# Indicators of Openness and Transparency in Scholarly Publishing: Early Insights from the Social Sciences

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### **ABSTRACT**

The landscape of scholarly publishing is changing rapidly - alongside open science practices and established ethical standards in research. Increasingly, there are higher expectations for research to be deemed credible and rigorous research, with an emphasis on transparency in the research process. To date, there has been a lack of comprehensive studies examining the attitudes and practices of social science researchers in Malaysia, a significant and strategically important research community, regarding transparency and openness in scholarly publishing. This research gap is particularly crucial due to several significant factors, including scholarly digital transformation, the open access movement, the emergence of open science practices, and generational change. Therefore, there is a pressing need to address this gap and explore the consequences of these developments. Thus, this paper seeks to (a) contextualize the study by contrasting social science researchers with their compatriots in the sciences in terms of transparency and openness in publishing, and (b) report on the early insight's indicators of openness and transparency in scholarly publishing as a heads-up to the detailed analysis of the data. The study employed qualitative methodology, with interview as the primary data collection technique. A total of 100 most productive Malaysian-based social science researchers who identified the Web of Science database were invited to participate via e-mail, of which six (6) agreed to be interviewed. By utilizing the interview data and comparing it with the Transparency and Openness Promotion (TOP) quidelines, preliminary analysis shows that several indicators of openness and transparency in scholarly publishing emerge. These indicators include sharing and connecting, open access publishing, research collaboration, open access repository, peer review process, preprint, ethics and integrity and reproducibility. The identified transparency and openness indicators are a valuable foundation for developing a framework that promotes responsible and reproducible research through the adoption of transparent research practices among social science researchers in the country. This is particularly significant as research and scholarly practices are increasingly embracing transparency and openness, as evidenced by the national initiative, the Malaysia Open Science Platform (MOSP). Incorporating these indicators into research practices can enhance the trustworthiness of research outcome while advancing the overall goal of open science.

Keywords: Transparency; Openness; Open Science; Scholarly Publishing; Social Sciences

### INTRODUCTION

Scholarly publication plays a crucial role in advancing university careers, as it is an essential avenue for sharing research findings. Typically, academic researchers aspire to publish their research in reputable scholarly journals. Because scholarly journals are intended to provide a comprehensive and permanent record of research, the work must be conducted and published in an honest, objective, and fair manner, and the target journal must be carefully selected (Abrizah, Shah, and Nicholas 2019). Currently, the scholarly publication landscape is becoming more accessible and transparent. This was made possible by open science practices, which increase the transparency and openness of research.

In this research context, transparency is defined as openness, communication, and responsibility (About Transparency - Assignment Point 2021). Transparency, or the degree of openness in disclosing information, is a mechanism communicating the trustworthiness of the actor in negotiations (Ball 2009). Transparency encompasses various aspects, including an individual's to care, be vulnerable, be brutally honest, have uncomfortable conversations, keep commitments, and deliver bad news effectively (Studer 2014). It can be observed that transparency is readily apparent, not only in terms of openness and accountability, but also in terms of communication, whether it be positive or negative in nature. Openness is defined as a lack of secrecy or concealment, frankness, and dealing with transparency (Oxford Lexico 2022). Openness may also be described as the capacity to consider, accept, or listen to other people's or ideas, as well as the ability to not be limited or covered (Oxford Learner's Dictionaries 2022).

In Malaysia, a country experiencing growth and development in research, the significance of open access, open data, and open science is a subject of extensive discussions at both the national and international arenas. However, Malaysian researchers currently place considerable emphasis on publishing their research outcomes in high-impact journals to enhance their productivity and performance. Consequently, the question arises as to how academics from developing countries can effectively practice transparency and openness in their research endeavors? To what extent do Malaysian researchers provide open and transparent research output that allows for systematic replications, is understandable, and allows for formal criticism?

Furthermore, in Malaysia, the open scholarly platform or movement through the Malaysian Open Science Platform (MOSP) reflects the drive for transparency and openness in sharing of research output. Furthermore, with the evolving social science scholarly publishing landscape new criteria for credibility and rigor in research are emerging, emphasizing the importance of transparency in addition to existing ethical standards. Despite this, no comprehensive study has been conducted to date to examine the attitudes and practices of social science researchers in Malaysia, a large and strategically important research community, regarding transparency and openness in scholarly publishing. There are very serious reasons for filling this research gap because there are several conditions which may lead to significant consequences, which include scholarly digital transformation, the open access and open

science movement, and of course generational change. This paper is a part of a larger study that seeks to provide an understanding and assessment on the transparency and openness of scientific publishing among Malaysian social science, arts, and humanities researchers<sup>1</sup>. Specifically, this paper seeks to contextualize the study by contrasting social science researchers with their compatriots in the sciences, in terms of transparency and openness in publishing, and to report on the early insights to what the authors found as indicators of openness and transparency in scholarly publishing as a heads-up to the detailed analysis of the data. This study addresses the following research questions: (a) What is the interpretation of "transparency and openness in scholarly publishing" from the perspective of social science researchers? (b) What indicators of "transparency and openness in scholarly publishing" adopted by social science researchers have been identified through early insights?

### LITERATURE REVIEW

Over the last decade, the Open Science movement has gained support among publishers, funders, policy makers, universities, and, most importantly, the scientific community. Open science is generally understood as the sharing of resources and ideas with the objective of making them openly and freely available for future use. Despite the diversity of the Open Science movement, the scientific community share the core belief that promoting openness of multiple research output and for multiple groups of people at multiple levels and geographies will foster equality, broaden participation, and increase productivity and innovation in science (Willinsky 2005). Through the development of Open Science and Open Access policies and guidelines, governments and funding agencies all over the world have come to recognise openness as a crucial component of scholarly research (Levin et al. 2016).

When researchers fail to document their assumptions, decisions, and actions and are unwilling or unable to share this information with others, their statements become more difficult to comprehend. When such errors occur frequently in a community of researchers, the community's credibility and reputation are compromised. Questions of data sharing and scholarly transparency are being addressed with increased frequency and vigor in the sciences. In addition to exposing researchers to a broader array of knowledge claims, technological advancements in electronic communication give them reason to believe that data and inferential information will become more accessible (Lupia and Elman 2014).

Numerous academic journals have revised their policies, recognising the value of cumulative knowledge creation and laying a solid foundation for it by requiring enhanced evidence trails and data reanalysis. There are undeniable benefits to having open data access, but there are also legitimate ethical and legal concerns regarding data sharing. This is the reason why access to research data and transparency in the research process have been extensively discussed throughout the social sciences (Nosek et al. 2015).

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<sup>&</sup>lt;sup>1</sup> Doctoral research by the first author, supervised by the second and third authors, proposed to the Universiti Malaya in 2022 entitled "Transparency and openness of scientific publishing among social science, arts and humanities researchers".

The literature has identified seven key elements that encompass researchers' understandings, experiences, and practises of scholarly openness. These themes include: timely donation and access to research components; standards for the format and quality of research components; metadata and annotation; freedom to choose venues and dissemination strategies; transparent peer review systems; and access to research components in non-Western and/or non-academic contexts (Levin et al. 2016).

Furthermore, the literature has identified nine factors that influence the implementation of openness in science. They are: (a) the availability of repositories and databases for data, materials, software, and models; (b) the competitiveness of academic fields; (c) the digital nature of research; (d) credit systems in academic research; (e) career structures in academic research; (f) collaborations with industrial partners and attempts at commercialization; (g) intellectual property models and standards; (h) governmental perspectives on the prestige and social role performed by universities; and (i) the existence of multiple, and at times competing, government policies on open science (Levin et al. 2016).

# **Dimensions/Indicators of Transparency and Openness**

The Transparency and Openness Promotion Factor (TOP Factor) refers to the dimensions and indicators of transparency and openness in scientific publishing and contains metric that reports the steps that a journal is taking to implement open science practices, that are based on the core principles of the scientific community<sup>2</sup>. Spitschan, Schmidt, and Blume (2021) described TOP Factor as a numerical score that summarizes the presence, requirement, and enforcement of transparent and open research practices in journals. A total of 149 biomedical articles published between 2015 and 2017 determined the proportion of reporting sources based on six reproducibility and transparency indicators from open access data provided on PubMed, including funding, a statement of conflict, protocol availability, data availability, replication, and article citation (Wallach, Boyack, and Ioannidis 2018). Fifteen key markers for transparency and best practises in open scholarship also had been identified to improve transparency and credibility of open access open scholarship (Bjornshauge 2015), including: Peer review process; Governing Body; Editorial team/contact; author fees; copyright; identification and handling of allegations of research misconduct; ownership and management; web site; journal name; conflicts of interest; access; revenue sources; advertising; publishing schedule; and archiving

Aside from that, Data Access, and Research Transparency (DA-RT) is one of several projects in the social sciences that work to make things more open. In social science, research transparency is the idea that researchers have a moral duty to make their evidence-based knowledge claims easy to evaluate by making their evidence, analysis, and study design public (Lupia and Elman 2014). Additionally, alternative literature has observed notable progress in promoting research transparency within the social sciences. These scholars advocate for the establishment of standards and practices that align scholarly incentives with scholarly values. They contend that while medical trials serve as partially applicable models, the social sciences

<sup>&</sup>lt;sup>2</sup> See https://www.cos.io/initiatives/top-guidelines.

require distinct approaches. To this end, social science initiatives are seeking to develop standards that go beyond what is required in medical trials. Bottom-up developments in the social sciences are ongoing, with a general consensus emerging around three principles: open data and resources, transparency, registration, and pre-analysis procedures (Lupia and Elman 2014).

# **Transparency and Openness Promotion (TOP) Guidelines**

Transparency, openness, and reproducibility are widely acknowledged as important characteristics of science. The literature recommended eight criteria to help translate Open Science concepts into actual and tangible actions (Center of Open Science 2016). The TOP Guidelines specify escalating levels of adherence to 8 modular transparency dimensions in Table 1<sup>3</sup>.

Table 1: The TOP Guidelines describe Increasing Levels of Adherence to Eight Modular Transparency Dimensions, Covering Citations, Availability of Data, Code, Materials and Design, Preregistration of Study Procedures and Analysis Plans, and Replication (Reproduce With Permission)

	Not implemented	Level 1	Level 2	Level 3
Citation standards	Journal encourages citation of data, code, and materials, or says nothing.	Journal describes appropriate citation for data and materials used consistent with journal's author guidelines.	Article provides appropriate citation for data and materials used consistent with journal's author guidelines.	Article is not published until providing appropriate citation for data and materials following journal's author guidelines.
Data Transparency	Journal encourages data sharing or says nothing.	Articles state whether data is available, and, if so, where to access it.	Data must be posted to a trusted repository. Exceptions must be identified at article submission.	Data must be posted to a trusted repository, and reported analyses will be reproduced independently prior to publication.

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<sup>&</sup>lt;sup>3</sup> https://www.cos.io/initiatives/top-guidelines (Reproduced with permission)

Analytic Method (Code) Transparency	Journal encourages code sharing or says nothing.	Articles state whether code is available, and, if so, where to access it.	Code must be posted to a trusted repository. Exceptions must be identified at article submission.	Code must be posted to a trusted repository, and reported analyses will be reproduced independently prior to publication.
Research Materials Transparency	Journal encourages materials sharing or says nothing.	Articles state whether materials are available, and, if so, where to access it.	Materials must be posted to a trusted repository. Exceptions must be identified at article submission.	Materials must be posted to a trusted repository, and reported analyses will be reproduced independently prior to publication.
Design and Analysis Transparency	Journal encourages design and analysis transparency or say nothing	Journal articulates design transparency standards.	Journal requires adherence to design transparency standards for review and publication.	requires and enforces adherence to design transparency standards for review and publication.
Study Preregistration	Journal says nothing.	Article states whether preregistration of study exists, and, if so, where to access it.	Article states whether preregistration of study exists, and, if so, allows journal access during peer review for verification.	Journal requires preregistration of studies and provides links and badges in articles to meet requirements.
Analysis Plan Preregistration	Journal says nothing.	Article states whether preregistration of the analysis plan exists, and, if so, where to access it.	Article states whether preregistration of the analysis plan exists, and, if so, allows journal access	Journal requires preregistration of analysis plan and provides link and badges in article to

			during peer review for verification.	meeting requirements.
Replication	Journal discourages submission or replication studies or says nothing.	Journal encourages submission or replication studies.	Journal encourages submission or replication studies and conduct results blind review	Journal uses Registered Reports as a submission option for replication studies with peer review prior to observing the study outcomes.

TOP Factor was discovered in the literature as a statistic for describing the extent to which publication policies have implemented the TOP Guidelines. To determine the TOP Factor, systematic techniques and evaluation instruments are required. Furthermore, the execution of these open scholarly principles is dependent on journal procedures and practises, for which there are no standards or rating instruments provided by TOP. The TOP Factor was developed to evaluate journal policies, methods, and practices in accordance with the TOP Guidelines, as part of the TRUST (Transparency of Research Underpinning Social Intervention Tiers) Initiative, which aims to advance open science in the social intervention research ecosystem. The calculation of a journal's TOP Factor score, the determination of journal ratings dependability, and the examination of coherence among a journal's policies, processes, and practices are also explained. It may be regarded as a protocol for evaluating around 345 significant journals that have published research used to inform evidence-based policy as an example of this process (Mayo-Wilson et al. 2021). It was proposed to assess journals and publications based on the Transparency and Openness Promotion (TOP) norms and associated criteria, using the recent debate over global tree 'restoration' potential as an example. A high-TOP score indicates that readers have enough information to evaluate the objectivity and credibility of scholarly publications and their authors (Slingsby 2020).

### **METHODOLOGY**

The study used qualitative methodology, employing interviews as the data collection technique. A total of 100 most productive social science researchers in Malaysia based on the Web of Science Social Science Citation Index (SSCI) data were invited to participate via e-mail personally sent out to each. After two weeks six researchers agreed to be interviewed. The details of the participants are given in Table 2.

Table 2: Demographic details of research participants

Participants	Positions	Research Field	Gender	No of papers (last 5 years)
P001	Associate Professor	Humanities	Female	16
P002	Professor	Education	Male	39
P003	Professor	Business economics	Female	48
P004	Associate Professor	Economics	Male	74
P005	Associate Professor	Information science	Female	41
P006	Associate Professor	Business economics	Male	32

Interviews were conducted either in-person or remotely over Google Meet according to participants' preferences. The interviews were conducted in English, considering that English is widely utilized in Malaysia. The interviews, typically 45-60 minutes in duration, were recorded, with the transcripts returned to the participants to ensure accuracy/agreement and to obtain further clarity. All the interview transcripts (translated where necessary) were transferred to a 'coding sheet', which closely matched the questions of the original 'interview schedule', but left room for information derived from additional enquiries or clarifications during the interview process. The indicators found in Transparency and Openness Promotion (TOP) guidelines were used as it provides a valuable template as the basis for comparison on the indicators that emerged during the interviews. ATLAS.ti version 23 was used for coding the interview transcripts to generate thematic analysis for the findings. Each verbatim statement is accompanied by the participant code, date, line number and page number of the transcript. The study has obtained ethical clearance from Universiti Malaya research ethics committee.

### **RESULTS**

Interpretation of "transparency and openness in scholarly publishing". Based on the interviews, five themes have been Identified to represent "transparency and openness in scholarly publishing"

# (a) A thorough and detailed explanation of the methodology section

Findings addressed transparency and openness, implying a greater emphasis on the methodology section. In this aspect, participants believe that the methodology section of a paper should be presented in a comprehensive manner, ensuring openness and transparency to the greatest extent possible. If the method information is sufficiently documented, others will be able to replicate the research.

"It focuses on the methodological phase; it means that in that case the methodology should be retained in such a way that it will be as transparent and open as possible." (1:10 193 in P004; 13<sup>th</sup> Apr. 2023)

"It is based on methodology and the results. All that transparency involves the methods that have been used. So, when we write a paper, our method should be detailed enough, so that when other people want to copy it, they can. It is methodologically robust. That's why I said

earlier, if the paper is rejected because of the methodology, [it is] because there are no details." (2:63 777 in P001; 23rd Feb. 2023)

### (b) Detailed description of the data utilized

Social science researchers in this study provide alternative definitions of transparency and openness in scholarly publishing that specifically pertain to the detailed provision of data for secondary use.

"What do we mean when we say open and transparent as possible, particularly in relation to the data utilized." (1:11 193 in P004; 13<sup>th</sup> Apr. 2023)

"When it comes to data, declaring statement [the availability] of data is a practice essential if you intend to publish it " (5:6 187 in P005; 14<sup>th</sup> Apr. 2023)

"Open and transparent means my data is available for secondary use" (6:24 539 in P006; 18<sup>th</sup> Apr. 2023)

### (c) Data archived or stored in a research repository

Another aspect of transparency and openness in scholarly publishing involves the storage of data in research repository, as indicated in the following verbatim statements:

"All authors should be transparent in the sense they should, it is compulsory for all authors to provide data for the journal. So that the data will be stored in repository or databank, so that probably if I publish now, I want to check my result or the open of my result, then just go to databank, collect the data, used similar method that used, and you should be able to generate the same result." (1:91 205 in P004; 13<sup>th</sup> Apr. 2023)

If the data belongs to you and it's not confidential, then you're supposed to put it in data repository" (5:6 187 in P005; 14<sup>th</sup> Apr. 2023)

# (d) Ensuring transparency in the reviewing process

Another perspective of transparency and openness in scholarly publishing is related to peer reviewing and should be as transparent as possible.

"Review process should be as transparent as possible, and you should also be open as possible. In that case, it is now under publisher. The publisher should ensure that the review process is structured in such a way that if the comment is given by the reviewers align with the content that they have reviewed." (1:9 163 in P004; 13<sup>th</sup> Apr. 2023)

# (e) Willingness to share research output

Another definition of transparency and openness of scholarly publishing, as stated by one social scientist, encompasses the willingness to share research output at every stage of the research process.

"Transparency is open to sharing. That means open for everyone to see, get to know whatever information and processes allowing others to become familiar with things that we had done during the research." (2:31 633 in P001; 23rd Feb. 2023)

Hence, Fig. 1 depicts the understanding of social science researchers regarding the meaning of transparency and openness with reference to scholarly publishing across five thematic areas:

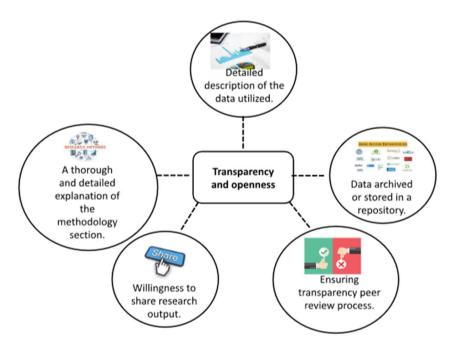


Fig. 1: The meaning of transparency and openness in relation to scholarly publishing by social science researchers

# Indicators of "transparency and openness in scholarly publishing"

Preliminary analysis has identified the following eight themes as indicators of openness and transparency in scholarly publishing.

### (a) Sharing and connecting

Early insights show that social science researchers primarily disseminate their research findings through publications in scholarly journals.

"Because at the moment I believe if people really are into their knowledge process, if the people really know what exactly the research is going on, obviously they know they should be knowing the best platform of the journal."  $(4:18 \ \P \ 367 \ in \ P002; 2^{nd} \ Mar. \ 2023)$ 

"In most cases the journals and the publishers usually impose restrictions on citations or sharing of your published papers. But there has been recent development in collaboration between Springer and ResearchGate, where it allows for the sharing of papers published in Springer journals." (1:18  $\P$  259 in P004; 13<sup>th</sup> Apr. 2023)

"Yes, I prefer that I go to a journal because [attending] conferences requires money. (6:19  $\P$  278 in P006; 18<sup>th</sup> Apr. 2023)

Social science researchers in this study have opted against attending conferences to present their research outcomes due to the inefficiency, cost and diminishing effectiveness associated with such events. One perceived conference as being beneficial for younger researchers.

"Even though I do not attend conferences anymore. For me, the conference has changed in many ways. The conference has no longer become as effective as it is. " (4:17 343 in P002; 2<sup>nd</sup> Mar. 2023)

"My level [as Professor] are not anymore conference" (3:9 275 in P003; 10<sup>th</sup> Mar. 2023)

"I focus on journal papers because conferences sometimes waste time." (1:43 440 in P004; 13<sup>th</sup> Apr. 2023)

".... [attending] conference requires money. Not cheap nowadays. Conference [fees] at least RM1000 plus." (6:19 278 in P006; 18<sup>th</sup> Apr. 2023)

Social science researchers refrained from publishing their research output on social media for the following reasons: they did not have social media accounts, they were not very active on social media, and a few only used it as passive observers without actively contributing or sharing their own work.

"I really haven't posted much on social media for the past few years, I'm just a reader." (2:36 537 in P001; 23rd Feb. 2023)

"I am not a social media guy. No Facebook; No Twitter. I don't have Instagram. So, I do not have any social media in my life. So, I never use it." (4:15 325 in P002; 2<sup>nd</sup> Mar. 2023)

"I don't have one. I will not go for that." (3:20 490 in P003; 10<sup>th</sup> Mar. 2023)

"I'm not active on social media" (5:9 209 in P005; 14th Apr. 2023)

### (b) Open access publishing

The study findings revealed that social science researchers showed a reluctance to publish their scholarly works on open access platforms. Several reasons were identified for their lack of belief in open access publishing, including concerns about the quality and credibility of open access journals, the perceived impact on traditional publishing models, and the rapid and excessive publication of articles potentially compromising the quality of research output.

"Not intentionally go for open access but choose to fit into particular traditional journal in the field" (2:2 81 in P001; 23rd Feb. 2023)

"I don't publish in Open Access, because of that, even in my research grants, I also do not have any allocation for publication. Furthermore, I do not believe in Open Access. I really do not believe in that way" (4:31 391 in P002; 2<sup>nd</sup> Mar. 2023)

"I'm not comfortable going for open access journals these days, particularly there are a lot of journals that're quite devious. They just publish so many articles at a very fast rate. Something seems to be off. So not comfortable. I have a recent bad experience. I think maybe you are also aware. Some of WoS journals have been kicked out from WoS and all of these are open access journals. I have two papers that were affected because of this. So, this is the main reason why I don't like to go for open access but if you don't go look into whether the journal is authentic or not, if fee is not an issue." (5:5 163 in P005; 14<sup>th</sup> Apr. 2023)

### (c) Research collaboration and gender openness

Gender does not pose any issues in terms of research collaboration and publishing. Social science researchers prioritize merit and compatibility over gender.

"Whether someone is male or female, it doesn't matter to me. What matters is the ability to work together effectively and achieve our goals" (2:28 549 in P001; 23rd Feb. 2023)

"For me I really do not mind if there is a male or female. If the research is aligned with that, I am okay with that. So, gender participation is not something that I always look into in a very detailed manner, but I look into a detailed manner of competency and the interest that the people have in you. So my research team includes both genders" (4:57 475 in P002; 2<sup>nd</sup> Mar. 2023)

"I don't have preference as long as they're capable of doing what I want them to do. There's a specific project then of course you bring a team member who has the expertise you need. Who you bring in of course has to contribute to the success." (5:30 514 in P005; 14<sup>th</sup> Apr. 2023)

Nevertheless, certain social science researchers expressed a preference to collaborate with individuals of the same gender. They find it more comfortable and, in some cases, necessary to fulfill specific requirements set by the funder.

"Sometimes gender is an issue to get funding. The funds asked for female participation." (4:56 475 in P002; 2<sup>nd</sup> Mar. 2023)

"Mostly I worked with males, mainly because they've been my friends and acquaintances" (1:65 687 in P004; 13<sup>th</sup> Apr. 2023; 2<sup>nd</sup> Mar. 2023)

Findings regarding research collaboration revealed that almost all social science researchers engaged in collaborations with international researchers. One of the reasons for international collaboration is that the collaborator brings more experience to the table which allows for the exchange of ideas and enhances the quality of the research output.

"I go for international collaboration." (3:21 502 in P003; 10<sup>th</sup> Mar. 2023

"From the UK, from Italy, yes, also from Nigeria. This is part of what my important co-authors are." (4:45 409 in P002; 2<sup>nd</sup> Mar. 2023)

"So now how do I form a relationship with a researcher in the US that will probably improve my own research. Is it for me to form a research collaboration with a person who I believe is better than me because if I form a research collaboration with someone who is better than me then I need to improve myself but if I form with someone with lesser expertise? Maybe below my standard then I will not improve myself" (1:67 709 in P004; 13<sup>th</sup> Apr. 2023)

# (d) Open access repository

The findings indicated that social science researchers did not maintain and deposit their research data in an open access repository. One primary reason cited for not depositing their research output in an open access repository was the perceived overwhelming number of platforms available for data deposition. There was this belief that even without depositing research articles in a specific repository, the research could still be discovered and accessed through other means.

" No, I never did. I don't think I ever did." (2:39 687 in P001; 23rd Feb. 2023)

"I do not do that, I do not like to do it because at the end of the day, if people really are very passionate about their research culture, they would know what the big outlet is. So, creating too many outlets, not a good point. Because now, it is not like selling clothes. If you are selling clothes, you need an outlet. One outlet goes to home, but it is not selling clothes. You do not need too many outlets, but you need a quality outlet, and you need, not the number of outlets a matter, but the matter is whether we know the right product. Right is more important, not too many outlets. It is not like a product of clothes, or it is not like selling Pepsi, so if I have a convenient store, and I have a superstore, I cannot go to the superstore because it is midnight. So let me go to the convenience store. So, research articles are not convenient versus convenience versus superstore". (4:63 515 in P002; 2nd Mar. 2023)

However, a small number of social science researchers use open access repositories to provide digital, permanent, and immediate accessibility to their research outputs., that enable anyone to use, download, and distribute the research outputs freely.

"Share in the repository as I said earlier, I put it in UMEXPERT, I want to put it in the UM repository, it used to be there but I'm not sure now I have to put it in myself, or the library does it for me" (2:29 585 in P001; 23rd Feb. 2023)

"Sometimes you see we don't have storage tools for example. So, we put it in the GitHub Open Repository. So, everyone can access it." (5:29 508 in P005; 14<sup>th</sup> Apr. 2023)

### (e) Peer review process

Social science researchers are actively engaged in as in the journal peer review process and receive a significant number of papers to review. Recognizing the importance of fostering the growth of the literature in their field, they demonstrate a strong commitment to accepting review requests and diligently fulfilling their responsibilities as reviewers.

"There are a lot of requests for review papers. Yes, until I am unable to accept the request." (3:36 710 in P003; 10<sup>th</sup> Mar. 2023)

"Normally in a year I think I review 24, 20 to 24... Because I know if I do not review the articles, journals cannot grow. So, every year I review almost 20 to 24 articles every year." (4:72 545 in P002;  $2^{nd}$  Mar. 2023)

They have a firm belief in the peer review system, as they recognize its ability to enhance the quality of a paper, particularly when the reviewer is an expert in the same topic. The issue on transparency of the peer review process was not mentioned by any of the participants, and this highlights the need for further investigation of this important aspect.

"If not quality, it means in terms of method and significance of the research. While the quality of the methodology, validity and reliability of the findings is the priority. When we say quality, it means that we have scanned the paper through, which basically fits into that journal. If it doesn't fit into the journal coverage, we do reject it. But if we accept that, it should be achieve

some kind of standard in terms of quality, robustness and significant, interesting enough for targeted audience, and currentness." (2:46 711 in P001; 23rd Feb. 2023)

"I do trust but depends on the journals the editor brought, that means if they find their right peer reviewer, and if they really actually understand." 4:67 533 in P002; 2<sup>nd</sup> Mar. 2023

### (f) Preprints

The interview findings identified nearly all social science researchers demonstrating little concern or interest in preprints, because preprints are often excluded from formal research assessment and not subject to rigorous peer review.

"It would be fine if I made preprints and there are no issues with my submission to the other journals of WoS or Scopus. But, if there is, I would prefer not since I would save for the most crucial one. It does not meet university's KPI" (2:40 693 in P001; 23rd Feb. 2023) "Depending on the original, I don't really care. Preprints are there or not." (3:31 668 in P003; 10<sup>th</sup> Mar. 2023)

"I don't like it because a preprint has not been reviewed and published yet." (5:26 478 in P005; 14<sup>th</sup> Apr. 2023)

# (g) Ethics and integrity

Ethics and integrity are of paramount concerns for all social science researchers particularly in relation to issues of plagiarism and the improper slicing of research findings (salami publishing). They emphasized that these values should be deeply ingrained in one's personal and professional life, extending beyond merely adherence to official rules and regulations.

"For this process, research grants, students, all researchers need to apply for ethical approval from the university. It doesn't matter who your respondents are but before there were only certain respondents. Which of the respondents is at high risk or vulnerable, is afraid that there will be an issue later, especially if it involves children." (2:43 753 in P001; 23rd Feb. 2023) "But I believe that it is important to be a human being or a researcher. So, I would say that being young researchers, they need to understand ethics and integrity and follow the official standards and procedures. But over time, if the people grow up, they also need to understand the purpose. The purpose and the role of ethics and integrity. If they do not know this, then by heart or by the self-driven, they won't do it. But they will do it because there are rules and regulations. But if you're even a good Muslim, you will pray five times, but you did five times because there is a law that is asking you to pray five times. So, when your parents are not there, you will not pray or if you are praying because of society, you will not really be if you migrate to other countries. So, for me, ethics and integrity are by heart, by soul and embodied as a culture, as a practice and that they need to feel as an importance in their own life. And if that is not the case, the official rules and regulations are not enough to really make that as a culture or as a practice of everyday life." (4:78 664 in P002; 2<sup>nd</sup> Mar. 2023)

"I disagree with salami [publishing]. You can't put everything that you have collected from a framework into one paper. Other than that, the duplicity I have seen, I think it's cases where they have a study like what I said, it's salami practice. They write the papers at the same time; changes are very little to the framework and then they send the paper at the same time to 2

different journals to accept their paper. They have a very similar content." (5:32 574 in P005; 14 Apr. 2023)

### (h) Reproducibility

The study revealed that certain social science researchers engage in data sharing within scholarly publishing to facilitate others to replicate and follow their research.

"Why you did and then if you share your data, and provide information on how they [readers] can get to follow your data then i think it can help the replication" (5:35 628 in p005; 14 Apr. 2023)

However, they acknowledged the challenges associated with reproducing or replicating research, particularly within the realm of social sciences, one pointed out that replicating qualitative studies can present challenges due to the unique nature of the methodology which is often aimed at achieving deep understanding rather than producing exact identical results.

"Yes, but social science if you are talking about replicating the study, it is difficult. If it's an interview questionnaire, the interview is difficult, right? How do you replicate it? For the questionnaire, we can point to the variables, use the same variables, and then add up another variable, right? You can, but in the interview, it will be different, we need insights " (2:49 801 in P001; 23rd Feb. 2023)

### **DISCUSSION**

This study presents preliminary research findings based on a small sample of six social scientists who are active authors. The findings shed early insights on the concept of transparency and openness within the context of scholarly publishing. The participants initially had a limited familiarity with the concept, but with the provision of examples and clarification by the authors (in the current study), they gained a better understanding. It became evident that the participants recognized the importance of covering and disclosing every stage of their research process in their published articles to enhance replicability. However, two participants in this study expressed their inability to articulate the concept of transparency and openness in scholarly publishing. They indicated that they had primarily focused on the requirements set by publishers and had not actively considered the importance of being transparent and open in their scholarly works. Five themes have been Identified to represent "transparency and openness in scholarly publishing", and this study confirmed that the term transparent as defined in existing literature aligns with the findings, that signifies a set of processes and tools aimed at disclosing all methodologies and data used in a study. The focus is on utilizing registration to monitor the entire research, exposing critical decisions and specific study design details in pre-analysis plans, and employing standardized reporting guidelines to facilitate the accumulation of knowledge (de la Guardia and Sturdy 2019). These preliminary findings highlight the need for further investigation and exploration into the attitudes and behaviors of scholarly publishing transparency among social scientists.

Based on this initial investigation, the authors have identified eight indicators that signify transparency and openness in scholarly publishing. These indicators were subsequently embraced and practiced by social science researchers who served as the informants for this study. The indicators include *sharing and connecting; open access publishing; research collaboration and gender openness; open access repository; peer review process; preprints; ethics and integrity; and reproducibility.* 

According to earlier-discussed findings, not all informants adopted the indicators of openness and transparency in their scholarly publishing. For the indicators of sharing and connecting, it can be concluded that most social science researchers preferred to publish their research findings in subscribed journals rather than open access journals. In addition, they were hesitant to attend conferences and share research findings on social media. For them, publishing in an indexed journal of WoS or Scopus was more prestigious and valuable, particularly for satisfying institutions' key performance indicators (KPI). Based on open access publishing indicators, social science researchers were not interested to publish in open access platforms due to the expense involved, their lack of belief and discomfort and having bad experience with open access publication. However, for research collaboration, the respondents are extremely concerned about the practice of having both local and international research partners for more outstanding and established research outcomes. Most of them were also unconcerned with choosing a specific gender for collaboration, as the most essential factors were passion, expertise, and the quality of each member's research output. To ensure reproducibility, most social science researchers were also concerned with participating in the peer review process, putting data in research repositories, adhering to research ethics and integrity procedures, and disseminating detailed data in scholarly journals. Social science researchers exhibited a reluctance to publish preprints which are preliminary versions of articles that have not yet been submitted for peer review because preprints did not align with the university's key performance indicator (KPI) set by their respective institutions.

### **CONCLUSION**

In a nutshell, Malaysian social science researchers in this study adopted transparency, but they did not implement the openness aspect of scholarly publishing. To make research more replicable, supposed openness and transparency must be practiced in conjunction, with research techniques, analyses, and data published and shared publicly, explicitly, and comprehensively (Gottlieb 2021); (Cambridge University Press 2021). The limited sample may restrict the generalizability of the findings to a larger population of social science researchers, but further investigation will shed light on the challenges and barriers faced by social science researchers in adopting transparent and open research practices. This knowledge can inform the development of interventions and policies aimed at promoting transparency and openness in scholarly publishing, ultimately enhancing the quality and impact of social science research, fostering. Trust among peers and the wider public, as well as facilitating collaboration and knowledge sharing. This holds particular significance in light of the growing

transparency and openness in research and scholarly practices, exemplified by national initiatives such as the Malaysian Open Science Platform (MOSP).

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### **REFERENCES**

- "About Transparency Assignment Point." 2021. https://www.assignmentpoint.com/science/psychology/about-transparency.html.
- Abrizah, A., Shah, Nordiana Ahmad Kharman and Nicholas, David . 2019. "Malaysian Early Career Researchers on the Ethics of Scholarly Publishing." *Malaysian Journal of Library and Information Science* 24 (1): 75–96. Available at: https://doi.org/10.22452/mjlis.vol24no1.5.
- Ball, Carolyn. 2009. "What Is Transparency?" *Public Integrity* 11 (4): 293–308. Available at: https://doi.org/10.2753/PIN1099-9922110400.
- Bjornshauge, Lars. 2015. "Towards a Transparent and Open Scholarly Communication System Science a Global Enterprise!" DOAJ. 2015.
- Cambridge University Press. 2021. "Transparency and Openness." Cambridge University Press. 2021. Available at: https://www.cambridge.org/core/services/openresearch/transparency-and-openness.
- Center of Open Science. 2016. "Ecology Letters, and Transparency and Openness Promotion (TOP) Guidelines." Ecology Letters. Blackwell Publishing Ltd. July 1, 2016. https://doi.org/10.1111/ELE.12611/FULL.
- de la Guardia, Fernando Hoces , and Jennifer Sturdy. 2019. "Best Practices for Transparent, Reproducible, and Ethical Research," no. February. Available at: https://publications.iadb.org/en/best-practices-transparent-reproducible-and-ethical-research.
- Gottlieb, Grace. 2021. "Why Research Transparency and Reproducibility Matter | Wonkhe." Wonkhe. 2021. Available at: https://wonkhe.com/blogs/why-research-transparency-and-reproducibility-matter/.
- Levin, Nadine, Sabina Leonelli, Dagmara Weckowska, David Castle, and John Dupré. 2016. "How Do Scientists Define Openness? Exploring the Relationship Between Open Science Policies and Research Practice." *Bulletin of Science, Technology & Society* 36 (2): 128–41. https://doi.org/10.1177/0270467616668760.
- Lupia, Arthur, and Colin Elman. 2014. "Openness in Political Science: Data Access and Research Transparency." *PS Political Science and Politics*, 47(1): 19–42. https://doi.org/10.1017/S1049096513001716.
- Mayo-Wilson, Evan, Sean Grant, Lauren Supplee, Sina Kianersi, Afsah Amin, Alex DeHaven, and David Mellor. 2021. "Evaluating Implementation of the Transparency and Openness Promotion (TOP) Guidelines: The TRUST Process for Rating Journal Policies, Procedures, and Practices." Research Integrity and Peer Review 6 (1): 1–11.

- https://doi.org/10.1186/s41073-021-00112-8.
- Nosek, B. A., G. Alter, G. C. Banks, D. Borsboom, S. D. Bowman, S. J. Breckler, S. Buck, et al. 2015. "Promoting an Open Research Culture." *Science*, 348 (6242): 1422–25. https://doi.org/10.1126/SCIENCE.AAB2374/SUPPL\_FILE/TOP\_GUIDELINES\_SUMMA RY-GOOGLE\_SHEETS\_FILES.ZIP.
- Oxford Learner's Dictionaries. 2022. "Openness Noun Definition, Pictures, Pronunciation and Usage Notes | Oxford Advanced Learner's Dictionary at OxfordLearnersDictionaries.Com." Oxford University Press. January 14, 2022. Available at: https://www.oxfordlearnersdictionaries.com/definition/english/openness.
- Oxford Lexico. 2022. "OPENNESS English Definition and Meaning | Lexico. Com." Oford Lexico. https://www.lexico.com/en/definition/openness.
- Slingsby, Jasper A. 2020. "Forest Restoration or Propaganda? The Need for Transparency and Openness Promotion (TOP) Scores to Uphold Research Integrity." South African Journal of Science. https://doi.org/10.17159/sajs.2020/7684.
- Spitschan, Manuel, Marlene H. Schmidt, and Christine Blume. 2021. "Principles of Open, Transparent and Reproducible Science in Author Guidelines of Sleep Research and Chronobiology Journals." Wellcome Open Research 5. https://doi.org/10.12688/wellcomeopenres.16111.2.
- Studer, Quint. 2014. "Creating a Culture of Quality." Harvard Business Review 39 (9): 5-9.
- Wallach, Joshua D., Kevin W. Boyack, and John P.A. Ioannidis. 2018. "Reproducible Research Practices, Transparency, and Open Access Data in the Biomedical Literature, 2015—2017." PLoS Biology 16 (11): 2015–17. https://doi.org/10.1371/journal.pbio.2006930.
- Willinsky, John. 2005. "The Unacknowledged Convergence of Open Source, Open Access, and Open Science." First Monday 10 (8). https://doi.org/10.5210/fm.v10i8.1265.