

Вестник РУДН. Серия: Психология и педагогика

DOI: 10.22363/2313-1683-2023-20-4-713-729

EDN: VHONAW UDC 159.9

Research article

Moral Conformity through the Lens of Bibliometric and Content Analysis

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Abstract. The purpose of this study is to make a bibliometric and content analysis of publications on the problem of moral conformity. Its relevance is due to the emerging interest in this phenomenon. The materials under study were publications in English extracted from the Scopus and Google Scholar databases as well as Google Ngram data. The data were processed using the VOSviewer program and the bibliometrix R-package. It was shown that for the period from 1800 to 2019 the proportion of texts containing the term 'moral conformity' increased significantly in comparison with texts containing the term 'conformity'. A term map constructed using the Google Scholar database made it possible to identify four clusters, reflecting four areas in which the concept 'moral conformity' was found. A bibliometric analysis of the concept 'moral conformity' in the field of psychology highlighted four clusters that reflected the main aspects of this phenomenon. A keyword frequency analysis over time showed that since 2007 the frequency of use of the concepts 'morality' and 'conformity' had noticeably increased. A content analysis of publications revealed 10 sources directly related to the phenomenon of moral conformity. Recent studies have indicated that this phenomenon is quite stable and manifests itself in different samples and in different conditions. On the whole, the problem of moral conformity is quite new and requiring additional examine. One possible direction for further research can be aimed at verifying the results of previous studies on a Russian-speaking sample or studying the phenomenon under conditions of both real and virtual pressure.

Key words: bibliometric analysis, morality, conformity, moral conformity

Acknowledgements and Funding. The study was supported by the Russian Science Foundation grant no. 23-28-00771, https://rscf.ru/project/23-28-00771/

Introduction

For centuries morality and moral behavior have been one of the most pressing problems of humanity. Morality is a subject of interest not only in psychology, but also in philosophy, sociology, religion and other fields of knowledge. Moral psychology studies issues such as the development of moral consciousness, the foundations of moral behavior, moral choice, moral emotions, etc. The phenomenon of moral con-

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formity can be considered relatively new in this area. Traditionally, a person's moral behavior is regarded as quite stable and tough-to-influence. People have faith in their individuality and the stability of their moral principles. However, there is irrefutable evidence that each person is subject to influence and conformity. Numerous data indicate that the phenomenon of conformity, brought to widespread attention in the 1950s by S. Asch's experiments, is stable and universal. In this regard, a natural question arises whether the conformity effect will be observed in a specific area of decision-making, namely moral decisions. There is a paradox here associated with belief in the unshakability of one's own moral convictions, on the one hand, and susceptibility to influence, on the other. This fact raises questions about the true nature of our moral beliefs. Strictly speaking, are our morals sincere and authentic or are they merely reflections of collective beliefs? The above determines the relevance of studying the phenomenon of conformity (namely moral conformity) in the field of moral psychology.

The emerging interest in the phenomenon of moral conformity leads to the need to systematize the currently available data and research related to this phenomenon. A method such as bibliometric analysis is becoming increasingly widespread in modern Russian psychology (see, for example: Fedorov, 2021; Susanina, Prutskov, 2022; Nosova, Fedorov, 2022). At the same time, both abroad and in our country, works are appearing that examine the problems of moral psychology through the lens of bibliometrics (Ellemers et al., 2019; Morgun et al., 2023). This method involves performing a quantitative analysis of publications, allowing one to evaluate such parameters as the number of publications, co-authorship, frequency of co-occurrence of terms, citations, etc. The undoubted advantages of this method include the ability to track the most significant topics and problem areas of research and analyze time trends, as well as the ability to identify individual authors and research groups that make the most significant contribution to the development of the field under study.

In the context of studying the phenomenon of moral conformity, bibliometric analysis will make it possible to identify the most significant aspects of this phenomenon, as well as avoid duplication of existing research and focus on significant aspects of the problem. Systematization of currently available knowledge about the phenomenon of moral conformity will help identify existing gaps and, thereby, outline directions for further research.

Bibliometric analysis, however, is not without drawbacks. These usually include the incompleteness of databases, as well as the impossibility of obtaining a complete and reliable assessment of the area under study based only on quantitative data. Therefore, a bibliometric analysis of publications must necessarily be supplemented with a content analysis.

With this in mind, *the purpose of this study* is to make a bibliometric and content analysis of publications on the problem of moral conformity, which will highlight existing gaps and identify relevant directions for further research of this phenomenon.

Procedure and methods

At the first stage of the study, using the Ngram Google service, we searched for sources containing the terms 'conformity' and 'moral conformity', and subsequently analyzed the relationship of these terms over time. Ngram Google data were

used to analyze time trends (Michel et al., 2011). To extract data from Google Ngram, a script was written in the Python programming language. This script used two queries: 'conformity' and 'moral conformity'. The goal was to obtain data related to these concepts from Ngram Google in texts for the period from 1800 to 2009 inclusive. After extracting the data, the frequency ratio of these linguistic units in different years was calculated. Changes in this relationship over time were analyzed using linear regression.

At the next stage, a term map of source titles from various fields of knowledge, including the term 'moral conformity', was constructed. Texts in English were analyzed. In order to make a bibliometric data analysis and construct a bibliometric map, the VOSviewer 1.6.19 program was used (Van Eck, Waltman, 2010). An analysis of 2607 sources was carried out (for the period from 1763 to 2022). The term map was constructed using VOSviewer 1.6.19 (Van Eck, Waltman, 2010). The source headings were analyzed, and the link strength method was used as a normalization method. The number 10 was chosen as the occurrence threshold.

The next step in our research was a bibliometric analysis of literary sources on the problem of moral conformity in the field of psychology. For this purpose, we analyzed publications in the Scopus database related to the subject area 'Psychology'. We generated the search query as follows: moral* W/4 conformi*. This meant that the distance between the specified terms was no more than four words. Forty-five sources matched this query. The bibliometric map was generated using VOSviewer 1.6.19 (Van Eck, Waltman, 2010). The link strength method was used as a normalization method: it allowed us to obtain the most meaningful solution. The pairs of the terms 'conformity (personality)' and 'conformity', 'social norms' and 'norms' were considered synonymous. Given the small number of publications, we decided to choose the number 2 as the threshold for occurrence. Thus, we analyzed 11 keywords out of the total number (164).

Next, we conducted a frequency analysis of keywords, authors and sources using the the bibliometrix R-package (Aria, Cuccurullo, 2017). The keyword occurrence frequency over time was analyzed based on the author keywords. Nine of the 45 articles subjected to analysis had missing keywords. As in the case with the term map, the pairs of the terms 'conformity (personality)' and 'conformity', 'social norms' and 'norms' were considered synonymous.

The next step in our research was to make a content analysis of ten sources directly related to the phenomenon of moral conformity.

Results

Figure 1 presents a graph of the relationship between the terms 'moral conformity' and 'conformity' according to the Google NGram data for the period from 1800 to 2019, displaying the share of occurrence of the term 'moral conformity' relative to the number of texts containing the term 'conformity'.

A visual assessment of the graph allowed us to identify peaks in the use of the term 'moral conformity' in the period from the beginning to the second half of the 1800s and starting from the first decade of the 2000s. The content of the concept 'moral conformity' in the 19th century, however, did not yet carry a psychological meaning but reflected religious and philosophical attitudes.

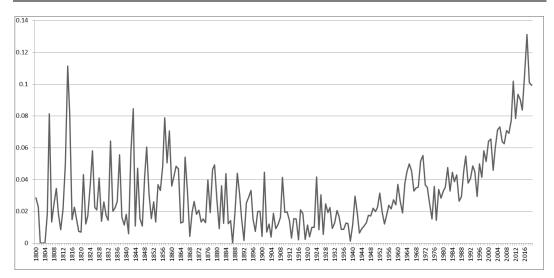


Figure 1. Occurrence of the term 'moral conformity' relative to the number of texts containing the term 'conformity' (Google NGram)

Source: compiled by Marina V. Zlobina, Alexandr A. Fedorov.

A linear regression analysis showed that the frequency of the concept 'moral conformity' relative to the frequency of the concept 'conformity' had increased significantly during the study period. The model confirmed the statistical significance of this relationship with the following indicators: $(F(1,218) = 29.54, p < 0.001, \text{ with } R^2 = 0.12)$.

The term map of titles based on the Google Scholar database sources made it possible to identify the main areas in which the term 'moral conformity' was found. The obtained map shown in Figure 2 contains six clusters. Each cluster is indicated in the figure by a separate color. The sizes of the circles on the map reflect the occurrence frequency of the concepts, and the distance between the circles indicates the co-occurrence of the words.

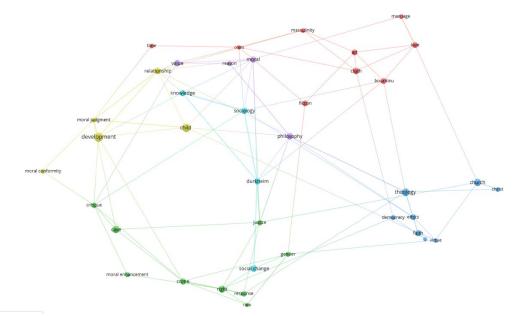


Figure 2. Term map of titles (Google Scholar, moral conformity, 1763–2022)

Source: compiled by Marina V. Zlobina, Alexandr A. Fedorov in VOSviewer.

The first cluster (colored red in the figure) includes such concepts as 'art', 'cloth', 'crisis', 'fiction', 'love', 'marriage', 'masculinity', 'time', as well as the name of the French sociologist and philosopher Pierre Bourdieu. This cluster indicates that moral conformity may be related to cultural, aesthetic, and emotional aspects of human experience. It emphasizes that moral issues permeate various areas of our lives, including art and interpersonal relationships.

The second cluster (colored green) included such socio-legal concepts as 'case', 'crime', 'criticism', 'gender', 'justice', 'moral enhancement', 'race', 'response', and 'right'. This cluster reflects the relationship between moral conformity and social norms, laws and justice. It highlights the importance of maintaining social and legal standards to maintain moral order in society.

The third cluster (colored blue) is represented primarily by religious concepts. It includes such concepts as 'Christ', 'church', 'ethics', 'faith', 'struggle', 'theology', 'democracy', and 'virtue'. This cluster indicates the role of religion and belief in the formation of moral values and norms. It implies that religious beliefs can have a significant influence on moral behavior and conformity.

The fourth cluster (colored yellow) is composed of concepts probably related to the area of moral development, namely: 'child', 'development', 'moral conformity', 'moral judgment', and 'relationship'. This cluster suggests that moral conformity can be associated with processes of personality development and the formation of moral values and beliefs.

The fifth cluster (colored purple) includes philosophical and psychological concepts such as 'morality', 'philosophy', 'reason', and 'value'. This cluster probably points to the role of philosophy in the study and understanding of the moral aspects of human nature, including moral conformity.

The sixth cluster (colored blue) reflects sociological aspects and is represented by such concepts as 'knowledge', 'social change', 'sociology', as well as the name of the French sociologist Emile Durkheim. It can be seen that this cluster connects sociology with the study of moral conformity in society. Research in this area may address issues of social control, social influence, social norms and roles in shaping moral conformity. On the whole, it points to the importance of understanding social context, social processes, and the influence of social factors on moral behavior and conformity.

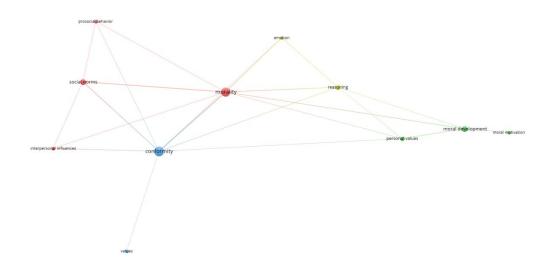
As a result of the bibliometric analysis of publications in the field of psychology devoted to the problem of moral conformity, a term map was constructed (Figure 3), which allowed us to identify four clusters.

The first cluster (colored red) includes concepts reflecting social aspects. It contains such keywords as 'interpersonal influences', 'morality', 'prosocial behavior', and 'social norms'. This highlights the role of interpersonal interactions and social influence in the phenomenon of moral conformity.

The second cluster (colored green) includes such concepts as 'moral development', 'moral motivation' and 'personal value'.

The third cluster (colored blue) contains terms such as 'conformity' and 'values'. This cluster probably indicates a connection between moral conformity and commitment to conformity as a social value.

The fourth cluster (colored yellow) includes the concepts 'emotion' and 'reasoning'. This cluster seemingly reflects the connection between moral conformity and the mechanisms underlying moral judgment.



 $\textbf{Figure 3.} \ \text{Term map of keywords (psychological publications, `moral*\,W/4\,conformi*')}$

Source: compiled by Marina V. Zlobina, Alexandr A. Fedorov in VOSviewer.

The occurrence frequency and link strength of these keywords is presented in Table.

Table 1
Occurrence frequency and link strength of keywords

Key words	Cluster	Occurrence frequency	Total link strength
Conformity	3	15	20
Morality	1	13	21
Moral development	2	5	6
Social norms	1	5	10
Reasoning	4	4	9
Personal values	2	3	5
Emotion	4	2	6
Interpersonal influences	1	2	4
Moral motivation	2	2	1
Prosocial behavior	1	2	3
Values	3	2	1

A keyword occurrence frequency analysis over time for the concepts 'morality' and 'conformity' is presented in the graph (Figure 4).

The cumulate occurrence frequency of the concepts is plotted along the abscissa axis, and the year of publication of the article is plotted along the ordinate axis. As can be seen from the resulting graph, starting from 2007, the occurrence frequency of the keywords 'morality' and 'conformity' (marked in red and turquoise, respectively) has increased significantly.

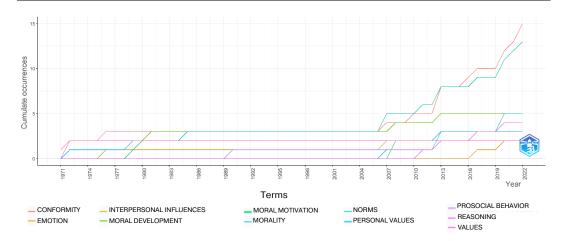


Figure 4. Keyword occurrence frequency over time (1971–2022)

Source: compiled by Marina V. Zlobina, Alexandr A. Fedorov in in bibliometrix.

Figure 5 shows the cumulate occurrence frequencies only for the concepts 'morality' and 'conformity'.

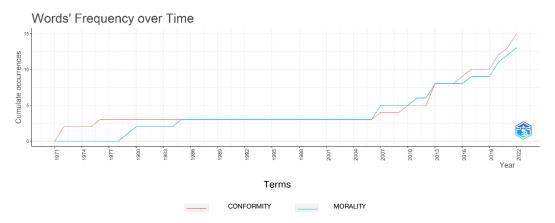


Figure 5. Cumulate occurrence frequency of the terms 'morality' and 'conformity'

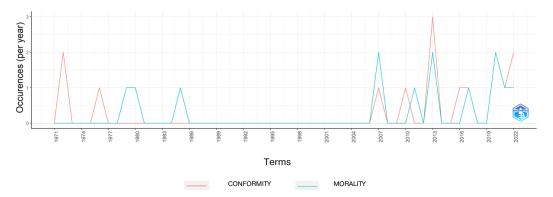
Source: compiled by Marina V. Zlobina, Alexandr A. Fedorov in in bibliometrix.

Figure 6 shows the number of uses of these terms per year.

Having made an analysis of authors and sources, we found out that 45 articles were published in 41 journals, of which three articles were in *Social Influence*, and two articles were each in *Developmental Psychology* and *The Journal of Personality and Social Psychology*. In total, 84 authors contributed to the articles, with each author having only one publication, with the exception of Chituc V. and Sinnott-Armstrong W., who each had two articles co-authored with each other.

The further content analysis of publications allowed us to select 10 sources directly related to the phenomenon of moral conformity, covering the period from 2013 to 2022. Eight of the ten articles contained descriptions of experimental studies; the work of Chituc and Sinnott-Armstrong (Chituc, Sinnott-Armstrong, 2020) presented a philosophical understanding of the problem of moral conformi-

ty, while Ellemers and Van Nunspeet (Ellemers, Van Nunspeet, 2020) analyzed the problem in their review determining the neurophysiological basis of this phenomenon.



 $\textbf{Figure 6.} \ \textbf{Occurrence frequency of the terms 'morality'} \ \textbf{and 'conformity'}, \ \textbf{per year}$

Source: compiled by Marina V. Zlobina, Alexandr A. Fedorov in in bibliometrix.

The first publication devoted to the study of the phenomenon of moral conformity dates back to 2013 (Kundu, Cummins, 2013). Using the material of J. Greene's dilemmas (Greene et al., 2008), within the framework of S. Asch's paradigm (Asch, 1956), researchers have shown that moral decision-making largely depends on the social context, thereby confirming the phenomenon of conformity in a new area discovered by S. Asch. The authors showed that subjects, rating moral dilemmas in the absence of group pressure, rated the dilemmas in the acceptable category as more acceptable, whereas in conditions of social pressure, they rated moral dilemmas in the acceptable group as unacceptable when the group rated them as unacceptable and vice versa, i.e., the dilemmas that belonged to the group of unacceptable were assessed as more acceptable under conditions of social pressure.

In the same year, the work of Lisciandra, Postma-Nilsenová and Colombo (2013) was published, also devoted to the study of conformity in the field of morality and making moral decisions. It is interesting to note that both works appeared independently of each other (in any case, we did not find links indicating the opposite). As in the work of Kundu and Cummins (2013), in order to study how the opinion of the group members affects the individual answers of the subjects, the modified classical paradigm of S. Asch was used. Thirty scenarios describing violations of moral, social, and decency norms were used as stimulus materials. An important aspect of this work was the introduction of additional conditions, namely high and low degrees of social presence. Indeed, the physical presence of other people and their nonverbal behavior could serve as an important source of information about normative behavior in the group and, therefore, increase the effect of conformity. For this reason, the authors introduced two conditions, namely: a high and low degree of social presence. It was shown that all the judgments (about violations of moral, social and decency principles) were affected by the group. This influence was especially strong for judgments of social and decency violations.

Moreover, the effect of conformity was observed both in the conditions of the direct presence of the group members, and in the case of a low degree of social presence (the participants sat in front of the computer screen and were in the same room with the other members of the group but did not see their faces; they gave their answers on the computer screen where the answers of the other members of the group were also presented) (Lisciandra et al., 2013).

The next work devoted to the study of moral conformity appeared in 2016. Kim et al. (2016) studied the phenomenon of conformity in preschool children with regard to making moral decisions, adhering to social norms, and solving visual tasks (classic version of S. Asch's experiment). To create a pressure situation, instead of a real pressure group, videos of two children were used. The preschoolers were shown to demonstrate conformity in all the three domains, but conformity in the domain of social norms was found to be significantly higher (Kim et al., 2016).

Kelly et al. (2017), relying on the ideas of Lisciandra et al. (2013), considered the phenomenon of moral conformity not just in conditions of a low degree of social presence but in virtual reality and digital communication. J. Haidt's dilemmas were used as stimulus materials (Heidt et al., 1993.). The subjects in this study were asked to rate how morally acceptable or unacceptable a particular action performed by the actor was in their opinion. At the same time, on the computer screen, the subjects could see how many people rated this act as acceptable from a moral point of view. While in Lisciandra et al.'s (2013) study the other group members were present in the same room (although the subject was not able to see their faces), in Kelly et al.'s study the pressure group did not share physical space with the subject and was present only virtually. It was shown that the conformity effect was observed even when the subjects saw only statistical information about what decision the majority made. The authors concluded that even minimal social information in an anonymous context would influence moral decision making (Kelly et al., 2017).

Bostyn and Roets (2017) supplemented and refined the data obtained in other studies. In their work, they showed that the degree of conformity, when making moral decisions, would depend, among other things, on the type of decisions that the group would adhere to. Thus, their subjects showed greater conformity, when the pressure group adhered to deontological decisions, and less conformity to the consequentialist majority (Bostyn, Roets, 2017).

Alshaalan and Gummerum (2022) confirmed the findings of Lisciandra et al. (2013) and Kelly et al. (2017): the subjects demonstrated a conformity effect in the area of moral decision making as well as decisions in the domain of decency even in conditions of low social presence. The main goal of the study was to examine the phenomenon of moral conformity in the context of judgments regarding moral, social conventional and decency transgressions. In addition, the authors examined cross-cultural differences in a sample of adults from the UK and Kuwait. The subjects from the UK demonstrated a conformity effect in the domains of moral, decency, and social conventional judgments, but this effect was somewhat weaker in the area of decision-making regarding social norms. The Kuwaiti subjects showed similar levels of conformity in all the three domains, with female subjects in this sample showing slightly stronger conformity than the UK subjects

(although the effect size was small, as noted by the authors) (Alshaalan, Gummerum, 2022). Thus, the study conducted by Alshaalan and Gummerum (2022) demonstrated the fact that the conformity effect in moral decision-making could be observed across cultures.

Keshmirian, Deroy and Bahrami (2022) examined the role of social interaction in moral decision making. Unlike previous studies, not only traditional moral dilemmas (J. Green's dilemmas) but also dilemmas close to real life were used as stimulus materials (a set of these dilemmas was developed by the authors in a separate study). The study tested three models, namely: virtue signaling, stress reduction and social deliberation. The social deliberation model implied that group interactions would increase conscious deliberation, reflection and critical thinking, which in turn would lead to an increase in utilitarian responses. On the other hand, the virtue demonstration model supposed that in groups people tend to make deontological decisions. The authors noted that the deontological decision makers were valued more by the other group members; they were more often chosen as social partners, and were perceived as more prosocial in economic games (Keshmirian et al., 2022). Note that this was consistent with the findings of Bostyn and Roets (2017). Consequently, deontological decisions could be made in a group with the aim of creating a certain favorable social image. The third hypothesis regarding how social interaction could influence moral decision making was proposed by the stress reduction model. According to this model, group discussion could reduce negative feelings about a moral decision, and reducing current (e.g., stress) or future (e.g., regret) negative emotions could lead to more utilitarian responses. In contrast to the social discussion model, the stress reduction hypothesis implied only a temporary increase in utilitarian responses: in the absence of a group that reduced negative emotions, the proportion of subjects' utilitarian responses would decrease (Keshmirian et al., 2022).

The subjects in the study conducted by Keshmirian, Deroy and Bahrami (2022) solved moral dilemmas both individually (before and after group discussion) and in the group. This allowed the authors not only to test whether the responses of subjects in the group differed from individual responses, but also whether conformity in moral decision-making is normative or informational. In the case where normative conformity occurs, the subjects changed their decision in the group but returned to their original decision even after group discussion. In the case of information conformity, the individual decision shifted towards a collective decision after discussion.

The results obtained in this study supported the stress reduction hypothesis: indeed, the authors observed a temporary increase in utilitarian responses, while the stress assessment in the second experiment showed a significant decrease in stress levels during group discussion compared to individual decision making (Keshmirian et al., 2022).

Marton-Alper, Sobeh, and Shamay-Tsoory (2022) examined people's tendency toward utilitarian or deontological decisions in the context of the phenomenon of moral conformity in online settings. To this end, the authors developed a paradigm based on the assessment of moral dilemmas like the trolley problem.

The subjects were presented with moral dilemmas in which the actor had to make a choice similar to the choice in the trolley problem. After describing the dilemma, the subjects were provided with a possible solution formulated in terms of utilitarian or deontological solutions, after which they were asked to rate the degree of acceptability of the presented solution on an eight-point scale: from absolutely morally unacceptable to absolutely morally acceptable. This procedure was the first stage of the experiment. In addition, the subjects were warned that they would subsequently be asked to provide arguments supporting their position. At the second stage, the subjects were presented with the same set of moral dilemmas, ratings, and supporting arguments from a virtual group (fictitious study participants whose names, ratings, group averages, and arguments were assigned by the experimenters). The third stage involved re-evaluating this set of dilemmas. The authors of the study suggested that people prone to utilitarian decisions would demonstrate greater conformity with the opinions of other people due to their tendency to analytical thinking, reasoning, openness to experience, etc. The results of the study supported the assumption that people with utilitarian judgments would demonstrate conformity more often and to a greater extent than people with deontological moral judgments (Marton-Alper et al., 2022).

Discussion

The results obtained in this study have shown that the phenomenon of moral conformity is relatively new in psychology.

The results of the analysis of the relationship between the terms 'moral conformity' and 'conformity' over time indicate a probable shift in the perception and consideration of aspects of conformity in society. Increasing interest in moral conformity may imply an expanding understanding of conformity in general. It is also possible that public perceptions of conformity are becoming deeper and increasingly take into account moral aspects such as ethics, fairness and social responsibility.

The term map of titles, based on the Google Scholar database, allows us to see that the concept 'moral conformity', which initially arose in line with religious and philosophical ideas, is affected in various fields of knowledge, including philosophy, religion, sociology, psychology, etc., which may indicate an increasing interest in the phenomenon of moral conformity in society.

Having analyzed the occurrence frequency of terms, we were able to see that until 1986, the terms 'morality' and 'conformity' were used quite 'spotwise', only in individual studies. Between 1986 and 2007, the terms 'morality' and 'conformity' did not appear as keywords in any of the studies. Since 2007, the occurrence frequency of these concepts has increased noticeably, which also indicates an increase in interest in this phenomenon.

Thus, the data obtained in the bibliometric analysis suggest that the problem of moral conformity is a relatively new, poorly studied topic. Open interest in this phenomenon has appeared only in the last decade.

The content analysis of publications indicates that the phenomenon of moral conformity is quite stable. Moral conformity affects people of different ages, including children (Kim et al., 2016), as well as representatives of different cultures (Alshaalan, Gummerum, 2022). A number of studies have shown that the phenome-

non of conformity when making moral decisions is observed in conditions of both real group pressure (Kundu, Cummins, 2013; Lisciandra et al., 2013; Bostyn, Roets, 2017; Keshmirian et al., 2022) and a low degree of social presence (Lisciandra et al., 2013) or virtual pressure (Kelly et al., 2017; Marton-Alper et al., 2022). The data from Bostyn and Roets (2017) suggest that the degree of conformity may depend on the type of decisions that the group adheres to (in their study, the subjects showed greater conformity when the group adhered to deontological decisions), and Marton-Alper et al. (2022) showed that in the presence of arguments in favor of a particular decision, persons inclined to make utilitarian decisions (due to their critical thinking and propensity for analysis and reflection) would be more susceptible to conformity.

Most studies of moral conformity have been implemented within the framework of the moral dilemma approach. Of the eight experimental studies reviewed by us, moral dilemmas were used in seven. Thus, in the work of Kundu and Cummins (2013), J. Greene's 12 dilemmas were used (Greene et al., 2008). Lisciandra and her colleagues (2013) used in their study the author's set of 30 scenarios describing violations of moral, social, and decency norms, based on examples from philosophical and psychological literature (in particular, J. Haidt's dilemmas). Bostyn and Roets (2017) presented the subjects with 10 moral dilemmas involving a deontological or utilitarian solution. Kelly et al. (2017) used two scenarios: the first is the classic Haidt dilemma, depicting a family who eats their dog; the second is a dilemma in which passengers on a sinking boat are forced to sacrifice one injured and overweight person in order to save the rest. Alshaalan and Gummerum (2022) use 15 scenarios that demonstrate violation of moral, social, and decency norms (scenarios by Lahat et al., 2012 and Lisciandra et al., 2013). An exception was the work of Kim et al. (2016), focused on the study of moral conformity in children, where the stimulus material consisted of drawings depicting moral actions.

Marton-Alper, Sobeh, and Shamay-Tsoory (2022) develop their own way to study the phenomenon of moral conformity, which, however, also relies on the use of moral dilemmas. Unlike previous studies, Marton-Alper and her colleagues presented the subjects with a moral dilemma, as well as its solution, formulated in utilitarian or deontological terms, after which the subjects were asked to rate the degree to which the solution was acceptable.

The attempt made by Keshmirian, Deroy and Bahrami (2022) to develop moral dilemmas that are close to real life seems very interesting. These authors note that traditional sacrificial dilemmas, such as those of J. Greene, consist of utilitarian actions but do not include utilitarian 'inactions', and also operationalize utilitarianism solely as an endorsement of 'killing' one to save many. Unlike traditional sacrificial dilemmas, the dilemmas developed by the authors involve cases of omission to maximize the greater good for all, relate to real life situations, do not involve direct harm (such as murder) to maximize utility, the actor (or his/her family)) generally do not benefit from the utilitarian solution.

In Russian psychology, the phenomenon of conformity and the problem of moral choice under the influence of a group have been studied primarily within the framework of developmental psychology and studies of personality development. Thus, according to L.I. Bozhovich, 'personality' is an individual who has stable moral

principles and is capable of resisting influences from the environment that are alien to his/her beliefs (Bozhovich, 2008a). With regard to the phenomenon of conformity, Bozhovich points out the need to distinguish between 'conformity' as situational behavior and 'conformism' as a trait in the personality structure (Bozhovich, 2008b).

Research conducted by A.I. Lavrinenko under the leadership of L.I. Bozhovich was focused on studying changes in the moral stability of children with age. For this purpose, the author modified the technique developed by U. Bronfenbrenner. The research of A.I. Lavrinenko was continued in the work of F.N. Avanesova, who argued that, with age, the moral resistance of schoolchildren to the 'pressure' of peers and adults increased (Avanesova, 1999). She also pointed out that, compared with schoolchildren of the 60s, schoolchildren of the 90s were less susceptible to peer influence in their moral judgments.

V.S. Mukhina in her works described how conformist behavior manifests itself in children of primary school age (Mukhina, 1999). In addition, her experiments on studying conformity shown in the popular science film *Me and Others* (by F. Sobolev) are widely known.

Thus, we can see that, in Russian psychology, approaches to the problem of moral conformity were made already in the Soviet period of its development.

Conclusion

This study is devoted to a bibliometric analysis of the phenomenon of moral conformity. The results show that the term 'moral conformity' first appeared in the 19th century, although it still contained not a psychological but a philosophical and religious meaning. However, moral conformity had been considered in a philosophical and sociological context long before the emergence of interest in it in psychological research. This necessitates implementing an interdisciplinary approach to the study of moral phenomena and their sociocultural roots. The analysis of moral conformity in the field of psychology indicates that interest in this phenomenon has appeared only in recent decades. Since 2007 the frequency of using the terms 'morality' and 'conformity' as keywords has noticeably increased, and in 2013 the first works devoted to the study of the phenomenon of conformity in the field of moral decision-making were published. This study indicates that the problem of moral conformity is relatively new today and requires further study.

All of the above suggests that interest in the phenomenon of moral conformity is growing; therefore we can determine further directions for research. One of these directions could be the study of the phenomenon of moral conformity in different samples, as well as comparison of the results obtained under conditions of both real and virtual pressure. The development of virtual platforms and social networks creates new environments of interaction and influence, where moral standards and conformity can manifest themselves in new ways. The virtual pressure and influence of social media can have a significant impact on the formation and enforcement of moral standards. In our opinion, it is important to develop the study of moral conformity, conducting interdisciplinary research that combines philosophy, psychology, sociology and other disciplines, and also actively use modern

methods and tools, including data analysis and computer modeling. Only through systematic and in-depth exploration of moral conformity will we be able to better understand and effectively address the complex ethical challenges and problems facing modern society.

The limitation of this study can be the relatively small number of publications devoted directly to the phenomenon of moral conformity, which, however, in itself indicates the emerging interest in this problem and the relevance of the phenomenon under study. A fundamental limitation of any bibliometric analysis is the limited source data: such an analysis is based on existing publications and their metadata, which may be incomplete or may not cover all studies on a given topic. The absence of some key works or insufficient data may limit the comprehensiveness and accuracy of the study. However, even with limited data, the bibliometric analysis can provide a starting point for further research, help identify relevant topics and questions that deserve further study, and focus on the most significant aspects of the phenomenon of moral conformity.

To overcome the limitations of this analysis, we included additional theoretical considerations of the most significant research in the field of moral conformity. This allowed us to expand and deepen our understanding of this phenomenon and compensate for possible shortcomings associated with limited initial data.

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Article history:

Received 5 July 2023 Revised 20 September 2023 Accepted 21 September 2023

For citation:

Zlobina, M.V., & Fedorov, A.A. (2023). Moral conformity through the lens of bibliometric and content analysis. *RUDN Journal of Psychology and Pedagogics*, 20(4), 713–729. http://doi.org/10.22363/2313-1683-2023-20-4-713-729

Author's contribution:

Marina V. Zlobina – bibliometric and content analysis, text writing, text editing. Alexandr A. Fedorov – design of the research, data extraction from Google Scholar and Scopus, time trend analysis, text editing.

Conflicts of interest:

The authors declare that there is no conflict of interest.

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DOI: 10.22363/2313-1683-2023-20-4-713-729

EDN: VHONAW УДК 159.9

Исследовательская статья

Моральная конформность сквозь призму библиометрического и содержательного анализа

М.В. Злобина № , А.А. Фёдоров

Аннотация. Цель исследования – библиометрический и содержательный анализ публикаций по проблеме моральной конформности. Актуальность темы обусловлена зарождающимся интересом к феномену моральной конформности. Материалом послужили публикации на английском языке, извлеченные из баз данных Scopus и Google Scholar, а также данные Ngram Google. Библиометрический анализ данных выполнен с помощью программы VOSviewer и с использованием пакета bibliometrix для языка R. Показано, что в период с 1800 по 2019 г. значимо увеличивается доля текстов, содержащих термин «моральная конформность», относительно текстов, включающих термин «конформность». Построенная на материале базы данных Google Scholar понятийная карта позволила выделить четыре кластера, отражающие четыре области, в которых встречается понятие «моральная конформность». Библиометрический анализ понятия «моральная конформность» в области психологии позволил выделить четыре кластера, отражающих основные аспекты данного феномена. Анализ частоты встречаемости слов с течением времени показал, что начиная с 2007 г. частота использования понятий morality и conformity заметно возрастает. В результате содержательного анализа публикаций отобрано 10 источников, непосредственно относящихся к феномену моральной конформности. Существующие на сегодняшний день исследования свидетельствуют о том, что феномен моральной конформности является достаточно устойчивым и проявляется на разных выборках и в разных условиях. В целом проблема моральной конформности является новой и требует дальнейшего изучения. Перспективы исследования видятся в проверке результатов предыдущих исследований на русскоязычной выборке, а также изучении феномена в условиях как реального, так и виртуального давления.

Ключевые слова: библиометрический анализ, мораль, конформность, моральная конформность

Благодарности и финансирование. Исследование выполнено за счет гранта Российского научного фонда № 23-28-00771, https://rscf.ru/project/23-28-00771/

История статьи:

Поступила в редакцию 5 июля 2023 г. Принята к печати 21 сентября 2023 г.

Для цитирования:

Злобина М.В., Фёдоров А.А. Моральная конформность сквозь призму библиометрического и содержательного анализа // Вестник Российского университета дружбы народов. Серия: Психология и педагогика. 2023. Т. 20. № 4. С. 713–729. http://doi.org/10.22363/2313-1683-2023-20-4-713-729

Вклад авторов:

 $M.В.\ 3лобина$ — проведение библиометрического и содержательного анализа, написание и редактирование текста. $A.A.\ \Phi\ddot{e}\partial opos$ — дизайн исследования, извлечение данных из Google Scholar и Scopus, анализ временных трендов, редактирование текста.

Заявление о конфликте интересов:

Авторы заявляют об отсутствии конфликта интересов.

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