Forensic Accounting, Preventing And Detecting Fraud: A Systematic Literature

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Abstract: This research was conducted to map and describe research related to forensic accounting in preventing and detecting fraud. A sample of 31 Scopus-indexed literature was selected using the PRISMA method. A selection of 51 pieces of literature was then analyzed using the SLR method and assisted by VOSViewer software. The results of this research show that literature with the keyword Fraud is the literature that is most related to the keyword forensic accounting, thus indicating that forensic accounting research related to Fraud research is carried out more often than other topics.

Keyword: Forensic Accounting; Fraud; Fraud Detection; Fraud Prevention

INTRODUCTION

The increasingly advanced development of the economic world has had a significant impact on society and provides benefits both directly and indirectly in material and non-material forms. However, the fact is that economic development also triggers business competition, which can emphasize fraudulent activities. In a complex and dynamic business environment, fraud is a severe threat that can disrupt the integrity of financial reports, damage the company's reputation, and cause investor confidence (Sudarmadi, 2023). Fraud is a global issue impacting business, especially in countries facing financial crises. This complex phenomenon affects all leading economic indicators (Burzinji et al., 2022).

In Indonesia, there was an act of fraud in 2018 involving a State-Owned Enterprise (BUMN) by PT Garuda Indonesia Tbk by manipulating performance facts and actual financial position (Christian, Jessica, & Rionaldo, 2021). Another fraud case still unsolved to date is the Century Bank case, which caused losses to the state of almost 6.7 trillion (Sayyid, 2015). Meanwhile, fraud also occurred in India when Satyam Computer Services Limited was revealed to have manipulated financial reports, including inflation of income, profits, and cash amounts reported by the company, causing a loss of trust from clients and investors (Bhasin, 2013). Another act of fraud occurred in the United States by a medical rehabilitation company, namely HealthSouth, by manipulating financial reports, embezzling funds, and other fraud (Chaube, 2006).

Fraudulent acts in Indonesia and other countries cause losses and impact various aspects of life. According to Tekavčič and Damijan (2021), it is difficult to estimate the level
of fraud in the world because the impact of losses experienced can be shocking for the world economy, destroying hopes of prosperity and economic efficiency in the future. The global impact of fraudulent activity is challenging to estimate because fraudulent acts often receive little attention and are not reported. However, according to information revealed in the 2014 ACFE (Association of Certified Fraud Examiners) report, every year, a company loses 5% of its revenue due to fraudulent acts, and it is estimated that this loss reaches almost $4 trillion globally (Mittal, Kaur, & Gupta, 2021). This condition proves that fraud is a challenge for today's modern economy and can even occur widely and quickly because fraud occurs anywhere and anytime without being easily detected (Firmanza, Abidin, & Ruswanda, 2022).

Fraud or deception is an act of cheating by presenting false financial information to deceive or obtain unlawful financial gain, which is carried out intentionally; the losses experienced are usually in the form of money or assets that can be assessed (Imam, Kumshe, & Jajere, 2015). According to Indonesia Corruption Watch (ICW), fraud can be classified into four types: misuse of company assets, manipulation of actual financial conditions in presenting reports to gain profit, committing bribery, corruption, price gouging, and fraud through information technology (cybercrime). Such as ATM hacking. In practice, campaign finance reports have been manipulated by six political parties in Indonesia based on the results of ICW investigations in 2009. Allegations of manipulation of price fixing and inflated flight costs and operational costs for Hajj funds worth IDR 1.28 trillion also occurred in 2008. All fraudulent activities will cause losses to several parties involved (Ginting et al., 2021). Likewise, price gouging, bribery cases, and ATM hacking impact material losses, regulation changes, and loss of trust for the parties involved.

From a public accountant's perspective, fraudulent activity is a severe problem because it relates to the reputation of public accountants, especially auditors (Marpaung, 2016). The process of examining financial reports by auditors aims to evaluate and examine a company's financial records to ensure that accounting standards present the financial reports. However, there is the possibility of auditor failure in detecting fraud caused by several factors. Another case of failure to detect misstatements by auditors occurred in Japan. ChuoAoyama is an audit company tasked with examining the financial reports of Japan's largest cosmetics and textile company, Kanebo. Kanebo's fraud was aimed at avoiding bankruptcy because he had an excessive debt of 250 billion yen. According to Numata and Takeda (2010), his failure resulted in a decline in the share prices of ChuoAoyama's clients.

Fraudulent activities, which are increasing worldwide, impact the need for prevention and detection in uncovering fraudulent acts to minimize the losses obtained. Efforts to detect and prevent fraud must be taken seriously in the central and regional government sectors (Priyadi, Hanifah, & Muchlish, 2022). The formation of International Financial Reporting Standards (IFRS) or Generally Accepted Accounting Principles (GAAP) accounting standards by the independent International Accounting Standards Board (IASB) is one form of effort to minimize fraudulent activities, which aims to strengthen financial reporting standards and increase transparency. One of the government's efforts to prevent fraud is to collaborate with educational institutions to provide special education and training programs and establish new institutions with the House of Representatives (DPR). Meanwhile, other fraud prevention efforts can be carried out by applying forensic accounting science in companies and other sectors. Forensic accounting is the application of specialized knowledge and specific skills to identify evidence of economic transactions used in the investigation process. The result is an accounting analysis suitable for the court and used as evidence of fraud for the basis of discussion, which helps resolve disputes (Enofe, Olorunnuho, & Eboigbe, 2015). According to Kaur, Sood and Grima (2022), even though external auditors carry out examinations of financial reports, they cannot detect fraud that may exist in financial reports, which is why the demand for forensic accounting is increasing.
According to Sarker (2020), in his research, forensic accounting is a positive step both for Bangladesh and in the global context in fraud prevention and detection, so it needs to be introduced and practiced widely. In line with Navarrete and Gallego (2022), they concluded that applying forensic accounting techniques can contribute to efforts to prevent fraud in financial reports, both when a risk is detected and has already occurred. Proof of its application was carried out by Firmanza, Abidin and Ruswanda (2022), who showed that forensic accounting can resolve legal fraud problems that occur in Indonesia, both in court and outside court. The application of forensic accounting services in Islamic Banks and Conventional Banks in Malaysia was also proven by Abdulrahman et al. (2020) to be by the court's needs in supporting discussions and debates in the form of related evidence. However, based on research by Das (2020), forensic accounting has not yet developed in the Indian economy. However, forensic accounting plays a role in the development process, which is not optimal after increased fraud.

The basis for conducting this research is that many previous studies discuss forensic accounting and fraud, so this encourages researchers to carry out mapping and provide an overview through the systematic literature review (SLR) method for further research in forensic accounting in preventing and detecting fraud.

**METHOD**

This research uses the SLR method to collect and map literature regarding forensic accounting. The results of this method are an overview of literature mapping on forensic accounting to prevent and detect fraud, which is helpful for further research.

To support research well, researchers use EndNote software to make it easier to manually carry out the literature selection process based on keywords and VOSViewer software functions for processing literature through simple visualization. The results of this software processing are in the form of related discussions between literature. The objects used in this research are international journals indexed by Scopus in the 2013-2023 period. The stages in the analysis process are as follows:

1. **Selection of article via EndNote**
2. **Mapping via VOSViewer**
3. **Article selection via EndNote**
4. **Mapping literature in the form of tables**
5. **Interpret the results of the analysis**
6. **Analyze based on processing results**

Source: Data Analysis Technique

a) Selecting literature via the Scopus website with the keywords "fraud, fraud detection, forensic audit, auditing, fraud triangle theory, fraud theory, fraud prevention, financial fraud, audit, fraud pentagon theory, fraud diamond theory, fraud detection technology usage, fraud control, fraud detection and prevention methods, forensic accountants, forensic chartered accountants, cyber fraud."

b) Carry out mapping via VOSViewer software with a minimum number of keyword occurrences of 5, resulting in the keywords "fraud, fraud detection, auditing, forensic accounting, corporate governance."

c) Carry out mapping again based on five keywords by selecting literature using EndNote software.
d) Carry out an analysis related to the latest literature based on the results of the overlay visualization analysis in the VOSViewer software

e) Interpret the results of the analysis of the latest literature and the relevance of the literature discussion according to the year described

f) Map the literature in the form of a table sorted by the latest year and consisting of the researcher's name, research results, research title, research journal, and country of origin of the research.

Sample Selection

Sampling using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) method helps researchers conduct literature reviews and map journals.

<table>
<thead>
<tr>
<th>Literature research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database: SCOPUS</td>
</tr>
<tr>
<td>Search limit: articles that have related keywords (IC1)</td>
</tr>
</tbody>
</table>

Search result (n=72)

Screening on the basis of year and access (IC2) (n=53)

not included IC2 (n= 19)

Screening on the basis of related keywords (IC3) (n=51)

not included (IC3) (n= 2)

Sample (n= 51)

Figure 1. PRISMA flow diagram

Defining literature eligibility criteria is determined by inclusion criteria (IC) where:

(1) IC1: literature that has the keywords "fraud, fraud detection, forensic audit, auditing, fraud triangle theory, fraud theory, fraud prevention, financial fraud, audit, fraud pentagon theory, fraud diamond theory, fraud detection technology usage, fraud control, fraud detection and prevention methods, forensic accountants, forensic chartered accountants, cyber fraud."

(2) IC2: literature published in the 2013-2023 period and has comprehensive access

(3) IC3: literature with the keywords "forensic accounting, fraud, fraud detection, auditing, corporate governance."
RESULTS AND DISCUSSION
VOSViewer Analysis

The darker the color (blue) displayed, the longer the research topic. The blue color refers to the keyword auditing. On the other hand, the brighter the colors (green and yellow) displayed, it shows that the literature discusses the latest topics. Some keywords in green are fraud detection and fraud, while those in yellow are corporate governance and forensic accounting. Literature containing forensic accounting is related to 5 other keywords: auditing, fraud detection, fraud, and corporate governance. (Figure 2)

The literature with the keyword "forensic accounting" is connected to the literature with the keyword "auditing," which is dark blue. This means that the topic of forensic accounting related to the discussion of auditing is a topic that has been researched for a long time, namely before 2012. (Figure 3)
Research that refers to keyword auditing has been conducted in the USA by Dutta, Caplan and Marcinko (2014), finding cases that were successfully applied to undergraduate and postgraduate programs by illustrating weaknesses in poor corporate governance structures due to the opportunity for executives and directors to hide investment losses for more than two years. In line with research by Chui and Matson (2019) in the same country, a case suitable to be applied in forensic accounting subjects by acting as a forensic investigator in investigating suspected fraud using the fraud triangle theory.

Research by Alshurafat, Alaqrabawi and Al Shbail (2023) in Jordan states that forensic accounting courses' learning and teaching process is adjusted to the learning objectives. Meanwhile, research in the USA by Kern and Weber (2016) shows the benefits of accounting expertise in developing an understanding of forensic accounting through classroom learning.

Research originating from Nigeria by Popoola, Che-Ahmad and Samsudin (2015) found that fraud response mediates between fraud prevention actions and the level of knowledge in the context of prevention, detection, and response to fraud. In the same country, research by Adesina et al. (2020) states that the involvement of experienced and expert forensic auditors contributes to correcting financial fraud and creates trust in the Nigerian banking sector.

Research conducted in Jordan by Mansour, Ahmi and Popoola (2020) shows that personality factors moderate the relationship between skills, such as forensic accounting and auditors, with the thoroughness in carrying out fraud risk assessment tasks in the Jordanian public sector. Research in the same country by Abu-Tapanjeh and Al-Sarairah (2021) states that certified public accountants and auditors in Jordan have the ability to apply various fields in forensic accounting and the availability of components needed to use forensic accounting.

Research by Alsheikh, Alsheikh and Kareem (2022) in Saudi Arabia states that failure in implementing forensic accounting can be predicted by several factors, in line with Ebaid (2022) finding weaknesses in the integration of forensic accounting into accounting education at Saudi Arabian universities.

Source: VOSViewer

Figure 4. The relationship between forensic accounting and fraud detection

Literature that discusses forensic accounting is also related to literature that has the keyword fraud detection showing green; this shows that research topics related to fraud detection have been carried out before and after 2016. (Figure 4)

Research on keyword fraud detection was examined in Indonesia Prabowo (2015), which shows an increasing need for forensic accounting services to fight money laundering. In line with research in Ghana by Afriyie et al. (2023) concluded that there is a high demand for skilled forensic accounting experts to detect, prevent, and reveal weak systems.
Research Sihombing and Muda (2019) in Indonesia states that several factors significantly impact the auditor's ability to identify fraudulent acts. This is proven by research Oyerogba (2021) that the power of forensic auditors is important in predicting the ability to detect fraud in the Nigerian public.

Research by Alrawashdeh et al. (2021) in Saudi Arabia found the fact that information technology strengthens the role of forensic accounting in detecting acts of fraud, in line with research in Pakistan by Hassan et al. (2023) proving that information technology and corporate governance help in detecting fraud and And reducing fraud by minimizing opportunities, rationalizations, pressures, and potential employees' ability to commit fraud.

Research conducted by Máté et al. (2017) in Hungary shows unsustainability in the application of Benford's law in wholesale trading companies, indicating the potential for manipulation of financial statements; however, research Aggarwal and Dharni (2020) in India proves the effectiveness of Benford's law in detecting companies suspected of being shell companies.

Research conducted in the USA (Quirin & O'Bryan, 2014) found cases to be used as tangible examples of how forensic accountants can provide additional value in the field of litigation. Research in the same country by Cooper and Kawada (2022) stated that efforts to apply skills beyond the scope of conventional accounting are essential for use in fraud detection and forensic accounting practices.

Research conducted in 2021 by Abbadi, Dabaghia, et al. (2021) in Jordan states that the application of forensic accounting is faced with challenges that are influenced by experience, cooperation between stakeholders, the complexity of the extent of fraud crimes, and the technology used to fight fraud. Research by Akinbowale, Klingelhöfer and Zerihun (2021) in South Africa in the same year stated that a formulation provided an overview of the possibility of combining components to prevent cyber fraud.

In 2023, research by Pitchayatheeranart and Phornlaphatrachakorn (2023) in Thailand concluded that forensic accounting had a significant and positive effect on fraud detection, risk reduction, and company productivity, while in the same year, research by Al Natour et al. (2023) in Egypt, it was found that the implementation of CAATT's application was able to moderate the relationship between auditor self-efficacy and fraud detection.

Source: VOSViewer

Figure 5. The relationship between forensic accounting and corporate governance

The literature that discusses forensic accounting is interconnected with the keyword corporate governance and shows a bright yellow color; this proves that the topics that discuss
forensic accounting and corporate governance have only been researched after 2018. (Figure 5)

Research in Malaysia Rehman and Hashim (2021) shows that forensic accounting is part of governance management to reduce fraud. Another study conducted in the same country Bhasin (2016) states that several primary skills are needed in the field of Financial Crime Analysis (FCA) and are used as guidelines for university teachers in designing forensic accounting curricula.

The literature that discusses forensic accounting and its relationship with research containing the keyword fraud shows a bright green color. This proves that studies examining forensic accounting and fraud can be considered new research. (Figure 6)

Research related to keyword fraud by Al-Balqa et al. (2021) in Saudia Arabia states the need to introduce special programs in the field of forensic accounting in universities based on this proven research Flynn, Belak and Andre (2020) in the USA shows that students’ knowledge can be improved through forensic accounting courses in studying Ponzi scheme cases. In line with research in the USA Hess (2022), which states that by studying issues related to the combination of narcissism, manipulativeness, and psychopathic characteristics associated with fraud, students who study forensic accounting can increase their knowledge, understanding, and application.

Research Deb (2018) in India states that if its application in government agency audits as a tool for detecting fraud is appropriate, it can bring about changes in accounting. The process of implementing investigative audit practices was also researched by Laupe et al. (2022) in Indonesia, which was proven to reduce the level of fraud revealed.

Research conducted in Indonesia by Fadilah et al. (2019) found that several skills from the field of forensic accounting influence the ability to detect fraud. Research in the same country Utama and Basuki (2022) revealed that business themes, time knowledge, reports with accounting, and forensic fraud themes have been identified as keywords used in disclosures on the social media platform Twitter. Research in Indonesia was also conducted by Wahyuni-Td, Haron and Fernando (2021), stating that the implementation of governance is not related to the principles of justice either directly or indirectly through preventing fraud.

Research in the USA by Kramer, Seda and Bobashev (2017) found differences in views between educators and practitioners, although both groups agreed that demand for forensic accounting services would increase. Research related to fraud in the same country was also examined by Di Gabriele and Huber (2015), stating that fraud and quantitative methods
dominate the highest percentage of research topics and approaches in published forensic accounting journals.

Research in Jordan by Omar, Mat and Chandra (2016) states that integrity plays a vital role in mediating forensic accounting with awareness of fraud. Research in the same country was also examined Tapanjeh and Tarawneh (2020), stating the need to provide the development of standards, elements, procedures, and steps related to forensic accounting to reduce fraudulent activities. In addition, research Hashem (2021) concluded that forensic accounting techniques significantly reduced the risks associated with cloud-based accounting in five-star hotels in Jordan.

Research conducted in 2020 by Sahdan, Cowton and Drake (2020) shows that not all users of forensic accounting services in the UK feel confident with the solutions offered, in addition to research in the same year in Taiwan by Yang and Lee (2020) Finding the balance scorecard results has implications for company decision makers to meet quality standards for corporate governance and fraud prevention.

Research in 2021 by Friedrich (2021) conducted in Germany showed that credible investigations could benefit through disclosure. A study in the same year by Allee, Baik and Roh (2021) in South Korea stated that increasing growth in electricity consumption was positively correlated with income and the use of discretion in accounting. In addition, research by Mittal, Kaur and Gupta (2021) in 2021 India found that applying big data technology mediates the relationship between awareness and the desire to detect fraud.

Research on fraud was also conducted in 2023 by Akinbowale, Mashigo and Zerihun (2023) in Africa, finding that neural networks can group internal fraud into three levels of risk. In the same year, research by Mandal and S (2023) in India showed the readiness of accounting professionals to adapt and develop with the help of standards in FA assignments.
### Table 1. Summary of papers

<table>
<thead>
<tr>
<th>No</th>
<th>Author/s and year of publication</th>
<th>Finding</th>
<th>Title</th>
<th>Journal</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Afriyie et al., 2023)</td>
<td>Forensic accounting experts skilled at detecting, preventing, and exposing weak systems are in high demand.</td>
<td>Forensic Accounting: A Novel Paradigm and Relevant Knowledge in Fraud Detection and Prevention</td>
<td>International Journal of Public Administration</td>
<td>Ghana</td>
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<td>2</td>
<td>(Akinbowale, Mashigo, &amp; Zerihun, 2023)</td>
<td>Neural networks have decent capabilities in categorizing internal fraud into three levels of risk. These characteristics will be applied to forensic accounting technology frameworks and the use of big data to reduce the risk of internal fraud.</td>
<td>The integration of forensic accounting and big data technology frameworks for internal fraud mitigation in the banking industry</td>
<td>Cogent Business and Management</td>
<td>Afrika</td>
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<td>3</td>
<td>(Al Natour et al., 2023)</td>
<td>There is a significant relationship between practical communication skills, psychosocial skills, accounting and auditing skills, and auditor self-efficacy. The application of CAATT can moderate the relationship between auditor self-efficacy and fraud detection.</td>
<td>The role of forensic accounting skills in fraud detection and the moderating effect of CAATTs application: evidence from Egypt</td>
<td>Journal of Financial Reporting and Accounting</td>
<td>Egypt</td>
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<td>4</td>
<td>(Alshurafat, Alaqrabawi, &amp; Al Shbail, 2023)</td>
<td>Learning objectives come from understanding the core material disseminated in Bloom’s cognitive domain. The purpose is to adapt forensic accounting courses’ teaching and learning processes.</td>
<td>Developing learning objectives for forensic accounting using Bloom’s taxonomy</td>
<td>Accounting Education</td>
<td>Jordan</td>
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<tr>
<td>5</td>
<td>(Hassan et al., 2023)</td>
<td>Corporate governance and information technology help detect and reduce fraud by minimizing opportunities, rationalization, pressure, and the ability of potential employees to commit fraud.</td>
<td>The perception of accountants/auditors on the role of corporate governance and information technology in fraud detection and prevention</td>
<td>Journal of Financial Reporting and Accounting</td>
<td>Pakistan</td>
</tr>
<tr>
<td>6</td>
<td>(Mandal &amp; S, 2023)</td>
<td>Demonstrating the readiness of accounting professionals to adapt and develop with the help of standards in FAI assignments, proven results FAIS 410 received the highest average score. In contrast, Evaluating the perceived usefulness and fairness of forensic accounting and</td>
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<td>7</td>
<td>(Pitchayatheeranart &amp; Phornlaphatrachakorn, 2023)</td>
<td>FAIS 240 received the lowest average score.</td>
<td>investigation standards</td>
<td>Forensic Accounting and Corporate Productivity in Thailand: Roles of Fraud Detection, Risk Reduction and Digital Capability</td>
<td>Management and Accounting Review</td>
</tr>
<tr>
<td>8</td>
<td>(Alfordy, 2022)</td>
<td>Forensic accounting significantly and positively affects fraud detection, risk reduction, and company productivity. Fraud detection significantly positively affects risk reduction but does not affect company productivity.</td>
<td>EFFECTIVE DETECTION AND PREVENTION OF FRAUD: PERCEPTIONS AMONG PUBLIC AND PRIVATE SECTOR ACCOUNTANTS AND AUDITORS IN SAUDI ARABIA</td>
<td>Management</td>
<td>Saudi Arabia</td>
</tr>
<tr>
<td>9</td>
<td>(Alsheikh, Alsheikh, &amp; Kareem, 2022)</td>
<td>In Saudi Arabia's private and public companies, accountants and auditors are highly aware of fraud risks, responsibilities, and reporting venues. However, the average employee in a company has not received training on how to prevent and detect fraud.</td>
<td>Factors implanted in the successful implementation of forensic accounting: An empirical study on academicians and practitioners</td>
<td>Humanities and Social Sciences Letters</td>
<td>Saudi Arabia</td>
</tr>
<tr>
<td>10</td>
<td>(Badua, 2022)</td>
<td>A method is essential to introduce students to forensic accounting, which covers the topics of fraud, corruption, cybercrime, money laundering, whistle-blowing, the fraud triangle, and giving testimony.</td>
<td>Balboa security v. M&amp;M systems: Forensic accounting for determining commercial damages</td>
<td>Accounting Historians Journal</td>
<td>USA</td>
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<tr>
<td>11</td>
<td>(Cooper &amp; Kawada, 2022)</td>
<td>The reasonable and analytical application of skills outside the scope of conventional accounting is increasing, especially for use in the context of fraud detection and forensic accounting practices.</td>
<td>An exploration of accounting</td>
<td>Journal of Accounting Education</td>
<td>USA</td>
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<td>12</td>
<td>(Ebaid, 2022)</td>
<td>The weakness in integrating forensic accounting into</td>
<td></td>
<td>International Journal of Egypt</td>
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<tr>
<td>No</td>
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<td>accounting education at Saudi Arabian universities is the unsatisfactory level of integration. According to them, the right approach is to add an independent course that covers aspects and topics of forensic accounting.</td>
<td></td>
<td>students’ attitudes toward integrating forensic accounting in accounting education</td>
<td>Law and Management</td>
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<tr>
<td>13</td>
<td>(Hess, 2022)</td>
<td>In studying cases involving the combination of narcissism, manipulativeness, and psychopathic characteristics associated with fraud, students studying forensic accounting can increase their knowledge, understanding, and application.</td>
<td>The Fyre Fraud: A Case Exploring the Dark Triad Personality</td>
<td>Issues in Accounting Education</td>
<td>USA</td>
</tr>
<tr>
<td>14</td>
<td>(Laupe et al., 2022)</td>
<td>Implementing effective investigative audit practices by auditors can reduce the rate of uncovered fraud. Auditor skepticism in practice can strengthen the link between forensic accounting and reduced fraud rates.</td>
<td>AUDITOR’S SKEPTICISM, FORENSIC ACCOUNTING, INVESTIGATION AUDIT, AND FRAUD DISCLOSURE OF CORRUPTION CASES</td>
<td>Journal of Governance and Regulation</td>
<td>Indonesia</td>
</tr>
<tr>
<td>15</td>
<td>(Soneji, 2022)</td>
<td>The fraud theory approach is an investigative method that supports investigators and auditors in planning examinations based on accessible information.</td>
<td>The Fraud theories: Triangle, Diamond, Pentagon</td>
<td>International Journal of Accounting, Auditing, and Performance Evaluation</td>
<td>India</td>
</tr>
<tr>
<td>16</td>
<td>(Utama &amp; Basuki, 2022)</td>
<td>Business themes, time knowledge, reports with accounting fraud themes, and forensics have been identified as keywords used in disclosures on the social media platform Twitter.</td>
<td>Exploration of themes Twitter data in fraud-forensic accounting studies</td>
<td>Cogent Business and Management</td>
<td>Indonesia</td>
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<tr>
<td>17</td>
<td>(Abbadi, Alrawashdeh, et al., 2021)</td>
<td>The application of forensic accounting is faced with challenges that are influenced by experience, collaboration between stakeholders, the complexity of the extent of fraud crimes, and the technology used to fight fraud.</td>
<td>THE CHALLENGES OF APPLICATION OF FORENSIC ACCOUNTING IN JORDAN</td>
<td>Academy of Strategic Management Journal</td>
<td>Jordan</td>
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<tr>
<td>No.</td>
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<td>19</td>
<td>(Akinbowale, Klingelhöfer, &amp; Zerihun, 2021)</td>
<td>The validated model formulation uses a genetic solving algorithm that provides an overview of the possibility of combining components such as forensic accounting, management control systems, and bank reputation to prevent cyber fraud.</td>
<td>THE INTEGRATION OF FORENSIC ACCOUNTING AND THE MANAGEMENT CONTROL SYSTEM AS TOOLS FOR COMBATING CYBERFRAUD</td>
<td>Academy of Accounting and Financial Studies Journal</td>
<td>Afrika Selatan</td>
</tr>
<tr>
<td>20</td>
<td>(Al-Balqa et al., 2021)</td>
<td>Court involvement is essential in increasing understanding of fraud records and the techniques used. In addition, there is a need to introduce special programs in forensic accounting at universities.</td>
<td>THE ROLE OF COURTS AND UNIVERSITIES IN ACTIVATING THE FORENSIC ACCOUNTING TO DISCOVER FINANCIAL FRAUD</td>
<td>Academy of Accounting and Financial Studies Journal</td>
<td>Saudi Arabia</td>
</tr>
<tr>
<td>21</td>
<td>(Allee, Baik, &amp; Roh, 2021)</td>
<td>Increased growth in electricity consumption is positively correlated with income and the use of discretion in accounting and is reflected in the restatement of financial statements, the quality of audit opinions, and regulatory enforcement measures.</td>
<td>Detecting Financial Misreporting with Real Production Activity: Evidence from an Electricity Consumption Analysis</td>
<td>Contemporary Accounting Research</td>
<td>South Korea</td>
</tr>
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<td>22</td>
<td>(Alrawashdeh et al., 2021)</td>
<td>Information technology strengthens the role of forensic accounting in detecting fraud. Still, the use of information technology in forensic accounting is influenced by the cost of information technology infrastructure, lack of training, and high costs related to providing technology.</td>
<td>The role of technology in activating the use of forensic accounting in financial fraud detection</td>
<td>Academy of Strategic Arab Saudi Management Journal</td>
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<td>Signals that an investigation is reliably connected to upcoming disclosures can provide an advantage, so companies may benefit by refusing to disclose information.</td>
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<td>Awareness of forensic accounting positively impacts practitioners’ desire to utilize it to detect fraud. In addition, applying big data technology mediates the relationship between this awareness and the desire to detect fraud.</td>
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<td>Forensic accounting directly impacts Sustainable Corporate Governance, and forensic accounting is part of governance management to reduce fraud and achieve corporate governance goals.</td>
<td>Can forensic accounting impact sustainable corporate governance?</td>
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<td>Personality factors moderate the relationship between skills, such as forensic accounting and auditors, with the level of thoroughness in carrying out fraud risk assessment tasks in the Jordanian public sector.</td>
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<td>(Chui &amp; Matson, 2019)</td>
<td>Case studies act as forensic investigators in investigating suspected fraud using the fraud triangle theory, which is suitable for application in forensic accounting.</td>
<td>Embezzlement at the Grandview community recreation association</td>
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<td>(Fadilah et al., 2019)</td>
<td>Several skills from the field of forensic accounting, including auditing skills, communication skills, psychological, criminological, and victimological understanding, and ICT skills, influence the ability to detect fraud. In contrast, investigative skills, legal skills, and accounting knowledge have no effect.</td>
<td>Forensic accounting: Fraud detection skills for external auditors</td>
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<td>(Jamieson et al., 2019)</td>
<td>Employees have great potential as effective supervisors in preventing fraud and unethical decisions in the company. By expanding the scope of forensic accounting education, it can contribute to dealing with fraud problems.</td>
<td>FINANCIAL SHENANIGANS: THE IMPORTANCE OF ANTI-FRAUD EDUCATION</td>
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<td>(Sihombing &amp; Muda, 2019)</td>
<td>Some factors, such as forensic accounting variables, training, experience, workload, and level of skepticism, significantly impact the auditor's ability to identify fraudulent acts.</td>
<td>The effect of forensic accounting, training, experience, workload, and professional skepticism on auditor's ability to detect fraud</td>
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<td>(Deb, 2018)</td>
<td>Corruption and laxity in accounting influence government agency audits and if appropriately implemented to detect fraud, can bring about changes in accounting.</td>
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<td>(Kramer, Seda, &amp; Bobashev,</td>
<td>There are significant differences in views between</td>
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<td>educators and practitioners. However, both groups agree that demand for forensic accounting services will increase and prefer separate study programs or degrees at postgraduate and undergraduate levels.</td>
<td>accounting education</td>
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<td>(Máté et al., 2017)</td>
<td>discrepancies between forensic accounting practices and Benford law in some situations</td>
<td>Fraud detection by testing the conformity to Benford’s law in the case of wholesale enterprises</td>
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<td>(Bhasin, 2016)</td>
<td>Critical skills, written and verbal communication, legal knowledge, audit skills, deductive analysis, flexibility in investigations, analytical skills, and the ability to solve complex problems are the main skills needed in the Financial Crime Analysis (FCA) field. They are guidelines for higher education teachers in designing a forensic accounting curriculum.</td>
<td>Contribution of forensic accounting to corporate governance: An exploratory study of an Asian country</td>
<td>International Business Management</td>
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<td>(Kern &amp; Weber, 2016)</td>
<td>This class examines the injustices that arise from insufficient resources to pursue fraud perpetrators, including a lack of funds to conduct examinations and, on the other hand, to utilize accounting expertise to develop an understanding of forensic accounting.</td>
<td>Implementing a “real-world” fraud investigation class: The Justice for fraud victims project</td>
<td>Issues in Accounting Education</td>
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<td>(Omar, Mat, &amp; Chandra, 2016)</td>
<td>Integrity plays an important role in mediating forensic accounting with fraud awareness.</td>
<td>Key drivers in enhancing fraud awareness: A survey of practitioners</td>
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<td>(Di Gabriele &amp; Huber, 2015)</td>
<td>Fraud and quantitative methods dominate the highest percentage of research topics and approaches in forensic accounting research.</td>
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<td>(Prabowo, 2015)</td>
<td>Showing respondents’ agreement with the importance of forensic accounting subjects in the undergraduate accounting curriculum at Indonesian universities, it also shows the increasing need for forensic accounting services to fight money laundering.</td>
<td>The Perceived Forensic Accounting Education Development in Indonesia</td>
<td>International Journal of Applied Business and Economic Research</td>
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<td>(Dutta, Caplan, &amp; Marcinko, 2014)</td>
<td>This case illustrates how flaws in poor governance structures allow company executives and directors to hide investment losses for over twenty years, so this case has been successfully used in undergraduate and postgraduate courses covering forensic accounting.</td>
<td>Blurred vision, perilous future: Management fraud at Olympus</td>
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<td>(Quirin &amp; O'Bryan, 2014)</td>
<td>This case provides an opportunity to explore the benefits of public records for forensic accountants; it does not involve allegations of fraud but rather provides a concrete example of how forensic accountants can provide additional value in their field of litigation.</td>
<td>The Mobile Home Monster: A Forensic Case in the Use of Public Records to Locate Assets</td>
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CONCLUSION

From the analysis that has been carried out, it can be concluded that the literature that is most related to forensic accounting literature contains the keyword fraud. This shows that forensic accounting research related to research reviewing copy is carried out more often than other topics.

The limitations of this research are the challenges in the literature screening process, which is sometimes difficult to access, and the literature selection process, which is carried out manually.

Suggestions for future researchers include increasing research that discusses corporate governance. This is based on the analysis of the VOSViewer literature with the keyword corporate governance having a dim color, thus indicating that forensic accounting literature related to corporate governance literature is rarely accurate.

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