $P<0/05$	$\beta=0/20$ $t=2/8$ $p<0/05$		
	Informational Citing Conformity	0.52	0.27	19.3 $P<0/001$	$\beta=0/027$ $t=0/31$ $p=0/76$	$\beta=0/051$ $t=5/7$ $p<0/001$	

The outcomes of the Regression Analysis based on the Stepwise method confirmed the above-mentioned results (Enter) regarding the significance of the prediction power of the

Informational Citing Conformity variable ($\beta=0.52$, $p<0.001$) (table 4). The R-squared is 0/26 and the F ratio is 38/89 which is significant at $p<0.001$. These findings suggest that among two predicting variables of Normative and Informatinoal Citing Conformity, only the variable Information Citing Conformity has the power to predict the model of citation to multi-author articles (table 4). Therefore, the first research hypothesis is confirmed and the second one is rejected.

Table 4

The results of multiple-regression between Citing Conformity variables (Normative, Informational) as the predicting variables and the model of citation to multi-author articles as the criterion variable through the Stepwise Method

statistical indexes	Multiple-Regression coefficient	R-squared	F ratio	predicting variable: Citing Conformity	
				regression Coefficients	
				Normative	Informational
The criterion variable	MR	RS	P-value		$\beta=0/52$ $t=6/23$ $p<0/001$
the model of citation to multi-author articles	0.52	0.26	38.89 $P<0/001$		

The correlation model of Informational Citing Conformity variable with variable of citation to multi-author articles can be seen in chart 1. In this chart, the X and the Y axes present Informational Conformity level and the model of citation to multi-author articles, respectively. The relationship between the rates of these two variables has led to a linear model from which the criterion variable of citing multi-author articles can be predicted based on Informational Citing Conformity. In other words, this chart indicates that the Informational Citing Conformity variable interferes with determining different amounts of citing multi-author articles variable.

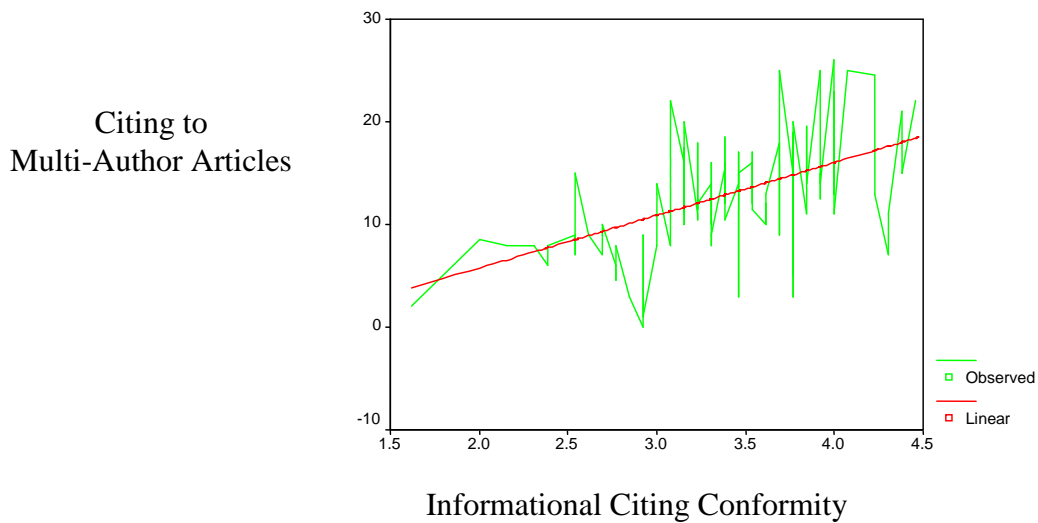


Chart 1: The correlation model of citation to multi-author articles with Informational Citing Conformity factor

Regression Equation

The following equation can be presented with regard to predicting behavioral model of citing multi-author articles based on Informational Citing Conformity:

$$Y = \alpha + BX$$

$$Y = -4/56 + 5/15 (X)$$

As the regression equation components indicate, the amounts of citation to multi-author articles model (Y) can be predicted by the amounts of Informational Citing Conformity (X). The positive amount B shows a direct relationship between these two variables. In this equation, α (Intercept) is $-4/56$ which is resulted from regression analyses. As the X coefficient, B equals $5/15$ (according to the results of Stepwise model). By using the fixed amounts of B and α , and by putting the X amounts (Informational Citing Conformity score) in the equation, Y (the amount of citing multi-author articles) can be achieved.

$$\beta = 0.52$$

Informational Citing Conformity \longrightarrow the model of citing multi-author articles

Discussion

The research findings suggest that Informational Citing Conformity is the only variable that explains 26% of changes in authors' motivation for citing multi-author articles. In other words, in 26% of the cases, Informational Citing Conformity and/or the tendency towards true behavior are the main reasons why authors cite articles written by several authors. On the other hand, the findings indicated that conformity to group norms could not be a predicting factor for authors' citation to multi-author articles. In other words, Normative Citing Conformity plays no role in this citing behavior of the authors. In this regard, the first research hypothesis is confirmed and the second one is rejected.

As stated before, multi-authorship is an issue that is of great importance in scientific interactions and Scientometrics. It seems that multi-author articles are more credible and this

has affected the articles admission policy by journals' editorial board in a way that the admission percentage of multi-author articles is higher. To confirm this, the findings of the research by Smart & Bayer (1986) showed that multi-author articles have a higher rate of admission to be published in journals compared to that of individual articles. Smart & Bayer stated that there is a relationship between multi-authorship and quality of the article and this is the reason for being cited more than other articles.. Having done some research, Beaver (2004) also found that there is a positive correlation between the number of perceived citations in an article and the number of co-authors who wrote the article.

The results obtained from Osareh, Nowrouzi Chakli & Keshvari (2010) in Iran also indicated the tendency of Iranian authors towards cooperating for the creation of multi-author articles so as during 2000 to 2006 this cooperation has increased and the cooperation coefficient in 2006 reached 0/62. Osareh & Wilson (2005) even did some more detailed investigations and stated that during 1985 to 1998, the cooperation between Iranian productive authors has increased and changed from cooperating with 1 to 5 colleagues. Other studies indicated that the scientific cooperation rate in recent years has been great and in some cases it has been 2/8 higher than that of scientific productions. Osareh & Wilson believed that the reason for this is the cooperation advantage, amongst which is the increase of citations (Osareh & Wilson, 2005).

King (2012) stated that recently the number of authors who write articles in Thomson Reuter's databases has remarkably increased and it is over 50 authors. King suggested that the average number of authors for each article in 2007 was 3/8 according to Science Watch, and it reached to 4/5 in 2011. The findings of Brid's study (1997) illustrated that in recent years there has been a significant increase in the tendency towards doing multi-author as well.

Regarding the confirmation of previous studies based on higher credibility of multi-author articles, it can be said that multi-author articles are the ones that often have higher quality and credit, and also according to Informational Citing Conformity theory based on the authors' tendency towards healthy thoughts and honesty, it leads the authors to be interested in citing these articles. The research findings suggested that 26% of the Variance of authors' citations to multi-author articles are explained under the influence of Informational Citing Conformity. Sometimes the number of an article's authors puts a real or imaginary psychological pressure on the authors regarding the quality of the articles and therefore, they cite more of these articles.

One of the important reasons for authors' motivation to cite multi-author articles and, thereby, form Informational Citing Conformity is satisfactory motivation. Gilbert (1977), the British sociologist and one of the supporters of social constructive theory of citing behaviors, believes that citation is a tool for satisfying the addressees. He explains that a scientist who achieves some results in which he believes, tries to satisfy the scientific community about it and he provides some evidence that seems credible and in this way the addressees gets satisfied (Moed & Garfield, 2004). In another words, in their citations, authors select some behaviors through which they can better satisfy the addressees. Citation to multi-author articles based on Informational Citing Conformity is explainable in this framework.

Conclusion

Authors' citing behaviors and motivations are really complicated and they are formed under the influence of psychological variables. Knowing these variables provide a deeper insight in order to explain these behaviors. Informational Citing Conformity variable is a variable in the field of social psychology that positively affects authors' citing behaviors so that it directs the author towards selecting credible sources of information. On the other hand, the influence of Informational Citing Conformity can prevent the author from evaluating and judging the content of the article so that the citation would be based on admitting the author(s)' informational influence, and this can cause some kind of deviation in citation index calculations.

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