

# Evidence of the conditions affecting knowledge hiding among librarians in academic libraries

Knowledge  
hiding among  
librarians

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## Abstract

**Purpose** – This study aims to identify and theorize the conditions affecting the formation of librarians' knowledge-hiding behaviour in academic libraries.

**Design/methodology/approach** – This study is a qualitative research based on the grounded theory approach. The data collection method involved in-depth, semi-structured interviews. The data was analysed using the MAXQDA software in three stages: open, axial and selective coding. The study included 22 faculty members and experienced librarians from academic libraries. The participants were selected using a combination of targeted and snowball sampling techniques.

**Findings** – The study yielded 96 open codes, 24 axial codes and 18 selective general codes related to the axial category of knowledge hiding (KH). The librarians' KH axial coding paradigm pattern was developed in an academic library setting. The study also highlighted some general consequences of KH in academic libraries, such as lobbying and creating knowledge rents, deterioration of organizational relationships and interactions, reducing the competitive advantage of academic libraries and hindering individual and organizational learning.

**Originality/value** – This study has made a valuable contribution to the identification and explanation of the factors that affect KH. In addition, it has filled a research gap within the library and information science



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(LIS) field. The findings of the study may offer managers new strategies for addressing the occurrence of KH in academic libraries, and they also add to the existing literature on knowledge management in LIS.

**Keywords** Knowledge management, Knowledge hiding, Knowledge sharing, Academic libraries, Axial coding pattern, Grounded theory

**Paper type** Research paper

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## 1. Introduction

Knowledge is valuable if it is shared with others. Knowledge sharing (KS) is an essential aspect of personal and organizational growth. It helps individuals, groups and companies to thrive and stay ahead of the competition. However, despite the well-known benefits of KS, employees are often hesitant to engage in it for various reasons. This reluctance is referred to as knowledge hiding (KH), and it has been the subject of numerous studies (Butt and Ahmad, 2020; Choudhary and Mishra, 2021). KH occurs when someone deliberately withholds information that has been requested from them, even though they possess it. Despite the efforts of managers to encourage KS, various factors, such as psychological ownership, fear of losing status, authority or extra payments, have led employees to hide their knowledge. This has resulted in widespread KH behaviour in the workplace, which is the opposite of KS.

Research has shown that conflicts, damaged interpersonal relationships, distrust and reduced performance have all resulted from a lack of KS (Kumar Jha and Varkkey, 2018). Academic libraries, as knowledge-based institutions, are no exception. Librarians, as knowledge-oriented employees, require the knowledge and experiences of their peers to carry out their daily activities, and academic libraries need their librarians' knowledge to improve their organizational services, increase performance effectiveness, foster innovation and become a learning organization. Therefore, the success of libraries is heavily reliant on academic librarians' knowledge and their willingness to share it as a vital competitive advantage. Failure to share knowledge can lead to knowledge gaps in academic libraries and negatively impact their performance and achievements (Kaffashan Kakhki *et al.*, 2021).

In addition, academic libraries have a significant impact on supporting educational and research activities in higher education. Numerous studies have analysed the value of these libraries from different perspectives, including developing students' information literacy, enhancing their information-seeking behaviour, managing customer knowledge and providing library services to faculty members. All these studies have been conducted to provide librarians with accurate information and resources, as well as to help them fulfil their role as connectors and facilitators of complementary educational and research activities in universities. Without a complete understanding of the processes that impact the formation of academic libraries as one of the quality-determining tools of higher education, we would only have an illusion of their importance. As a result, any framework, criterion, or indicators that can help us gain a better understanding of these libraries and how they generate services can be beneficial.

According to a review of the KH literature, the antecedents and consequences of this behaviour have been identified in several mostly quantitative studies. However, these studies have not been taken into account in the field of library and information science (LIS). Given the originality of the topic and the scarcity of qualitative studies in LIS, it is imperative to conduct more qualitative research in LIS. Such research will provide researchers with a better understanding of the intricacies and factors affecting the occurrence of KH behaviour among academic librarians. This could be the reason why previous researchers have been eager to expand on their findings using exploratory approaches to understand and explain the factors affecting KH (Agarwal *et al.*, 2022; Connelly *et al.*, 2019). Thus, the absence of KH studies in LIS justifies the need to obtain

accurate and precise insights into the conditions affecting the formation of KH among academic librarians.

The purpose of this study was twofold. Firstly, it aimed to identify the conditions that lead to KH behaviour and its consequences on academic libraries, from the perspective of experienced experts. The experts invited in this study were comprised of five LIS faculty members and 17 academic librarians.

Secondly, it aimed to use an axial coding approach to identify patterns in these factors to better understand their relationships. Three research questions were formulated:

- RQ1.* From the experts' perspectives, what conditions affect the formation of KH in academic librarians?
- RQ2.* What are the consequences of librarians' KH behaviour in academic libraries?
- RQ3.* What is the paradigm pattern of KH behaviour among academic librarians?

## 2. Literature review

KS is a participatory and active process where employees and different sectors of an organization interact to exchange knowledge, ideas, experiences and skills. As such, this process involves sharing knowledge openly, being confident in each other's knowledge and developing mutual competencies. However, in some organizations, employees do not share their experiences, ideas and skills for a variety of reasons, which creates a lack of KS. However, non-LIS studies show that KS and KH are two distinct phenomena and not opposing. KS is primarily developed with a prosocial intention, while KH is created with a self-focused intention. Therefore, KS procedures in organizations may not necessarily decrease KH. Studies have also discovered that KS and KH can occur simultaneously, where employees share only the most trivial aspects of their knowledge with others while keeping the more vital aspects hidden. Through the theoretical literature, it becomes clear that KS and KH may have different underlying antecedents, consequences, and mechanisms, and they can be elicited by different sources. Due to these reasons, KH has been the subject of numerous organizational research studies in recent years.

### 2.1 Organizations and knowledge-hiding behaviour

From a historical perspective, KH studies have a shorter history than KS concepts. However, with the growing interest of organizations in KM processes since the 1990s, researchers have also started examining the consequences and obstacles to KH development. In recent years, KH has received serious attention from researchers in various workplace environments (Agarwal *et al.*, 2022; Butt and Ahmad, 2020; Choudhary and Mishra, 2021; Kumar Jha and Varkkey, 2018). Given that these studies were mostly conducted in non-library environments, no clear picture of the background of this range of studies in LIS can be found. However, this should not be considered as the impossibility of KH behaviour among librarians or libraries. From this perspective, the present study aimed to provide a broad view of KH in LIS by conducting an in-depth study of the behaviour of librarians in their workplace and focused on how KH is formed as a negative behaviour in libraries.

The concept of KH, or knowledge hiding, is often compared to other negative behaviours, such as knowledge hoarding. *Knowledge hoarding* refers to the unintentional accumulation of knowledge that is not requested by another person and is not necessarily done for KH. There are two main differences between KH and knowledge hoarding. Firstly, KH occurs when knowledge holders deliberately hide the knowledge that is required by other members of the organization, which is not a prerequisite for knowledge hoarding. Secondly, KH is a

multidimensional concept, whereas knowledge hoarding is unidimensional. This study defines KH behaviour as a deliberate attempt to provide irrelevant or inaccurate information, or individuals' refusal to share their knowledge with those seeking it in the organization. Such attempts may be considered anti-social or unethical behaviour.

Many researchers outside of the LIS field have proposed a type of KH called *rationalized hiding* to better understand the KH concept. However, KH is primarily shaped in the form of knowledge evasive hiding (Kumar Jha and Varkkey, 2018). Knowledge evasive hiding refers to behaviour in which individuals intentionally provide knowledge seekers with irrelevant or inaccurate information or refuse to share knowledge with others. Therefore, although rationalized knowledge hiding is not always negative, knowledge seekers may perceive it as deceitful (Syed et al., 2021). Even though this study focuses on evasive knowledge hiding, previous research has shown that any form of KH can have harmful consequences (Kumar Jha and Varkkey, 2018) that may affect individuals, interpersonal relationships, and organizations (Butt and Ahmad, 2020).

### 2.2 Knowledge hiding and academic libraries in LIS studies

Knowledge sharing is an essential and constructive factor in academic libraries that promotes learning and generates new knowledge by circulating information among librarians and library sections efficiently. This process leads to the development of creativity and innovation in library services, which in turn improves the performance of librarians and academic libraries. Academic libraries, as a component of the university, play a crucial role in creating and sharing knowledge, as well as supporting educational activities. Therefore, they must establish mechanisms that facilitate the circulation of knowledge among librarians and prevent any counterproductive behaviour that could hinder the accomplishment of their goals. One such challenge that libraries face is KH, which may have a detrimental impact on their performance and success. This study aimed to examine the conscious attempts made by librarians to keep their knowledge hidden from others and identify the conditions and causes of its formation in academic libraries.

Table 1 outlines some of the more recent KH studies. As previously stated, the thematic gaps are quite evident in these studies in the field of LIS.

Research trend	Main research topic	References	Dominant disciplines
Theoretical foundations	Theoretical definitions; KH incentives in the organization	Anand et al. (2020), Kumar Jha and Varkkey (2018)	Human resources management; management information technology social sciences
Processes	KH patterns and the relationship between KH, leadership and management	Latif et al. (2020), Lin et al. (2020), Xia et al. (2019)	Economics; tourism; management; organizational behaviour
Consequences	Reduction of competitive advantage; reduction of innovation; reduction of knowledge-seeking	Butt and Ahmad (2020), Chatterjee et al. (2021), Zhang et al. (2022)	Organizational behaviour; Information technology; marketing; tourism; economics; management
Assessment	KH tackling frameworks; monitoring and controlling KH behaviour	Anand et al. (2020), Butt and Ahmad (2020), Choudhary and Mishra (2021)	Industrial engineering; economics; management; administration
Methodology	Quantitative; qualitative; mixed	Kumar Jha and Varkkey (2018), Xia et al. (2019)	Management; administration; industrial engineering; economics

**Source:** Authors' own work

**Table 1.**  
Studies on  
knowledge hiding  
(KH)

### 3. Methodology

For this study, an applied-qualitative method was developed after conducting a thorough analysis of theoretical concepts and principles. Based on the review of the existing scientific resources, despite the increasing number of studies on KS in LIS, investigating KH is still a relatively new area. As such, grounded theory can be an effective approach to gathering expert opinions on the conditions that influence the behaviour of academic librarians. Grounded theory is a qualitative research approach that offers a deeper understanding of a phenomenon beyond just the surface-level description. This approach primarily involves gathering information related to a phenomenon by identifying the real experiences of people, their words and behaviours when interacting with the subject of study. Grounded theory is also used to develop a theory by continuously comparing research data and formulating a set of related hypotheses.

This study demonstrates that using this particular strategy has multiple advantages. Firstly, it helps academic libraries to provide researchers with a comprehensive, rather than a unidimensional, view of KH. Secondly, it enables researchers to better understand the librarians' behaviours and interactions related to the conditions that affect KH in academic libraries. Finally, by drawing on a paradigm pattern, this study facilitates the integration of technological and human aspects that impact librarians' KH. The paradigmatic model is an essential component of the grounded theory approach developed by [Strauss and Corbin \(1998\)](#). The model is comprised of five parts:

- (1) causal conditions;
- (2) contextual conditions;
- (3) intervening conditions;
- (4) strategies; and
- (5) consequences.

At the centre of the model lies the principal phenomenon of KH, which serves as the focal point around which the activities and processes revolve. The model demonstrates the flow of activities and processes identified in the context of the principal phenomenon. Having collected the necessary data through a semi-structured interview, the MAXQDA software was used to code and analyse the data in three stages:

- (1) open;
- (2) axial; and
- (3) selective coding.

The process of coding in grounded theory can be broken down into three steps. This process allows for the data to be conceptually abstracted and reintegrated into a theory. As the data is coded in each step, the concepts are gradually extracted from the codes, categories are formed from the concepts, and a theory is developed from the categories. For example, open coding is a step more abstract than the open concepts that are recorded during interviews. In order to indicate the final open-selected codes of interviews, conceptual labelling was used. This involved examining the interview transcripts in detail, line by line, to extract all the key concepts from the interview sentences or paragraphs. Once duplicates were removed, the final open codes were selected. The axial concepts, which resulted from the classification of finalized open codes, were then categorized into a more general theme.

The study mainly examined the KH behaviour of librarians in academic libraries, resulting in the creation of a core axial category called *academic librarians' KH*. A core axial

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category is a mental representation of the phenomena that underpin the research process. This category was used as the basis for identifying and analysing other axes including causal, intervening, strategies, contextual and consequences conditions. Finally, consequences conditions were established around this primary category. These measures were conducted in the axial coding stage. The outcome of these measures formed the basis of a more in-depth analysis for selective coding. In the selective coding stage, the present study moved towards the development of grounded theory and the integration of general categories around the core axial category. Selective coding is based on the outputs of open and axial coding (Strauss and Corbin, 1998). Thus, it is defined as focusing on integrating and modifying general categories. Attempts were made, at this stage, to integrate more accurately the conditions identified in the previous stage. To achieve this integration, it is proposed that the conditions affecting conditions or phenomena be formulated through a storyline, and an axial coding paradigm pattern be designed. These procedures and the study took seven months to complete (from mid-2022 to early 2023) but had no impact on the quality of the research.

### *3.1 Research population and sample*

According to Cresswell (2007), qualitative studies that use the grounded theory method typically require 15–20 participants on average. To determine the sample size in this study, the saturation point and Cresswell criteria were applied. The theoretical saturation was reached after 18 interviews since no new data was obtained from the next four interviews. Therefore, the required data for this study was gathered from just 22 participants. The participants were selected from faculty members and librarians who had at least ten years of experience in academic libraries. Their opinions were collected through a non-random sampling procedure that combined targeted and snowball sampling. The researchers used a snowball sampling procedure as they had insufficient information of the level of knowledge and work experience of potential librarians who could contribute to collecting the required information.

The sample consisted of individuals who were married and aged between 40 and 50 years old. They were in the middle or senior stages of their careers. Out of the 22 sample members, four librarians had bachelor's degrees, 11 had master's degrees, while two librarians and five LIS faculty members held PhD degrees. On average, the sample members had 16 years of experience. Fourteen Iranian faculty members in LIS who were specifically interested in KM were identified as potential participants for the study. They were contacted, and five participants finally agreed to take part in the research. Given their familiarity with the specialized concepts, criteria, challenges and principles of KM in libraries, their participation was deemed necessary both conceptually and practically. Adopting their views in KM studies offers a valuable conceptual perspective that could help researchers identify hidden theoretical angles within the subject under study. Furthermore, their experience in library management positions could serve as a useful guide for identifying the behavioural aspects of librarians.

There were two main reasons why the presence of experienced academic librarians was necessary for this research. Firstly, their considerable work experience in academic library environments meant that they could provide valuable insights, having been in contact with other librarians for at least ten years. Secondly, they claimed to have frequently observed KH behaviour while working at academic libraries, which was another crucial factor.

### *3.2 Data collection instrument*

For this study, a semi-structured interview was used as our research instrument. The interviews were conducted between March and June 2023. All participants, except for

faculty members who already had knowledge of KH and its functions, attended a 2-h training workshop to learn about KH and its functions in organizations, especially academic libraries. The LIS teachings emphasize the importance of knowledge sharing among librarians. However, previous studies have not explored this topic in libraries. Therefore, to avoid any potential misunderstandings during interviews, it would be beneficial to hold a training workshop on this issue before conducting them. The attendees were pleased with the training session and the workshop helped clear their doubts regarding the research topic. At the end of the workshop, the attendees received translated Persian resources so that they could competently respond to the interview questions. Two weeks after the workshop, the interviews were conducted. Each member was allocated a specific interview time and given a brief overview of the topic. They were encouraged to discuss their experiences related to KH in academic libraries. Finally, the main open-ended questions were posed to them in Persian.

During the research, each interview took around 40–50 min on average. With the interviewee's permission, the interviews were recorded and significant points were noted down. The edited texts were then quickly coded and inserted into the MAXQDA software based on the recorded files and memos. The participants' identities were kept confidential. Furthermore, the content of open and axial coding was sent to some of the interviewees to confirm the accuracy of the interviewer's interpretation and revise it in case of any inconsistencies. During the course of 22 interview sessions, the researchers received feedback from the interviewees. The feedback was then used to modify the research instrument questions to ensure that a full consensus was reached. Some sample questions that were designed and used in the instrument include:

- What are your thoughts on knowledge sharing in academic libraries?
- Have you ever been in a situation where you needed to learn something from other librarians but were turned down?
- Have your colleagues ever given you incorrect information when you needed specialized knowledge?
- In your opinion, what factors are important in the KH behaviour of academic librarians?
- Are there any specific reasons why KH has increased or decreased in academic libraries?
- What are the strategies that librarians use to share knowledge?
- What are the significant consequences of increasing the KH of academic librarians?

When the researchers felt that continuing the semi-structured interview would no longer add any new value to the subject under investigation, they ended the interview.

### *3.3 Validity and reliability of research instrument*

Studies that explore the design of an axial coding pattern often use several criteria to ensure the validity and reliability of interview data. These criteria include credibility, transferability, dependability and confirmability. The same criteria were used to assess the validity and reliability of qualitative data in this study. The credibility criterion focuses on the validity of the research findings. In this study, the contents of recorded interviews were double-checked and revised to ensure the validity of the data and, consequently, the validity of the findings from different perspectives. In cases where ambiguities arose, an expert was re-interviewed. The transferability criterion refers to the generalizability of the findings to

other fields. Therefore, the findings were expressed in detail to other fields, environments or researchers to ensure qualitative generalizability. To meet the dependability criterion, all the activities in the research process were carefully collected and recorded. This ensured that the research process was reliable. Finally, to meet the confirmability criterion and confirm the findings of this study, all recorded, labelled and files of interpretations and inferences were saved. These files were made available to other researchers to approve, if necessary.

#### 4. Results

The present research has revealed some interesting findings about KH among academic librarians. Tables 2–6 present the results obtained from the selective open coding of the open coding stage, the axial concepts of the axial coding stage, and the selective general categories of the selective coding stage. In the first stage, initial open codes were derived from the analysis of expert opinions, and the data were not refined at this level, which resulted in some duplicated codes. The final open codes were identified as the codes shared and approved by all experts. The open selective codes were the highlighted statements of the expert. After categorizing the codes, axial concepts were developed for each category

A selection of the final open codes	Axial concepts	Selective general categories
Fear of losing status and position Librarians' sense of competing with each other Jealousy; narrow-mindedness Librarians' inability to control their negative feelings Librarians' sense of isolation and tendency towards individualism A tendency towards job and mind security Job prejudices	Behavioural performances	Personality and behavioural traits
Librarians' lack of trust in their own competencies Librarians' lack of confidence in the value of their knowledge Lack of mutual trust among librarians and fear of their ideas being robbed Negative perceived organizational trust	Perceived distrust	Librarians' level of trust
Librarians' low capabilities to transfer their knowledge Fear of being judged as professionally uncreative by their colleagues Librarians' poor skills to communicate with managers	Personal skills level	Personal capabilities and skills level
Fear of receiving negative feedback after proposing their ideas Lack of friendly relationships; counterproductive behaviours among librarians Unexplained organizational values of the library Lack of a sense of helping colleagues A sense of intense competition among librarians	Counter-values	Organizational norms and values

**Source:** Authors' own work

**Table 2.**  
Causal conditions affecting KH from the experts' perspectives



## Knowledge hiding among librarians

A selection of the final open codes	Axial concepts	Selective general categories
Librarians' lack of personal KS motivation Librarians' lack of motivation to develop social relations Not encouraging librarians to develop self-efficacy in their tasks Not appreciating librarians according to their performance Not identifying the librarians' shared interests and describing shared goals	Librarians' level of job motivation	Inappropriate KS motivational systems
Designing KS incentive and motivational mechanisms Creating an inspiring environment for librarians Specifying KS values for librarians Welcoming the librarians' new ideas in the workplace Domination of individualism over collectivism Lack of KS supporting organizational culture Not supporting the librarians' culture of generating information Lack of culture of positive interaction between librarians and managers	Motivational and value incentives  Undesired organizational culture	KS culture
Not promoting the culture of dynamic teamwork Not continuously assessing the librarians' level of individual learning Managers' not paying attention to and promoting the librarians' learning Not documenting organizational knowledge Library managers' not explaining the significance of organizational learning Developing virtual or in-person learning programs for librarians	Individual learning  Organizational learning	Lack of learning culture

**Table 3.**  
Intervening conditions affecting the librarians' KH from the experts' perspectives

**Source:** Authors' own work

around the KH central category of academic librarians. Finally, the output of the preceding two stages was used to identify the selective general categories.

Table 2 presents the conditions that contribute to the development of KH behaviour among librarians. These conditions are known as causal conditions and they explain why and how librarians approach KH, as well as the events that lead to this behaviour. The results of the analysis show that there are 19 final open codes, four axial concepts and four selective general categories that can be used to categorize these causal conditions. The interviews conducted provide various examples of these causal conditions and excerpts from these interviews are presented in Table 2:

In my experience, librarians hide knowledge when they are afraid of losing it. Therefore, they may not transfer it as required. As a result, to preserve their place in the library, they hide their knowledge from others. I strongly believe that fear, for whatever reason, can be a serious cause for KH. (Participant 5)

KH is a common organizational phenomenon that can be defined as the fear of losing knowledge and job insecurity. Recent studies have identified these factors as the causal conditions affecting KH (Kumar Jha and Varkkey, 2018). In academic libraries, librarians may develop a sense of insecurity and threat, leading them to distrust their colleagues and hide knowledge. One participant (16) expressed these sentiments, thusly:

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A selection of final open codes	Axial concepts	Selective general categories
Inability to tackle the bureaucratic structure of academic libraries in Iran Librarians' ambiguous job description Lack of clear KS strategies Lack of a desired organizational atmosphere Avoiding job rotation in libraries	Undesired organizational structure and atmosphere	Structural and managerial mechanisms
Lack of delegation of autonomy to librarians Leaders' lack of attention to organizational justice development in libraries Managers' indifference toward librarians' creative ideas Strict managerial behaviours against librarians' mistakes	Inefficient style of leadership and management	
Lack of an ongoing assessment program for librarians' social interactions Lack of a program for developing young librarians' insights Lack of KS strategic program Not giving information about the importance and benefits of KS through regular training Not using the feedback given by librarians to remove KS obstacles	Lack of organizational development and change	
Lack of the ongoing development of KS information systems Inconsistency of information technologies with librarians' communicative needs Inability to use social media due to filtering	Lack of suitable and updated technology	New information and communication technologies
Stressful workplace Strict and inflexible managerial rules and regulations Librarians' heavy workload and time stress to perform tasks Negative perceived organizational policy in libraries Job dissatisfaction due to unfairly perceived workload	Undesired workplace	Physical and social environment
Perceiving the undesired atmosphere of organizational collaboration Lack of mutual dependency on other librarians in fulfilling tasks Not encouraging librarians towards socialization Lack of unity and coherence among librarians	Lack of efficient social environment	
Not identifying library knowledge processes Not paying attention to streamlining KM processes Library managers' not emphasizing KS programs Not paying attention to knowledge documenting processes	Lack of optimization and streamlining of KS processes	Developing and implementing KM processes
<b>Source:</b> Authors' own work		

**Table 4.**  
Contextual conditions affecting the librarians' KH from the experts' perspectives

## Knowledge hiding among librarians

A selection of final open codes	Axial concepts	Selective general categories
Avoiding open communication with others Emphasizing isolation in the workplace Evading to respond to others Using a harsh and hostile tone while responding to others Postponing KS to another time or person Librarians' playing foolish and dumb Emphasizing lack of time to respond to others Highlighting personal problems to evade KS Sharing irrelevant knowledge with others Providing others with false information Misleading others from the main topic of discussion Making personal knowledge appear insignificant Having claim over personal knowledge right and emphasizing its preservation Incomplete sharing of requested knowledge with others Deliberately restricting the librarians' access to information files	Isolation and communicative silence KS reluctance  Librarians' deceptive knowledge  Knowledge coding	Promoting counter-knowledge behaviours  Avoidance behaviours  Knowledge personalization

**Source:** Authors' own work

**Table 5.**  
Strategic conditions affecting the librarians' KH behaviour from the experts' perspectives

A selection of final open codes	Axial concepts	Selective general categories
Accumulating and monopolizing knowledge to gain power Some librarians' monopolizing knowledge A cycle of mutual hostile relations among librarians Reduction of librarians' communicative skills Developing hostile behaviors among librarians Reduction of library productivity Reduction of cost efficiency and energy waste Reduction of creativity and innovation Creating negative feedback from the library The library's inability to compete with others Lack of an inspiring atmosphere for knowledge learning and KS The librarians' reluctance to be involved in the organizational learning process Reduction of librarians' level of individual learning	Monopolizing knowledge  Inefficient human relations  Weakness in performance  Lack of learning and knowledge acquisition	Lobbying and creating knowledge rents  Deterioration of organizational relationships and interactions Reduction of competitive advantage  Reduction of the level of individual and organizational learning

**Source:** Authors' own work

**Table 6.**  
Consequences conditions affecting librarians' KH from the experts' perspectives

I've witnessed the librarians who, because of jealousy and narrow-mindedness, hide their knowledge and keep their participation in specialist discussions to the least. In some other cases, I've witnessed the librarians who have opted not to share their knowledge with others because they were afraid of being judged by their colleagues. They simply act as though they do not know

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and save face by keeping silent or refraining from commenting. In other cases, even they provide others with false information that may put them into trouble. I've witnessed this behaviour several times in official meetings held in the library.

Jealousy and narrow-mindedness are traits that stem from having an opportunistic mind set, where one seeks to gain more benefits without considering the interests of others. Librarians who possess such traits tend to be more open to sharing their professional knowledge. Therefore, in an environment where there is more interpersonal competition among librarians in academic libraries, there is a higher potential for the KH behaviour to increase. Conversely, librarians who lack confidence in their own knowledge and fear being judged negatively by others are more likely to engage in KH behaviour. Librarians who are confident in their competencies have no fear of being judged by others. Participant 14 mentioned another common aspect of KH behaviour among librarians:

I, sometimes, feel that my colleagues are hesitant to discuss certain things. One cause, in my opinion, is distrust. This caution even becomes more when it comes to colleagues with whom they have a strained connection. As a result, it's a good idea to build a positive emotional and cognitive relationship with our library colleagues. If we do not get along with our colleagues well, we should not expect them to share their knowledge with us.

Recent studies have compared the effect of KH with the importance of enhancing KS by promoting friendly relationships among employees (Connelly *et al.*, 2019; Kumar Jha and Varkkey, 2018). Therefore, developing interpersonal trust is considered crucial to overcoming KH in academic libraries. However, experts suggest that there are other causal conditions that contribute to librarians' KH, which are not limited to these. More information about these conditions is presented in Table 2.

Intervening conditions can either facilitate or hinder the development of KH in academic libraries. Through the analysis of interview transcripts, 19 final open codes, five axial concepts and three selective general categories related to KH intervening conditions were identified (see Table 3). The participants shared their experiences regarding these intervening conditions:

I've experienced situations in the library when I did not receive appreciative responses to my practical and valuable ideas, especially from senior managers. Although this has not stopped me from presenting ideas to help the library to achieve its goals, I'm not sure if this has been the case for my colleagues. (Participant 7)

It is important for managers to understand the personality and psychological traits of librarians, as a lack of knowledge in this area can demotivate them from sharing their knowledge with colleagues. This, in turn, can lead to a reduction in their extra-functional behaviours. Comments made by Participants 10 and 13 as experts are particularly relevant in this context:

To me, our library has a good KS culture between colleagues and managers. This encouraging organizational culture has aided in the growth of positive interactions among the librarians, as well as the encouragement and appreciation of KS. (Participant 10)

The library where I work has held some in-service training programs, but I don't recall any ongoing training courses to cover KM topics and processes, such as KS. When I was studying LIS at university, KM topics were not included in the field. Although individual studies and self-learning in this area might improve our knowledge, I regret to say that library managers rarely show any interest in developing the librarians' individual training. (Participant 13)

Numerous studies in the field of LIS have investigated the effect of organizational culture on KS (Koloniari *et al.*, 2019; Parirokh *et al.*, 2008). These studies have found that librarians are

more willing to share their knowledge when they work in a positive KM organizational culture. Since KS is a process that involves all members of a library and is independent of librarians' personal feelings, their willingness to share knowledge will increase without any hindrance. It is also important to note that the influence of training on librarians' behaviour should not be ignored, as confirmed in previous studies. However, the formal training for KM concepts in LIS is less than five years old in Iran, and there is still no comprehensive understanding of its processes in academic libraries, as studies have shown (Kaffashan Kakhki *et al.*, 2021). Therefore, experts were expected to propose such an idea.

Expert responses to the contextual conditions that affect the development of KH in academic libraries resulted in 30 final open codes, seven axial concepts, and four selective general categories (see Table 4). Contextual conditions refer to a set of factors whose strategies and procedures affect KH. These conditions can either prepare the ground for or hinder the growth of KH behaviour among librarians. Participant 11 shared this insight:

When a library does not have a specific plan for developing KS or does not use tactics such as career rotation to enhance librarians' knowledge, my colleagues or I are more likely to be discouraged from sharing our knowledge with others.

On a similar vein, another participant mentioned:

I'll share my knowledge with my colleagues only if I receive good feedback from them. In return for sharing knowledge with my colleagues, I expect them to have good suggestions for me. I get a lot of stress and anxiety when I am pressured by library managers, especially if my manager is strict and inflexible. In such cases, I'd prefer to talk less or present ideas. (Participant X)

Yet another participant pointed out the severe workload and time constraints as the causes of librarians' KH or evading responding to colleagues:

I'm a big fan of KS in the library and I've shared my knowledge with my colleagues in different situations. Because I've a good knowledge of library technological systems, I've often answered my colleagues' questions in the library lending section where I work or other sections. With the outbreak of COVID 19, we've lost many of our clients. Before the outbreak, I remember the crowd of clients in the section, and the necessity to respond to them quickly in a short time prompted me to escape from answering some of my colleagues' questions or to postpone it. In those situations, I had no other choice but to talk less. (Participant 12)

It was found that one of the contextual conditions affecting KS is librarians' assumption about the amount of feedback they receive. Some librarians' KH behaviour can be caused by a lack of mutual knowledge exchange. Employees expect to receive something valuable in exchange for sharing their knowledge. Previous studies have shown that workload, time pressure, and burnout can negatively affect KH behaviour (Zhang *et al.*, 2022). In addition, research suggests that increased workload and time pressure might have a significant effect on the quality of relationships and interactions between librarians (Choudhary and Mishra, 2021). Effective leadership interventions and socialization processes can improve the quality of relationships and interactions among librarians. Another expert's response on this topic is given below:

I believe that the socialization of librarians is effective in the process of sharing their knowledge with others. Socialization helps to get rid of some vain prejudices. Having specific plans for informal meetings or celebrating various occasions such as colleagues' birthdays and the like will help develop interpersonal relationships and socialization. But, COVID-19 has put a stop to such plans for now. (Participant 15)

Strategic conditions refer to a collection of effective methods that can be employed to attain desired goals of positive or negative actions. During the interviews, the participants gave

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examples of various ways they use to hide their knowledge from other librarians, their superiors or other individuals (see [Table 5](#)) as illustrated by Participant 4:

Some librarians escape from responding to or sharing their professional knowledge with others by pursuing a policy of isolation in the library and their relationships with their colleagues.

To explain KH strategies used by librarians, other experts highlighted cases of asserting ownership of organizational knowledge and coding knowledge to limit sharing:

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Once I asked a colleague of mine for help in solving a job problem, he provided me with answers that I could not use in practice as they were categorized or coded vaguely. I think they are reluctant to answer me in such cases. Of course, this is not always the case. Some of my colleagues are more adept at responding to others and sharing knowledge with them. (Participant 2)

Another participant shared the following experience highlighting cases of asserting organizational knowledge ownership and coding knowledge so as not to share it with others:

Well, I think those who are reluctant to share their knowledge with their colleagues can easily escape responding by pretending foolish and playing dumb. I've experienced such situations. (Participant 2)

Librarians can employ a variety of KH strategies based on the opinions of the respondents and the information presented in [Table 5](#). This study confirms [Connelly \*et al.\*'s \(2019\)](#) findings that librarians avoid KS by using strategies such as escaping to respond to others, isolationism, feigning ignorance, personalizing knowledge and more. [Table 5](#) provides detailed information on the experts' open codes, their axial concepts and selective general categories.

The implementation of strategies outlined in [Table 5](#) had several unintended outcomes in academic libraries. After analysing the opinions of experts on the consequences conditions of librarians' KH behaviour, 13 final open codes, four axial concepts and four selective general categories were identified and listed (see [Table 6](#)). KS consequences conditions refer to the observable and non-observable effective outputs that arise due to the application of strategic and other related conditions around the core category of academic librarians' KH. These consequences were highlighted during the interviews conducted for this study:

I think one of the unfavourable consequences of KH in academic libraries is the expropriation of practical and beneficial professional information by the library's lobbies. I've seen these lobbies in library specialist sections where a group of librarians focuses on a specific task. A few examples are catalogue, acquisition, or circulation sections. This strategy, in my opinion, gives them more authority. One of the reasons for this monopoly could be a fear of other librarians' success. (Participant 6)

Another expert stated that:

I should say that one of the consequences of KH behaviour among librarians is a reduction in creativity and innovation in academic libraries. As such, we should not expect high productivity from libraries to achieve their goals or respond to stakeholders. This can greatly lower individual or group learning levels in libraries. (Participant 3)

Based on the results of the study, if KH is practiced in a library, it can lead to reduced creativity and innovation, decreased competitive advantage, greater lobbying, deteriorated working relationships and decreased levels of individual and organizational learning for librarians. These consequences have been confirmed by previous research ([El-Kassar \*et al.\*, 2022](#)). [Table 6](#) details these conditions.

According to the [Strauss and Corbin \(1998\)](#) paradigm model, [Tables 2 to 6](#) illustrate that the axial coding category was divided into 18 categories across five dimensions. These

dimensions include causal conditions, intervening conditions, contextual conditions, strategic conditions and consequence conditions, all revolve around the core axial category of the librarians' KH (see Figure 1).

It could be argued that the pattern identified in this study is not only useful for examining KH, but also for understanding the overall growth of academic libraries. KM researchers may use this pattern to empirically examine its strength and efficiency in real-world library settings. Therefore, the pattern can assist managers in academic libraries to gain a better understanding of KH. This understanding can create a supportive environment in libraries for learning and knowledge development. In addition, this pattern demonstrates the necessity of establishing a robust system in academic libraries to reduce factors that affect KH and foster collectivism and collaboration.

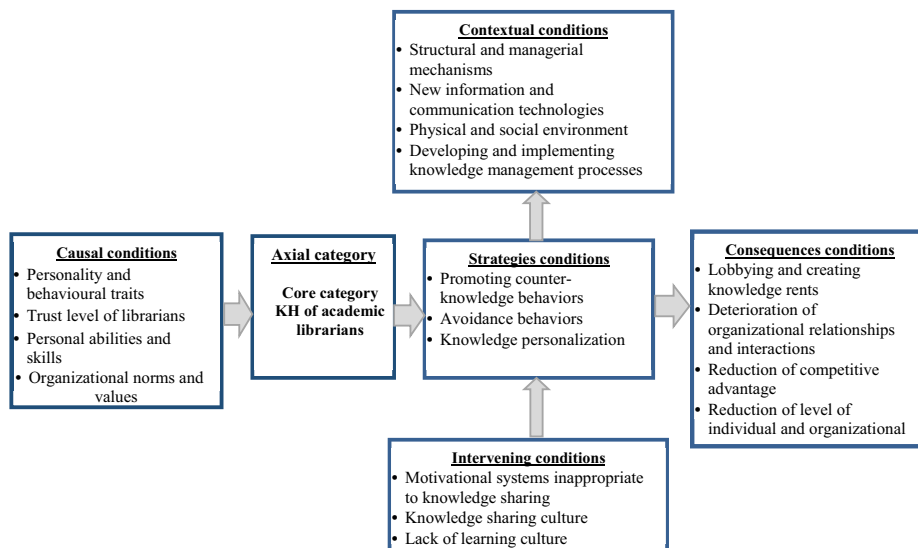
## 5. Discussion

This study explored the factors that influence academic librarians in their KH behaviour. The research aimed to answer three questions inspired by the current gap in KH research in the LIS field. Although previous studies have attempted to identify the factors that affect KS in libraries, certain questions remain unresolved providing a significant push for the conduct of this research and identifying the factors affecting KH:

*RQ1.* From the experts' perspectives, what conditions affect the formation of KH in academic librarians?

*RQ2.* What are the consequences of librarians' KH behaviour in academic libraries?

*RQ3.* What is the paradigm pattern of KH behaviour among academic librarians?



**Figure 1.**  
KH paradigm pattern of academic librarians

Source: Authors' own creation

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This study not only provided answers to the questions posed, but also gave rise to new questions that could serve as the basis for future research in the LIS field. This is a hallmark of grounded theory research, which generates robust theories that do not stop at mere answers. Through the information presented in Tables 2–6 and to answer *RQ1*, a comprehensive range of conditions affecting the creation of KH was identified from the viewpoint of the experts. In practice, this question uncovered 96 final open codes, 24 axial concepts and 18 selective general categories as the conditions influencing the development of academic librarians' KH. These results helped to attain a deeper understanding of the factors affecting librarians' KH in academic settings. Based on the results, academic library managers and policymakers can develop targeted initiatives to enhance the KS performance of librarians in response to these factors.

Table 6 presents the results of the study on the consequences of KH among academic librarians. The study identified four selective general categories, including lobbying and knowledge rent-seeking, deterioration of organizational relationships and interactions, reduction of competitive advantage of academic libraries and reduction of individual and organizational learning. The researchers formulated *RQ2* to understand these consequences, and the results show that the librarians' reactions and behavioural actions can create significant consequences in different situations from the perspective of the experts. It is crucial for academic library managers who want to promote the flow of knowledge to adopt an active approach in direct connection with librarians to understand the complexities, definitions, interpretations and behavioural actions of librarians. The pattern identified in this study can be useful for managers to prevent the consequences of KH in their libraries.

To answer *RQ3*, the axial coding paradigm pattern was used to identify 18 selective general categories in relevant conditions (as shown in Figure 1). This pattern was designed to enable the desired heuristic theory of academic librarians' KH. As a result, a systematic theory was presented in LIS by identifying the relationships between different conditions and explaining the facts of the subject under investigation. LIS thinkers have always been concerned with how to systematize the views of experts on a particular topic, and the theorization in this study was an attempt to address this concern and explain the different expert views to reach a consensus.

## 6. Conclusion

Over the past decade, academic libraries have undergone significant changes. KH can have negative effects on these libraries' success in higher education, but effective knowledge management interventions can help to control these effects. This study takes a multi-level approach to understanding the conditions that affect KH in academic libraries. This study aimed to answer three key research questions and presented documented answers to these questions. Despite the introduction of various methods, processes, initiatives and policies in academic libraries on how to share knowledge, librarians' KH behaviour is likely to persist for various reasons. Many researchers have focused on investigating productive KS behaviours in libraries and paid little attention to the conditions that shape KH behaviour or counterproductive behaviours. This study aimed to raise awareness among human resources professionals and library managers about controlling KH behaviour in libraries.

Academic libraries can benefit from the results of this study in managing KH behaviours and their consequences. To reduce the negative consequences of such behaviours, libraries can adopt methods, such as building a KS culture, minimizing job insecurity and recognizing long-term KS strategies. Failure to control or reduce the consequences of KH among librarians may lead to reduced knowledge-seeking at both individual and organizational levels, as highlighted in previous research (Butt, 2019; Chatterjee *et al.*, 2021). Therefore, academic library managers



should take the initiative to approach librarians, particularly those who are more open to the concept of KH, and use managerial techniques to create favourable conditions for libraries. To reduce the consequences of KH, managers should understand not only the experts' proposed frameworks but also the librarians' mind sets, psychological concerns, motivational mechanisms and behaviours. The conditions and factors discovered in the axial coding pattern in this study can serve as a clear roadmap to achieving this goal. This research has made several other contributions to the LIS literature, adding to its significance.

This study has two significant contributions to the LIS literature. Firstly, it proposes an efficient paradigm pattern for analysing KH from the experts' viewpoints. This is the first study of its kind in LIS and is expected to pave the way for future research on this topic. Secondly, the study is unique because it was conducted in a developing country with a non-Western context. Academic managers and librarians in other developing countries can benefit from the findings of this study. In addition, the study provides a foundation for comparing the findings of this study with those of future studies on KH in developed countries. By raising ongoing debates about the knowledge hiding in academic libraries, the study has highlighted the urgent need for qualitative empirical studies in LIS to develop more specific theoretical patterns for diverse libraries.

## 7. Theoretical and practical implications

The present study is valuable for several reasons, both theoretically and practically. Firstly, it responds to the request of [Connelly \*et al.\* \(2019\)](#) and [Skerlavaj \*et al.\* \(2018\)](#) for more research into the conditions affecting KH in different contexts and workplaces. This study is the first empirical investigation to analyse KH in the context of academic libraries and the community of academic librarians. It is important to understand the conditions affecting KH in academic libraries, as it can cause significant harm. Although the authors do not claim to have fully explained academic librarians' KH or provided a solution to it, the study contributes to the construction of the KH paradigm. It identifies the conditions affecting KH and how it may emerge in librarians, as well as its strategies and consequences in academic libraries.

[Tables 2–6](#) highlight various conditions that affect KH in academic libraries. To mitigate this negative phenomenon, academic library managers should promote teamwork, encourage interaction between librarians and managers, develop cooperation networks to support knowledge sharing, maintain transparency, socialize and train librarians, enhance their commitment and build organizational trust. Academic library managers can use the findings of this study to better understand the conditions that lead to KH behaviour and take steps to reduce or eliminate its consequences by enforcing strict standards and respecting librarians' KS behaviour. Regular seminars, gatherings or casual meetings that encourage academic librarians to participate can strengthen the belief that "knowledge sharing is power". This can also influence librarians' decisions about whether, how and with whom to share their knowledge.

## 8. Future suggestions and research limitations

The results of this study were based on the opinions of only 22 experts, so it is important to use them with caution when considering other types of libraries. To strengthen these findings and gain deeper insights into KH in LIS, additional qualitative and quantitative studies exploring KH should be conducted. It is recommended that a similar study be conducted among faculty staff and researchers to explore new dimensions of KH and compare the findings with those of this study. The research was conducted in academic libraries in Iran, and it was found that there were no significant cultural or geographical differences in the viewpoints of the experts. However, future studies could focus on intercultural or geographical influences on the experts' opinions. This study was conducted after the outbreak of COVID-19, and the limitations caused

by the outbreak may have affected the experts' perception of the conditions, ethics, and views. Any potential limitations or biases in the research will be eliminated by collecting longitudinal data at multiple periods or in the post-COVID-19 age. Despite all the limitations, the objectives of this study were well achieved.

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### Further reading

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