Auditors’ narcissism and their professional skepticism: evidence from Iran

Mohammad Hossein Safarzadeh
Faculty of Management and Accounting, Shahid Beheshti University,
Tehran, Islamic Republic of Iran,
and
Mohammad Amin Mohammadian
Shahid Beheshti University, Tehran, Islamic Republic of Iran

Abstract

Purpose – This study aims to examine the association between Iranian auditors’ narcissism and the auditors’ professional skepticism.

Design/methodology/approach – The authors’ sample is comprised of 355 professional auditors working in the private and public sectors in Iranian firms in 2022. The authors use cross-sectional multivariate regression as the main methodology, along with the structural equation modeling (SEM) technique.

Findings – The authors find that a higher level of narcissism leads to a greater level of professional skepticism among auditors, which ultimately can enhance the quality of the audit process. The results provided via the robustness tests also supported this finding.

Originality/value – The authors’ findings further the understanding of the role of narcissistic personality traits in improving professional skepticism among auditors of an Islamic and emerging country. In addition, audit firms and audit partners can also consider the findings of this study and enhance the effectiveness of audit processes by assigning appropriate employees with certain personalities to specific tasks.

Keywords Professional skepticism, Narcissism, Auditor personality, Iran

Paper type Research paper

1. Introduction

The change in the standard-setting approach and tendency to apply principle-based accounting standards have resulted in more frequent usage of fair values, management judgments and complicated estimates in financial reporting and accounting standards, which in turn, have highlighted the role of judgmental elements in audit process (White, 2010). In the same way, the notion of “professional skepticism” as one of the essential factors influencing the audit quality and decision-making of auditors, has become increasingly important, such that this concept is currently one of the main principles of auditing standards (Public Company Accounting Oversight Board, 2017). Based on IAASB (2008), professional skepticism is a trait including a questioning mind and critical appraisal of evidence (Quadackers, 2009). Kurtz (1992) believes that apart from suspicion, skepticism propels individuals to pursue evidence and reasoning to test hypotheses. Professional skepticism is an inseparable part of financial statements auditing and its application has been emphasized in academic and professional texts (Kadous, 2000; Nelson, 2009; Hurtt et al., 2013). Furthermore, regarding the remarkable importance of professional skepticism, this subject has been identified as one of the four strategic educational issues by the International Accounting Education Standards Board (International Accounting Education Standards Board, 2017).

JEL Classification — M42, D91

Authors are grateful to the Chief Editor and Associate Editor of the journal and reviewers for their valuable comments that have substantially improved the quality of the manuscript.

Conflicts of interest: The authors declare that they have no conflict of interest.
Considering the role of professional skepticism in auditors’ judgment and financial statements assurance, we may ask whether professional skepticism is merely a set of skills and behaviors, or whether individual characteristics also impact its formation. Some researchers emphasize the effective role of skills and another group of them highlight the effective role of individual characteristics in professional skepticism. Nevertheless, there is a notion that a combination of personal characteristics, knowledge and skills involves in the emergence of professional skepticism (Glover and Prawitt, 2014; Hurtt et al., 2013; Nelson, 2009). Glover and Prawitt (2014) claim that skepticism includes adventitious skills. Accordingly, figuring out and nurturing individual characteristics is more essential in comparison with other factors.

Given the role of individual features in the formation of professional skepticism, a question may arise as what will happen if these characteristics become disturbed? The importance of mental health is such that according to research conducted by World Health Organization (2017), a substantial number of people around the world suffer from mental and personality disorders. Auditors, like other individuals, have different personalities that may affect their audit work (Winwood, 2017). Moreover, having been revealed by existing research in the field of psychology, individuals’ personality traits or even ethical orientations can affect their decisions and alter their outlook for the consequences of their judgments (Ismail, 2014; Eagly and Chaiken, 1993, 2005). Meanwhile, on the basis of psychiatry and general and clinical psychology, narcissism is considered as an inflexible and constant personality trait including exaggeration, selfishness and a tendency to be admired by others (Rijsenbilt and Commandeur, 2013). From a cognitive perspective, narcissism is identified as relatively stable individual differences that contain exaggeration, self-love, pride and self-expression (Campbell et al., 2011). Expressing a number of significant characteristics of narcissism, some scholars such as Campbell et al. (2011), Pincus and Lukowitsky (2010), Furtner et al. (2011) and Schulze et al. (2013) noted the fictitious and deep sentiment among people about their importance and position, obsession and individual’s imagination about their prosperity, sense of being unique and exceptional, sense of entitlement, excessive sensitivity about criticism, exploiting interpersonal relationships, being jealous and having an arrogant tendency. However, personality psychologists believe that defining a specific boundary between normal and narcissistic personality is not possible. In other words, the determinative characteristics of the non-clinical type of narcissism are somewhat apparent in the behavior of most people (Paulhus and Williams, 2002; Campbell and Foster, 2007).

According to the above preface, this study aims to examine the association between Iranian auditors’ narcissism and their professional skepticism. The American Psychiatric Association (1980) defined narcissism as a substantial combination of personality traits and personality processes specified by characteristics such as authority, exhibitionism, superiority, exploitativeness, vanity, self-sufficiency and entitlement. Furthermore, professional skepticism is also introduced on the basis of components comprising a questioning mind, suspension of judgment, search for knowledge, interpersonal understanding, self-esteem and authority (Hurtt, 2010). Considering the results of prior research, it seems that narcissism and its components affect professional skepticism and its ingredients significantly. For instance, it seems logical that narcissistic auditors have a questioning mind. In this regard, Hurtt et al. (2013) state that auditors with questioning minds are less likely to be influenced by the expressions of other individuals. Additionally, narcissistic auditors appear to be more self-confident and independent in judgment as two components of professional skepticism (Vogel, 2010). Based on Padilla et al. (2007), narcissism may result in a number of negative impacts such as a lack of understanding of other individuals which can affect mutual understanding as one of the components of professional skepticism. Moreover, according to the results of some empirical studies, narcissism has a positive linkage with the delay in the production of audit reports, identifying as another
component of professional skepticism (Church et al., 2020). Hereupon, the purpose of this study is to investigate the association between auditors’ narcissism and their professional skepticism.

This study contributes to the existing audit literature in several ways. First, an investigation of the past literature shows that the impact of various factors on auditors’ professional skepticism has been studied. For instance, Nelson (2009) noticed that judgments that are based on professional skepticism are demonstrated to be influenced by knowledge, personality traits and incentives provided for auditors. Hughes et al. (2009) indicated that risk assessment is better carried out by skeptical auditors and consequently, such auditors are more likely to have desirable professional judgments. Moreover, the experience of auditors plays an effective role in providing sought risk assessment and making better professional judgments. Endrawes and Monroe (2010) investigated the role of culture on the professional skepticism of auditors. They found that judgment, decision-making and auditors’ professional skepticism differ when the culture is taken into the account. Based on the study of Coppage and Shastri (2014), the factors related to the auditor (auditor characteristics, experience and expertise, training, motivation and ethical reasoning), factors related to documentation (Confirmatory versus non- Confirmatory, subjective resources versus objective resources), Customer-related factors (e.g. risk-taking, complexity, management integrity) and external environment factors (accountability to auditors and inspectors) affect auditors’ professional skepticism and, consequently, their judgment. Mubako et al. (2017) concluded that knowledge transfer plays a key role in improving auditors’ professional skepticism. Also, Ta et al. (2022) revealed that workload and time pressure negatively impact professional skepticism. Besides all the above influential factors, personality traits and particularly the narcissism of auditors can impact their professional skepticism. The review of prior literature indicates that there are five studies including some parallels with the current research. Chou et al. (2021) investigated the relationship between auditors’ narcissism and audit quality in a sample of Taiwanese companies through an archival research. They measured narcissism and audit quality via the size of audit partners’ signatures and using clients’ reported earnings and actual misstatements, respectively. They concluded that the narcissism of the audit partners enhances the audit quality. Conducting an experimental study on a group of Chinese auditors and clients, Church et al. (2020) investigated the impact of auditor narcissism on auditor-client negotiations. They found that there is a positive association between auditors’ narcissism and audit delay. Through another experimental study conducted on 126 undergraduate students from an American university, Hobson et al. (2020) examined the effect of social interaction and dark triads (including narcissism) on the unjustified auditor trust in managers. The result revealed that in the case of lower dark triad auditors, the increase in social interactions increases the unjustified trust in managers. Marcal and Alberton (2020) through a field study investigated the relationship between dark triad personality traits (including narcissism) and professional skepticism of Brazilian independent auditors. D’Souza and De Lima (2018) and Hurtt (2010) scores were employed to measure narcissism and professional skepticism, respectively. They reported that narcissism enhances the auditors’ professional skepticism by means of self-confidence and questioning mind components. Finally, Johnson et al. (2021) implemented a quasi-experiment with 118 auditors from three international audit firms to test the mutual influences of auditor and client narcissism on the evaluation of auditors about fraudulent financial reporting risk. They found that more narcissistic auditors demonstrate lower sensitivity to client risk arising from the narcissistic Chief Financial Officer (CFO) and vice versa. In addition to existing distinctions in the subject, statistical sample and the measurement of variables between current research and the cited studies, there is a substantial difference in the case of the research environment. In fact, none of the previous researches were carried out in Islamic countries, while the present research concentrated on Iran, which is an Islamic country.
Pertaining to this, the impact of Islamic and religious beliefs on narcissism and thereupon on professional skepticism was discussed in the second contribution.

Second, the present study examines the association between auditors’ narcissism and their professional skepticism in Iran, which is recognized as an Islamic and developing country located in the Middle East. The majority of social and commercial activities in such countries are on the basis of people’s interpretation of Islamic doctrines and laws. The effect of religious opinions on the degree of narcissism has been reviewed in some studies. A Psychologist named Heinz Kohut (1966, 1972) and a sociologist named Christopher Lasch (1979) were the first scientists that took the increasing level of narcissism in Western societies into their consideration. Dubendorff and Luchner (2016) found that the level of narcissism is higher among non-religious people. Norenzayan et al. (2016) and Rowatt et al. (2014) concluded that non-religious people are less honest and more narcissistic in comparison with religious people. Hermann and Fuller (2014) also examined the level of narcissism between religious and non-religious Americans and concluded that the degree of narcissism among religious people is lower. According to the results of these researches and their parallel studies, it appears that religious tendencies can play a crucial role in the level of narcissism among individuals (in this study, auditors) and consequently, their professional skepticism.

Hereupon, Iran, as an Islamic country, is a unique environment for examining the association between auditors’ narcissism and their professional skepticism.

Third, our findings can contain significant practical implications. Employee characteristics (such as personality traits) are considered effective factors in hiring people and making decisions related to their promotion (Campbell, 2012). As a result of the findings of this study, the potential effects of auditors’ narcissism on their professional skepticism will be highlighted. Hence it can point out the implications of the audit process and its outputs. Audit firms can benefit from the results of this study and enhance the effectiveness of their audit processes when weighing the trade-offs of employing people with certain personalities. For example, more narcissistic audit partners are more likely to successfully resolve the challenges and problems in dealing with the client. In this case, a number of scholars such as Chou et al. (2021), Ham et al. (2017) and Judd et al. (2017) mentioned that the narcissism of audit partners can moderate the narcissism of managers who intend to manage the profit.

The remainder of this paper is organized as follows: Section 2 provides the theoretical foundations and hypothesis development. Section 3 is devoted to the research design, consisting of data sources, sample selection and variables. We present the results of empirical analyses in Section 4 and Section 5 concludes.

2. Theoretical foundations and hypothesis development

2.1 Professional skepticism

There is strong consensus among researchers that professional skepticism is mirrored via the judgments of auditors and their actions. The professional skepticism is affected by a number of dispositional and situational determinants (Hurtt et al., 2013; Kadous et al., 2013; Nolder and Kadous, 2014; Shaub, 1996; Hurtt, 2010). In order to drawing a clear conceptual framework and provide a deep insight into professional skepticism, this is essential to explore its exact notion. Going through professionalism involves behaving with honesty and solidarity, impartiality, competence, alertness, confidentiality and following the relevant regulations and standards (IESBA 100.5, 2021). In addition, being equipped with a vast variety of intellectual, technical, personal, interpersonal and organizational abilities is considered a necessity for professional individuals (IFAC, IES 3, par 1–3, 2002). According to Yankova (2015), professionalism encompasses a number of attributes such as a fair level of knowledge, brainpower, mental abilities and ingenuity, subordination to generally accepted values and pursuing of the public interest. To shed light on the concept of skepticism, Yankova (2015)
states that in general, skepticism implies the attitude of doubt. It necessarily includes questioning truth and knowledge claims, critical assertions and opinions as well as exertion for accuracy and clarity in definition, stability in logic and existing a fair level of proof about reasoning and evidence.

In light of the Canadian Institute of Chartered Accountants (CICA) viewpoint, skepticism and curiosity are considered the most significant features of a good professional auditor (Dennis, 2013). Hence, skepticism is an inseparable part of professionalism in auditing (Yankova, 2015). It should be noted that the term “professional skepticism” does not refer to the skeptical practices of a member of a professional accounting body (Dennis, 2013). Rather, being professional in skepticism implies adherence to the elevated ethical standards, being skillful and maintaining an acceptable level of quality and giving the public interest as a priority in comparison with self-interest or the client’s interest (Yankova, 2015).

Professional skepticism is one of the most important components of audit quality and plays a vital role in the field of auditing (Financial Reporting Council, 2010; Hurtt et al., 2013; International Auditing and Assurance Standards Board, 2012; Murray, 2012; PCAOB, 2012; Shaub and Lawrence, 2002; Yankova, 2015). Regarding to the definition introduced by International Auditing and Assurance Standards Board (IAASB), International Standard on Auditing (ISA) 200.13 (2008), professional skepticism is defined as “an attitude that includes a questioning mind, being alert to conditions which may indicate possible misstatement due to error or fraud, and a critical assessment of audit evidence”. Considering the auditing standards of Iran are exactly adopted in accordance with international auditing standards, this specification is in line with the accepted rules and auditing standards in Iran. In this regard, professional skepticism obviously has some behavioral dimensions (New Zealand Auditing and Assurance Standards Board, 2013). It commonly emerges as a mindset covering questioning attitude in the evaluation of existing proofs and evidence, information processing, judgment and decision-making (International Auditing and Assurance Standards Board, 2012). Professional skepticism is also in line with some behavioral and moral requirements, proficiency in making decisions and judgments, enough proper audit evidence and corresponding the whole audit process with the relevant auditing standards (IAASB, ISA 200.14–24, 2008; Yankova, 2015). According to Kadous et al. (2018), it also can be described as a combination of a skeptical mindset and skeptical attitude, which is reflected in the methods of thinking or information processing and cognitive evaluation of proofs and management’s claims respectively.

Professional skepticism has various determinative dimensions in the way of implementing an efficient audit process. In essence, it is particularly essential in complicated and obscure conditions during the audit process and enhances the auditor’s performance while evaluating the accounting estimates, going concern assumption and related party transactions (Australian Auditing and Assurance Standards Board, 2012; IAASB, 2012; PCAOB, 2012; FRC, 2013). Additionally, as Das and Teng (2004) stated, skeptical behavioral traits among auditors can be related to the higher-risk setting and acting more warily during audit assessments, evaluations and judgments.

In line of the strong theoretical framework for the determinative role of professional skepticism in auditing, prior scholars conducted a number of studies and investigated several factors influencing professional skepticism among auditors. Searching the auditing literature shows that the effect of factors such as partner style and team identity salience (Stevens et al., 2019), traits and personalities of auditors (Nelson, 2009; Hurtt et al., 2013; Farag and Elias, 2016; Safarzadeh et al., 2020; Samagaio and Felicio, 2022), incentives (Brazel et al., 2016), characteristics of audit evidences (Zarefar et al., 2016; Coppage and Shastri, 2014), time and audit workloads (Ta et al., 2022; Persellin et al., 2014; Westermann et al., 2014), fraud risk assessment (Payne and Ramsay, 2005; Hughes et al., 2009), auditors’ knowledge, skills and experience (Mubako et al., 2017; Carpenter et al., 2002), knowledge transfer (Rodgers et al., 2017),
auditor-client negotiation (Brown-Liburd et al., 2013), partner communications (Harding and Trotman, 2017), culture (Endrawes and Monroe, 2010), accountability (Hoos et al., 2019), gender (Ratna and Anisykurilah, 2020; Charron and Lowe, 2008), work experience (Carpenter et al., 2002), age (Ciołek and Emerling, 2019), education (Glover and Prawitt, 2014; Li et al., 2016; Che et al., 2017) and job position (Quadackers et al., 2014) has been examined on the professional skepticism of auditors. Based on our assessments, the impact of narcissism, which is a personality trait with broad psychological dimensions and a wide variety of aspects, has received less attention from previous scholars. Hence, in this study, we focus on the influences of narcissism among Iranian auditors on their level of professional skepticism.

2.2 Narcissism

The behavior of individuals in identical circumstances and situations towards a subject may be varied. Sometimes such interpersonal differences are extremely significant in others who find them unusual and strange behaviors. In this case, the person may suffer from a personality disorder. Narcissism or narcissistic personality is considered one of the most prevalent personality traits. Identified as an important combination of personality traits and processes, narcissism is associated with a number of features such as self-exaggeration while friability, obsession about success, sense of entitlement, expecting to be admired, fantasies of great power, beauty and success, hypersensitivity to criticism, autonomy, grandiosity and the tendency to exploiting others in interpersonal relationships (Raskin and Terry, 1988; Rosario and White, 2005; Ames et al., 2006; Pincus and Lukowsky, 2010; Schulze et al., 2013; Libby and Olczak, 2022).

Some scholars believe that narcissistic managers are a source of creativity and advocate innovative ideas. They frequently seek exaggeration and while relying on their own vision and leadership, take assertive and aggressive actions (Goncalo et al., 2010). Narcissists have higher self-esteem and demonstrate better behavioral health. They can be much more effective at the beginning of a personal relationship (Vogel, 2010). Further, they often display a pleasant social visage in order to attract new individuals (Kets and Balazs, 2004). Narcissists tend to optimistically and assertively carry out seemingly impossible or unlikely-to-be-successful actions in order to exhibit themselves and their abilities (Wallace and Baumeister, 2002). Narcissistic managers are looking for great achievements and often propel them to audaciously implement operational and strategic actions and accomplish new ventures (Chatterjee and Hambrick, 2007; Olsen et al., 2014; Olsen and Stekelberg, 2015; Achilli et al., 2022). With regard to the interpretation of Nietzsche, narcissists suppose themselves as superior creatures that ordinary rules do not apply to (Norberg, 2009).

However, narcissism may result in a number of negative consequences. Some researchers suggest that narcissists use their skills and abilities to deceive, dominate and threaten others. Such individuals are commonly attentive to their actual needs and believe that they deserve more love, praise and attention than they receive from others. Furthermore, they are more likely to slip and make an error in professional judgments and personal actions (Rosenthal and Pittinsky, 2006). Given the sense of entitlement among narcissists, they look down on others and follow an exploitative approach in the way of achieving their goals. Empirical evidence indicates that narcissism is associated with aggression that can impose irreversible detriments on organizations (Martinez et al., 2008). Narcissistic executive managers determine much more compensation for themselves and by pursuing this approach, strengthen their position in the organization (O'Reilly et al., 2014). Some researchers also argue that narcissists who have more pathological traits including exploitation can simply demolish the loyalty of their adherents (Paunonen et al., 2006). Such negative characteristic in interpersonal interactions, which reflects a person's lack of sympathy for others, has led several writers to attribute narcissism to destructive leadership (Padilla et al., 2007).
In addition, unconventional behaviors of narcissistic managers may affect the organizational processes comprising appointing managers, preparing strategic plans, recruiting employees and so on (Chatterjee and Hambrick, 2007). Arising from negative aspects of narcissism, auditing may be associated with some imperfections such as misjudgment about own abilities and risky decision-making by auditors. Aforesaid characteristics may result in erroneous conclusions that in turn enhance the business risks through probable complaints or penalties from supervisory bodies (Akers et al., 2014).

According to the above explanations, it can be expressed that a degree of narcissism is normal among individuals. Narcissists may be successful employees which existence brings a number of benefits to organizations. They can motivate their colleagues and lead the organization toward an admirable destination. However, excessive narcissism can cause nervousness and ostentation and eventually impose serious risks on the organization (Maccoby, 2003). Therefore, despite narcissistic managers are often so intelligent, hardworking and reputable in their field of work and can create value for the organization, their characteristics may neutralize organizational creativity and even be destructive. Consequently, narcissism is like a double-edged sword and very high or low levels can abolish the balance. For instance, striving to obtain power can turn into a destructive competition, in which the person is willing to accept each amount of cost to win, or its action lead to the exploitation of other individuals (Lubit, 2002).

2.3 The underlying theory
According to particular personality traits that psychologists have attributed to a narcissistic character, some researchers concentrated on behavioral orientations and cognitive processes of this personality type. Among existing theories describing the behavioral fundamentals of narcissists, the Dual Process theory which is proposed by Kahneman and Frederick (2002), Barbey and Sloman (2007), Evans (2008) and Stanovich (2011) provides profound insight by specifying type 1 (intuitive) and type 2 (reflective) thinking patterns and distinguishing between them. In essence, type 1 entails rapid, automatic, effortless and emotion-based processing, while type 2 is slow, endeavor-required and controlled (Yankova, 2015). In light of particular characteristics, narcissists commonly share their mental processing from the perspective of the dual thinking style that may demonstrate some distortions. For instance, as Grijalva and Zhang (2016), Miller et al. (2009) and Vazire and Funder (2006) stated, narcissists have traits connected to reflective cognition. Occupying cognitive reflection entails a self-critical attitude that propels them to biased and overstated self-evaluation (Carlson et al., 2011; Morf and Rhodewalt, 2001). Pertaining to this, the association between narcissism and behaving overconfidently can be supported from this window (Littrell et al., 2020; Macenczak et al., 2016).

On the other hand, with regard to studies conducted by Simon (1997), bounded rationality among auditors justifies the relevance of auditors’ skeptical judgments and decisions through a dual process system perspective (Olsen, 2017). In a nutshell, bounded rationality explains that based on the insufficiency of human cognition in the way of achieving optimal results suggested by conventional economic theory, real-world optimization is substituted by satisfying pragmatic solutions (Yankova, 2015). In this regard, Kahneman (2011) also specified the potential impacts of dual cognitive systems of reasoning on individuals’ judgments and decisions. Further, where people in an ordinary state simultaneously employ both automatic and controlled processing systems and experience some shifts in their proportions with regard to factors such as cognitive capacity and motivation, narcissistic personality can disrupt this normal mechanism and propels an individual to more frequent usage of one of these two systems (Evans, 2008; Smith and DeCoster, 2000; Shiv and Fedorikhin, 1999). In the case of auditors, the dual system processing in several stages of
applying judgment and professional skepticism has relevant implications and while their skill in evaluating audit evidence, especially in the cases associated with information restriction, self-confidence during the interaction with clients and making a judgment in high pressure and time-limited circumstances are more dependent on the functionality of their automatic system and heuristic processing, auditors’ controlled system and analytical processing are more relevant to the conditions requiring the analysis of complex accounting and auditing issues and also when there is a possibility of counterfactual thinking regarding the client’s risk and fraud (Koonce, 1992; Griffith et al., 2015, 2021; Grenier, 2010). Hence, as Grenier (2010) stated, dual processing not only impacts the purposes of auditors’ professional skepticism but also adjusts the movement of the fundamental factors of these purposes. Therefore, personality traits such as narcissism can pose positive or negative influences on their professional skepticism through the channel of changing the functionality and the balance of their dual system processing. Moreover, to express an alternative utilization of auditors’ cognitive process affecting their judgments about audit evidence, the cognitive theory of induction outlined by Holland et al. (1986) is a relevant theoretical framework. Based on this, the auditor’s knowledge is conducted to the goal-directed problem condition by means of the mechanism of a mental structure. Such a model is a dynamic delegation of the problem that alters by new data and outcomes of the evaluation of potential judgments (Anderson et al., 1991).

In such an atmosphere, our main concern is centered on the particular influences that narcissism has on the judgments and professional skepticism of auditors, which are inferred to be rooted in the above fundamental psychological mechanisms and influential channels of the cognitive processing systems of auditors.

2.4 Hypothesis development

As we pointed out in the previous section, narcissism among auditors causes several influences on their behavior, which in turn can impress their professional skepticism and its components. Among three different personality types defined by Sigmund Freud (1931) including narcissistic, erotic and obsessive, the narcissistic personality is considered the most complex and hardest one to investigate. Regard to Maccoby (2007), the notion of narcissism is not a malicious behavior or disease, but rather a type of personality, which in turn, can be productive or unproductive, creative or destructive, healthy or unhealthy and merciful or selfish. To put it another way, the behavioral strengths depict the productive dimension of narcissists and the behavioral weaknesses and their intensity reflect the unproductive side of narcissists. Hence, we presume to ascertain whether the narcissism of auditors enhances or diminishes their professional skepticism, we have to inquire about the potential behavioral strengths and weaknesses of auditors that originate from their narcissistic personality.

Making a comparison between different personality types, we find that narcissists are most free and they do not embrace the viewpoints of other individuals and do not obey common social pressures. As a productive characteristic, narcissists are not restricted to interior and exterior limitations and in the way of accomplishing their aims and realizing their viewpoints, they may take some risks. They are autonomous and self-governed thinkers who behave uninhibitedly, despite encountering some complications and barriers (Maccoby, 2007). In the case of narcissistic auditors, such personality traits may shape their judgments and negotiations with clients. In other words, considering that narcissistic auditors are more likely to reduce the supereminence of large clients and follow their own vision in any circumstances because of their self-centered personality, it seems credible to claim that they can better keep their independency while dealing with major and important clients (Chou et al., 2021; Byrne and Worthy, 2013). According to Hurtt (2010), such self-reliant tendencies among auditors and their ability to overcome clients’ pressure are vital and determinative to
professional skepticism. Furthermore, these behavioral traits are accordance with the independence requirements of IIAASB, ISA 200 (2008) and AICPA ET 101 (2013) which define “state of mind that permits the expression of a conclusion without being affected by influences that compromise professional judgment, thereby allowing an individual to act with integrity and exercise objectivity and professional skepticism”.

Going over the next feature of narcissistic individuals, we point out self-esteem and pride, which are considered productive aspects of narcissistic behavior. Regard to investigations conducted by Baumeister and Vohs (2001) and Rhodewalt and Morf (1998), self-esteem has been proven to have a significant positive association with narcissism and constitutes a major part of healthy or productive narcissism. It has significant interdependences with subjective well-being and mental health and encompasses positive dimensions of self that concentrate on self-investment, self-realization and self-development hence resulting in actualizing personal competencies and potentials (Baumeister et al., 2003; Wink et al., 2005; Sovine, 1999). As Boush et al. (1994) clarified, in a psychological framework, self-esteem has been defined as traits including self-confidence, self-worth and trust on own abilities and judgments. Such behavioral traits have a negative association with conformity, convinceingness and persuasiveness. In contrast, individuals with the above characteristics are expected to behave skeptically and confidently contend with other’s viewpoints, assertions and conclusions and endeavor in the way of achieving persuasive evidence rather than easily accept whatever is expressed. Therefore, in the case of narcissistic auditors, self-esteem can play a key role in shaping their professional skepticism, as it improves their ability to keep up an organized critical mindset and dispute clients’ reasoning and claims (Yankova, 2015). Moreover, without a fair level of self-esteem, the auditor may admit the client’s position and easily deny existing doubts and obscure unanswered questions, which in turn, can reduce his/her professional skepticism and deteriorate the quality of the audit. Consequently, despite not being truly expressed in the auditing standards, self-esteem is a crucial and undeniable feature in auditing and professional skepticism (Yankova, 2015).

According to Maccoby (2003), Productive narcissism also has strong association with knowledge-seeking and greedy learning. In essence, narcissism on its healthy and productive side can propel individuals to eagerly acquire information and knowledge and appeal to figuring out novel subjects and scientific facts. As Sigmund Freud (1931) stated, they have an unsatisfying and inexhaustible thirst for knowledge and learning. In psychology, the search for knowledge characteristic has been discovered through the notion of curiosity. Curiosity mirrors an individual’s appetite for knowledge. It can enhance exploration, insight, intellectual growth and the stimulation of individual interests (Yankova, 2015). In the case of narcissistic auditors and the field of auditing literature, Knowledge-seeking has significant implications and influences. To put it another way, based on the study conducted by Hurtt (2010), knowledge-seeking is considered as one of the key components of professional skepticism among auditors. Some scholars such as Ocak et al. (2022) found linkages between knowledge-seeking and continuing professional education and audit quality. In addition, Chazen and Solomon (1975) argued skepticism besides curiosity, inquisitiveness and imagination are crucial elements and essential abilities in auditing. Finally, the search for knowledge facet of skepticism has also been confirmed via the research of Love and Lawson (2009) and they describe professional skepticism as an inquisitive tendency. Consequently, it seems justifiable to expect significant association between the search for knowledge characteristic of a narcissistic auditor and his/her level of professional skepticism.

Narcissism, on the other hand, may be associated with some behavioral traits and orientations among auditors, which result in aggravating consequences on factors constituting auditors’ professional skepticism. Regard to a psychological research, narcissistic group leaders prevail in the decision process and are inclined to deny the remarks of others, which leads to undesirable group decision outcomes (Nevicka et al., 2011).
Furthermore, based on their strong feeling about their own abilities and expertise, narcissistic individuals may suppose relative optimism concerning their strengths and the probabilities of positive consequences. This can propel narcissistic partners to optimistically infer that they can simply and easily recognize and detect any problem in a client’s financial reporting system without an adequate diligent classification and evaluation of audit evidence (Chou et al., 2021).

Such behavioral orientations can be inversely associated with components of professional skepticism. For instance, as a main facet of professional skepticism among auditors, suspension of judgment encompasses withholding judgment and conclusion until providing an adequate amount of audit evidence to endorse or reject the assertions under consideration (Hurtt, 2010). Moreover, as clarified by IAASB, ISA 200 (2008), auditors are obligated not to be “satisfied with less than persuasive evidence”. Hence, a pessimist self-centered narcissistic auditor is more likely to rely on his/her skills and capabilities and ignore achieving enough credible audit evidence, which in turn, is in contrast with definitions of professional skepticism and its components especially the suspension of judgment.

Overall, based on the reasoning provided in this section, we hypothesize that narcissism among auditors is significantly associated with their level of professional skepticism. However, the overall association between auditor’s narcissism and their professional skepticism can run in either direction, depending on which forces prevail. Given that this remains an empirical issue, we do not make out a directional prediction. Thus, we posit the main hypothesis as follows:

\[ H1. \] Narcissism among auditors significantly associates with their level of professional skepticism.

### 3. Research design

#### 3.1 Sample selection

In line with our purpose to investigate the association between narcissistic personality and professional skepticism of Iranian auditors, the population consists of auditors working in public and private sector auditing firms and individual practitioners in Iran who are certified public accountants. According to statistics obtained from the Iranian Association of Certified Public Accountants in 2022, 2,778 auditors are working in public and private sector auditing firms and working as individual practitioners who are certified public accountants. We determined the sample size using Cochran’s formula. Therefore, taking 5% of error level into account, 338 auditors were chosen as our sample. In this regard, considering the non-returned and distorted ones, 400 questionnaires were sent to the intended auditors. The number of questionnaires that we do not receive and those determined as distorted were 27 and 18, respectively. Ultimately, 355 questionnaires were eligible to be employed in the final analysis.

<table>
<thead>
<tr>
<th>Selection procedure</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributed questionnaires</td>
<td>400</td>
</tr>
<tr>
<td>Minus: unreturned questionnaires</td>
<td>(27)</td>
</tr>
<tr>
<td>Minus: distorted questionnaires</td>
<td>(18)</td>
</tr>
<tr>
<td>Eligible questionnaires</td>
<td>355</td>
</tr>
<tr>
<td>Sample size determined using Cochran’s formula</td>
<td>338</td>
</tr>
</tbody>
</table>

**Table 1. Sample selection procedure**

Source(s): Table created by the authors
auditors. The questionnaires were sent manually to respondents. The response rate was 93%. In-person follow-up was the reason for the high response rate. Also, before distributing the questionnaires, they were approved by an Institutional Review Board (IRB) comprised of five members with varying backgrounds.

3.2 Variables definition and data collection

**Independent variable** In this study, a psychological variable namely the auditor’s narcissistic personality is considered as independent variable. Narcissism is a psychological term for which various definitions have been presented. We have measured this variable using narcissistic personality questionnaire (NPI-40), which was designed by Raskin and Terry (1988). The questionnaire consists of 40 items and is provided on the basis of the 3rd version of the Diagnostic and Statistical Manual of Psychological Disorders (DSM-III). One application of this questionnaire is evaluating and measuring normal or non-clinical narcissism. Furthermore, it contains significant psychometric features to assess the symptoms of non-clinical narcissism (Rosario and White, 2005). In the 3rd version of the DSM-III, eight dimensions of behavioral disorder were introduced under the title of narcissistic personality trait. Having investigated such eight dimensions, Raskin and Terry (1988) extracted seven components for their questionnaire and thereby the seven-factor version of NPI-40 was prepared.

These seven factors applied as criterion for distinguishing narcissistic personality are mentioned as follows. (1) **Authority**: as the result of authority, the person believes that he has a superior natural talent for influencing and dominating other individuals. This criterion is employed to measure the adaptive state of narcissism (Watson et al., 1992; Petronyte, 2018). Eight questions of the questionnaire are related to authority. (2) **Exhibitionism**: according to this criterion, the person tends to show off and has the tendency to be seen by others. Such person has exaggerated and supreme imaginations about himself and is unaware about his internal vacuity (Masterson, 1993). Seven Questions are related to Exhibitionism. (3) **Superiority**: it denotes the tendency of individuals to dominate individuals in various issues. Based on this feature, the person wants to be superior in all contexts and circumstances. The desire for power and control over affairs is the principal incentive for the actions taken by the person. Five Questions are related to this criterion. (4) **Exploitativeness**: it refers to the tendency of a person to abuse others; in other words, exploitativeness is the status, quality, or extent of unfair usage of other individuals or groups to obtain personal benefit or advantage (Brunell et al., 2013). Five Questions are related to exploitativeness. (5) **Vanity**: it implicates the tendency to self-exhibition among people. It commonly serves as a way to relieve insecurity and excessive self-confidence; it also can be described as a person who supposes himself superior, more important and more valuable in comparison with others and underestimates other individuals (Baumeister and Vohs, 2007). Three Questions are related to this criterion. (6) **Self-Sufficiency**: according to this component, the person considers himself independent of others and assumes his abilities are sufficient to meet his needs. In fact, self-sufficiency denotes a person’s attitude to fully accept the responsibilities of his decisions. Six Questions of the questionnaire are related to self-sufficiency. (7) **Entitlement**: an entitled person expects to receive services and respect from other people. In other words, in regard to the importance, superiority, or special characteristics that the person refers to himself, he expects other individuals to behave in a special manner with him. This component covers six questions of the questionnaire.

The NPI-40 questionnaire consists of 40 items and in each item, a pair of phrases are presented. The respondents are asked to choose one that has maximum compatibility with their situation. Each question is assigned a score of 0 or 1. The scores of 0 and 1 indicates the absence and existence of sign of narcissism, respectively. Consequently, the range of scores will be from 0 to 40 and the greater the scores an individual achieves, the higher level of...
narcissism reveals (Raskin and Terry, 1988). In this study, the reliability of the questionnaire was evaluated using Cronbach’s alpha coefficient. Accordingly, it resulted in a value of 0.82, which assumes an appropriate value. Moreover, in order to assess the convergent validity, we applied the average variance extracted (AVE) criterion. Regard to Fornell and Larcker (1981), the value of 0.5 for this criterion indicates acceptable convergent validity. The value of the AVE for the questionnaire was 0.67 which is considered an acceptable value.

**Dependent variable** In this study, professional skepticism is given as the dependent variable. This variable is measured using the questionnaire of components affecting professional skepticism provided by Hurtt (2010). According to Hurtt (2010), professional skepticism in auditing comprises six components as follows: (1) *Questioning mind*, including 4 questions, which denotes the ability of the mind to constantly ask about the accuracy of the issue during the audit (Fogelin, 1994). (2) *Suspension of judgment*, including 5 questions, which means delaying the judgment up to the availability of credible evidence to infer the result. (3) *Search for knowledge*, including 6 questions, which implies the existence of a curious mind along with an interest in searching for evidence. (4) *Interpersonal understanding*, including 5 questions, which can be defined as understanding the reasons or incentives leading to a particular behavior by the client. Regard to Hookway (1990), understanding other individuals propels the auditors to be suspicious. (5) *Self-esteem*, including 4 questions, which represent internal calmness and lack of anxiety (Lom, 2001). (6) *Authority*, including 6 questions, which can be interpreted as the auditor’s bravely deciding to assess, express and prove the audit opinion.

The questionnaire introduced by Hurtt (2010) contains 30 questions, with responses on a Likert scale ranging from 1 (strong disagreement) to 6 (strong agreement). Hence, the range of scores varies from 30 to 180, in which higher scores indicate a higher level of professional skepticism. In this study, Cronbach’s alpha coefficient has been employed to evaluate the reliability of the questionnaire and a value of 0.88 was obtained, which is considered an acceptable value. Also, we evaluated the convergent validity by the AVE criterion. Its value for Hurtt (2010) questionnaire was 0.71 which is an acceptable value.

**Control variables** Reviewing the literature (e.g. Ratna and Anisykurlillah, 2020; Ciolek and Emerling, 2019; Che et al., 2017; Li et al., 2016; Glover and Prawitt, 2014; Quadackers et al., 2014; Charron and Lowe, 2008; Carpenter et al., 2002), six variables that could have potential effects on professional skepticism are considered as our controlling variables. These include GEN which is a virtual variable that takes the value 1 for the male auditors and 0 for the female auditors; EXP which reflects the number of years the respondent has been employed as an auditor. If the auditing experience is less than 10 years, number 1, if it is between 11 and 15 years, number 2, if it is between 16 and 20 years, number 3, and if it is above 20 years, number 4 is assigned to this variable; AGE which represents the age of respondent auditor. For under 30 years old respondents, number 1, between 31 and 40 years old, number 2, between 41 and 50 years old, number 3, and for over 50 years old, number 4 is attributed to this variable; EDU which is a virtual variable that takes the value 1 if the auditor has a postgraduate degree (master and doctorate) and otherwise 0; POS defined as a virtual variable which takes the value 1 if the organizational level of the respondent is manager and partner, value 2 if the organizational level is senior supervisor and supervisor and value 3 if the organizational level is senior auditor, auditor and assistant auditor; ENV is also a virtual variable that takes the value 1 if the auditor is employed by a public sector auditing firm and 0 if the auditor is employed by a private sector auditing firm.

### 3.3 Model specifications

The following model is developed to test our main hypothesis:

\[
SKEP_i = a_0 + a_1 \text{NARS}_i + a_2 \sum \text{CONTROLS}_i + e_i
\]
Where $\text{SKEP}$ denotes the level of the auditor’s professional skepticism, which has been measured using the Hurtt (2010) questionnaire; $\text{NARS}$ is the auditor’s narcissism level, which has been measured via the narcissistic personality questionnaire (NPI-40) and $\text{CONTROLS}$ depicts six control variables applied in our study.

In this study, applying the cross-sectional multivariate regression (for 2022), the association between auditors’ narcissism and their professional skepticism is examined. Furthermore, assumptions of the linear regression, i.e., normal distribution of the error terms, autocorrelation between error terms, heterogeneity and multicollinearity, are tested using Jarque–Bera, Durbin Watson, White and variance inflation factor (VIF) tests, respectively.

4. Results
4.1 Descriptive analysis

The demographic characteristics of the participants are sown in Table 2. Regarding the information reflected in the table, about 69% of the respondents were male and the remaining 31% were female. Moreover, 69% of them have 10 years of audit experience. About 71% of the respondents were under 40 years old and almost 56% of them had a postgraduate degree, but 44% did not have a postgraduate degree. Around 26% of the respondents were employed as audit partners and audit managers, an approximate proportion of 43% was supervisor and senior supervisor and the rest were employed in one of the positions of senior auditor, auditor and assistant auditor. Also, 48% of the respondents were employed in public sector auditing firms and the rest were employed in private sector auditing firms.

Descriptive statistics related to the main variables (i.e. auditors’ narcissism and professional skepticism) are presented in Table 3. According to the results, among the components of auditors’ narcissism, the highest and lowest mean values are related to authority (5.820) and vanity (1.235) respectively, and among the components of professional skepticism, the highest mean value is related to Self-esteem (2.954) and interpersonal understanding demonstrates the lowest level with 1.532. Furthermore, the highest and lowest standard deviations among the components of auditors’ narcissism are related to exhibitionism (1.707) and vanity (0.584), respectively, and among the components of

<table>
<thead>
<tr>
<th>Variables</th>
<th>Characteristic</th>
<th>Frequency (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>69</td>
</tr>
<tr>
<td>Audit experience (years)</td>
<td>10 and under</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Between 11 and 15</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Between 16 and 20</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>21 and over</td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>30 and under</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Between 31 and 40</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Between 41 and 50</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>51 and Over</td>
<td>4</td>
</tr>
<tr>
<td>Level of education</td>
<td>Undergraduate</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>56</td>
</tr>
<tr>
<td>Job position</td>
<td>Manager and partner</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Senior supervisor and supervisor</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Senior auditor, auditor, and assistant</td>
<td>31</td>
</tr>
<tr>
<td>Work environment</td>
<td>State sector</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Private sector</td>
<td>52</td>
</tr>
</tbody>
</table>

Source(s): Table created by the authors

| Table 2. Demographic characteristics of participants |
professional skepticism, the highest and lowest standard deviations are related to self-esteem and suspension of judgment with 0.985 and 0.187 respectively.

Table 4 provides the descriptive statistics of auditors’ professional skepticism, which are classified by gender, audit experience, age, level of education, job position and working environment. The results show that (1) the professional skepticism of female auditors is more than male auditors, but this difference is not statistically significant at 5% level. Ratna and Anisykurilllah (2020) state that women consider the use of any existing information in information processing. Therefore, the professional skepticism among female auditors is far greater than male auditors. The research conducted by Charron and Lowe (2008) also

<table>
<thead>
<tr>
<th>Variable</th>
<th>Components</th>
<th>Mean</th>
<th>Median</th>
<th>St deviation</th>
<th>Max</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narcissistic</td>
<td>Authority</td>
<td>5.820</td>
<td>5.250</td>
<td>1.594</td>
<td>8.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Personality</td>
<td>Exhibitionism</td>
<td>3.270</td>
<td>3.110</td>
<td>1.707</td>
<td>7.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Trait</td>
<td>Superiority</td>
<td>2.994</td>
<td>2.840</td>
<td>1.050</td>
<td>5.000</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Exploitativeness</td>
<td>2.892</td>
<td>2.540</td>
<td>1.548</td>
<td>5.000</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Vanity</td>
<td>1.235</td>
<td>1.115</td>
<td>0.584</td>
<td>3.000</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Self-sufficiency</td>
<td>3.674</td>
<td>3.430</td>
<td>1.281</td>
<td>6.000</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Entitlement</td>
<td>4.183</td>
<td>3.805</td>
<td>1.425</td>
<td>6.000</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Professional</td>
<td>2.079</td>
<td>1.890</td>
<td>0.539</td>
<td>4.000</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Questioning mind</td>
<td>1.604</td>
<td>1.290</td>
<td>0.187</td>
<td>5.000</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Suspension of judgment</td>
<td>1.704</td>
<td>1.333</td>
<td>0.284</td>
<td>6.000</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Search for knowledge</td>
<td>1.532</td>
<td>1.350</td>
<td>0.365</td>
<td>5.000</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Self-esteem</td>
<td>2.954</td>
<td>2.750</td>
<td>0.985</td>
<td>4.000</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Authority</td>
<td>1.725</td>
<td>1.397</td>
<td>0.307</td>
<td>6.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source(s): Table created by the authors

Table 3. Descriptive statistics of variables

Table 4. Descriptive statistics of professional skepticism based on the demographic characteristics of participants

Note(s): Analysis of variance and t-test (proportionately) were employed to compare the significance of differences from the viewpoints of the participants. To examine the difference in professional skepticism based on gender, level of education, and work environment, the t-test was used, and to examine the difference in professional skepticism based on audit experience, age, and job position, variance analysis was used

* Significant at 5% level

Source(s): Table created by the authors
confirmed the professional skepticism of female managers is more than male managers; (2) Auditors with less work experience have less professional skepticism. In other words, auditors’ professional skepticism increases as a consequence of work experience increase. This difference is statistically significant at 5% level. In this regard, Carpenter et al. (2002) indicated that professional experience can lead to higher levels of professional skepticism among auditors; (3) Getting older, increases the professional skepticism of auditors. This denotes that, elderly auditors are more professionally skeptical. This difference is also statistically significant at 5% level. In this regard, Ciołek and Emerling (2019) did not report any significant relationship between age and professional skepticism of accounting students; (4) Postgraduate auditors have more professional skepticism, which is statistically significant at 5% level. Glover and Prawitt (2014) believed that education is one of the determinant factors in promoting professional skepticism. According to Che et al. (2017) and Li et al. (2016), individuals with postgraduate degrees have more professional skepticism; (5) Audit managers and audit partners represent a higher level of professional skepticism in comparison with senior supervisors and supervisors. Senior auditors, auditors and assistant auditors have the lowest professional skepticism. In fact, the higher job position of auditors results in higher professional skepticism among them. This difference is also statistically significant at 5% level. Concerning this issue, Quadackers et al. (2014) found that there is a significant positive association between job position and professional skepticism; (6) Auditors working in private sector auditing firms have more professional skepticism, although this difference is not statistically significant at 5% level.

Categorized descriptive statistics pertaining to the auditors’ narcissism variable are provided in Table 5. It represents categories such as gender, audit experience, age, level of education, job position and working environment. Going through the results, we find that (1) male auditors are more narcissistic than female auditors, but this difference is not statistically significant at 5% level. Banimahd et al. (2013) reported that the average of narcissism is

<table>
<thead>
<tr>
<th>Variable</th>
<th>Characteristic</th>
<th>Mean</th>
<th>F (t) statistics</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>2.358</td>
<td>1.644</td>
<td>0.102</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>3.924</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit experience</td>
<td>10 and under</td>
<td>4.778</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(years)</td>
<td>Between 11 and 15</td>
<td>3.652</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between 16 and 20</td>
<td>2.584</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21 and Over</td>
<td>1.483</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>30 and under</td>
<td>4.682</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between 31 and 40</td>
<td>3.618</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between 41 and 50</td>
<td>1.956</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>51 and Over</td>
<td>1.528</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of education</td>
<td>Undergraduate</td>
<td>2.573</td>
<td>3.416</td>
<td>0.003*</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>4.117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job position</td>
<td>Manager and partner</td>
<td>1.729</td>
<td>19.983</td>
<td>0.001*</td>
</tr>
<tr>
<td></td>
<td>Senior supervisor and supervisor</td>
<td>3.728</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Senior, auditor and assistant</td>
<td>4.469</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work environment</td>
<td>State sector</td>
<td>3.170</td>
<td>1.458</td>
<td>0.187</td>
</tr>
<tr>
<td></td>
<td>Private sector</td>
<td>3.685</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note(s):** Analysis of variance and t-test (proportionately) were employed to compare the significance of differences from the viewpoints of the participants. To examine the difference in narcissism based on gender, level of education, and work environment, the t-test was used, and to examine the difference in narcissism based on the audit experience, age and job position, variance analysis was used.

* Significant at 5% level

**Source(s):** Table created by the authors
different between male and female auditors and Grijalva et al. (2015) found that the level of narcissism is higher among men; (2) Auditors with less work experience are more narcissistic. It means that, as the work experience increases, the narcissism among the auditors decreases. This difference is statistically significant at 5% level. In this regard, Roberts et al. (2010) stated that an increase in work experience inversely affects narcissism; (3) Getting older, decreases the auditors’ narcissism. It points out the fact that older auditors are less narcissistic. This difference is also statistically significant at 5% level. In this context, Carter and Douglass (2018) indicated that older individuals demonstrate lower levels of narcissism; (4) Postgraduate auditors are more narcissistic, which is statistically significant at 5% level. Among the researchers who studied this subject, the research conducted by Greenberger et al. (2008) is remarkable. They found that there is a positive association between narcissism and academic education; (5) the narcissism degree of senior supervisors and supervisors exceeds the degree of the narcissism for managers and audit partners. The highest level of narcissism is attributed to senior auditors, auditors and assistant auditors. It implies that, as the job position of auditors improves, their narcissism diminishes. This difference is also statistically significant at 5% level. In this context, Banimahd et al. (2013) concluded that the average of narcissism is not equal among various auditing occupation levels and managers and partners have the least level of narcissism; (6) Auditors working in public sector auditing firms have lower levels of narcissism, although this difference is not statistically significant at 5% level.

4.2 Model estimation
The results of the model estimation are shown in Part A of Table 6. The significance level of the F statistic is less than 5%, which implies the significance of the whole regression model. Furthermore, the adjusted coefficient of determination is 0.146, which points out that more than 14% of the changes in the dependent variable (i.e. professional skepticism of auditors) can be explained through the independent and control variables. The results show that the coefficient of auditors’ narcissism is 0.146 and its significance level is 0.007, which is less than 5%; therefore, it can be concluded that auditors’ narcissism has a positive and significant association with auditors’ professional skepticism. The coefficients related to the variables of audit experience, age, level of education and job position are also positive and their significance level is smaller than 5%. It can be interpreted as, an increase in work experience, age, level of education and job position of auditors enhances their professional skepticism. This finding is also in line with the results presented in Table 4. On the other hand, in the case of gender and work environment variables, the insignificance of coefficients depicts that these two variables don’t have a significant association with the professional skepticism of auditors.

Empirically, the positive association between auditors’ narcissism and their professional skepticism support for H1. In this regard, Hobson et al. (2020) showed higher dark triad auditors are relatively more resistant to lapses in professional skepticism due to the effects of social interaction. Marcal and Alberton (2020) indicated that narcissism is positively associated with professional skepticism as it raises the auditors’ self-esteem and questioning ability. Chou et al. (2021) found that clients who opt for more narcissistic audit partners have higher audit quality and narcissistic partners can prevent the occurrence of material misstatements. Safarzadeh et al. (2020) and Paino et al. (2010) indicated that the personality type of auditors affects their audit quality; among the personality types, the conventional type had the highest and the searcher type had the lowest impact on audit quality. Samagaio and Felicio (2022) investigated the effect of auditors’ personalities on their professional skepticism and concluded that the personality traits of agreeableness, conscientiousness and openness have a positive impact on auditors’ professional skepticism, but the characteristics of extraversion and neuroticism have a negative impact on professional skepticism.
Farag and Elias (2016) also showed that there is a positive association between personality traits including agreeableness, conscientiousness, neuroticism, extraversion and openness and professional skepticism of auditors.

4.3 Robustness tests
4.3.1 Measurement of narcissism using the size of auditors’ signature. In order to strengthen the results, the auditors’ narcissism was measured using their signature size and its association with professional skepticism was investigated. For this purpose, the auditors’ signature size was extracted using the place embedded in the questionnaire. A rectangle was drawn around each signature to highlight the endpoint of the signature on each side (Zweigenhaft, 1977; Ham et al., 2017). Subsequently, using the Image-J software, the signature area was measured and the areas were squared and coded according to three groups: small (first quarter), medium (second and third quarters) and large (fourth quarter). For small signature size, value 1; medium signature, value 2 and big signature, value 3 was considered. Then, model 1 was re-estimated, in which the results are presented in Part B of Table 6.

It is obvious that the indices of the model fitness have improved in comparison with the previous model. Moreover, the coefficient of auditors’ narcissism variable is 0.132 and its significance level is 0.028, which is smaller than 5%; Hence, it can be stated that auditors’ narcissism (measured using signature size) has a positive and significant association with

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NARS</td>
<td>0.146</td>
<td>0.007*</td>
</tr>
<tr>
<td>GEN</td>
<td>0.009</td>
<td>0.742</td>
</tr>
<tr>
<td>EXP</td>
<td>0.233</td>
<td>0.001*</td>
</tr>
<tr>
<td>AGE</td>
<td>0.214</td>
<td>0.001*</td>
</tr>
<tr>
<td>EDU</td>
<td>0.139</td>
<td>0.011*</td>
</tr>
<tr>
<td>POS</td>
<td>0.145</td>
<td>0.004*</td>
</tr>
<tr>
<td>ENV</td>
<td>0.073</td>
<td>0.155</td>
</tr>
<tr>
<td>F Statistic</td>
<td>6.374</td>
<td></td>
</tr>
<tr>
<td>F statistic- significance</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>Adjusted R square</td>
<td>0.146</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>355</td>
<td></td>
</tr>
<tr>
<td>Panel B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NARS</td>
<td>0.132</td>
<td>0.028*</td>
</tr>
<tr>
<td>GEN</td>
<td>0.035</td>
<td>0.555</td>
</tr>
<tr>
<td>EXP</td>
<td>0.167</td>
<td>0.012*</td>
</tr>
<tr>
<td>AGE</td>
<td>0.274</td>
<td>0.001*</td>
</tr>
<tr>
<td>EDU</td>
<td>0.152</td>
<td>0.013*</td>
</tr>
<tr>
<td>POS</td>
<td>0.133</td>
<td>0.026*</td>
</tr>
<tr>
<td>ENV</td>
<td>0.061</td>
<td>0.289</td>
</tr>
<tr>
<td>F statistic</td>
<td>7.412</td>
<td></td>
</tr>
<tr>
<td>F statistic- significance</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>Adjusted R square</td>
<td>0.189</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>342</td>
<td></td>
</tr>
</tbody>
</table>

Note(s): In panel A, the Raskin and Terry (1988) questionnaire is used to measure the auditors’ narcissism (NARS), while in panel B, the size of auditors’ signatures is used to measure the auditors’ narcissism. Also, GEN (gender), EXP (audit experience), AGE (auditors’ age), EDU (level of education), POS (job position), and ENV (work environment) are control variables.

* Significant at 5% level

Source(s): Table created by the authors

Table 6. The results of cross-sectional regression model
4.3.2 Structural equation modeling. In this study, in addition to utilizing the cross-sectional multivariate regression to test the research hypothesis, the structural equation modeling (SEM) technique has also been employed. We used the Kaiser–Meyer–Olkin (KMO) and Bartlett tests to check the appropriateness of factor analysis (Ho, 2013). Based on the results, the value of KMO is equal to 0.951, which shows the factor analysis is appropriate. The value of Bartlett’s test is 2,416.5 and regard to the significance at 5% level, it can be interpreted that this study is suitable for factor analysis.

Based on the research hypothesis, auditors’ narcissism is associated with their professional skepticism. In this regard, this study constructs a theoretical model of the structural relationship between auditors’ narcissism components and their professional skepticism. The endogenous hidden variable of the model is professional skepticism and the exogenous hidden variable is auditors’ narcissism, which consists of 7 components. Moreover, the observed variables include 40 factors, which are the questions related to the components of narcissism.

We used AMOS 24 software to test the fitness of the SEM. In the case of SEMs, absolute fit indices, incremental fit indices and parsimonious fit indices are considered the most popular goodness-of-fit indices. The appropriate range for each of these indicators and observed values are displayed in Table 7. Based on this, all the goodness-of-fit indices is in the desirable range, which implies a good fit of the model with existing data. Therefore, the chosen model is statistically satisfactory and we can enter the structural stage, which is the next part of estimation.

According to the data analysis algorithm, in the partial least squares (PLS) method, after investigating the fitness of the measurement patterns, the fitting of the structural pattern must be started. The structural model designed in AMOS software with standard coefficients is presented in Figure 1.

The path coefficients and results of the hypothesis test are shown in Table 8. According to the details reflected in Table 8, in the case of path coefficients of all narcissism components, the significance level is less than 5%. The path coefficients in descending order are authority (0.437), exhibitionism (0.384), vanity (0.280), self-sufficiency (0.244), exploitativeness (0.221), superiority (0.217) and entitlement (0.212), which indicates the research hypothesis is not
rejected. To put it another way, the findings imply that all components of auditors' narcissism have a significant association with their professional skepticism. In other words, the increase in auditors' narcissism, increases their level of professional skepticism. This finding supports the results obtained using the main model.

Note(s): The values presented in this figure are t Statistics which are Significant at 5 Percent Level

Source(s): Figure created by author
5. Conclusion
Apart from the various limitations that auditors encounter in the audit process, they are always expected to conduct high-quality audits (Winardi et al., 2017). Professional institutions, such as the USA audit quality institution, introduce the three factors including independence, neutrality and professional skepticism as the key components of audit quality. The improvement of these three factors, especially professional skepticism, will ultimately result in the strengthening of the auditor’s ability to enhance professional judgments and documentation, which can improve the economic decision-making of individuals in the capital market (Demek et al., 2020). Lack of adequate professional skepticism deteriorates the ability of the auditor to assess the existing risks, especially the risk of fraud (Hammersley, 2011).

Considering that auditors interact with various individuals and groups in the organizational environment, they presumably are influenced by a number of psychological, socio-psychological and environmental factors in their professional skepticism process. Hence, they may fail to apply a proper level of professional skepticism, which can affect the quality of their audit. One of the most determinative psychological factors is narcissism, which is known as a personality trait including positive and negative consequences such as self-exaggeration, entitlement, expecting to be admired, high sensitivity to criticism and tendency to exploit others (Raskin and Terry, 1988; Rosario and White, 2005; Paunonen et al., 2006; Ames et al., 2006; Rosenthal and Pittinsky, 2006; Padilla et al., 2007; Chatterjee and Hambrick, 2007; Miller et al., 2009; Pincus and Lukowitsky, 2010; Foster et al., 2011; Schulze et al., 2013).

To shed light on the various aspects of this important issue, we investigated the association between the narcissistic character of Iranian auditors and their professional skepticism. The sample of our study, which was conducted in 2022, encompasses auditors working in public and private sector audit firms and self-employed individuals in Iran who are certified public accountants. After distributing the questionnaires and eliminating the distorted cases, eventually, 355 questionnaires were used in the final analysis. To test our hypothesis, we employed the cross-sectional multivariate regression model and also the structural equations technique based on path analysis. The results revealed that auditors’ narcissism has a positive and significant association with their professional skepticism. In other words, increasing the level of auditors’ narcissism can improve the level of their professional skepticism. Robustness tests (i.e. using structural equations modeling technique and measuring the auditors’ narcissism using the size of their signature) also supported the results obtained from applying the cross-sectional multivariate regression model. Our findings confirm the results of the research conducted by Chou et al. (2021). They concluded that as the audit partner’s narcissism level increases, the actual and expected quality of the audit report also improves. Montague (2010) found that biases including overconfidence,

<table>
<thead>
<tr>
<th>Path correlation</th>
<th>Path coefficient</th>
<th>t Statistic</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority→professional skepticism</td>
<td>0.437</td>
<td>2.667*</td>
<td>Not rejected</td>
</tr>
<tr>
<td>Vanity→professional skepticism</td>
<td>0.280</td>
<td>3.382*</td>
<td>Not rejected</td>
</tr>
<tr>
<td>Exploitative→professional skepticism</td>
<td>0.221</td>
<td>2.384*</td>
<td>Not rejected</td>
</tr>
<tr>
<td>Exhibitionism→professional skepticism</td>
<td>0.384</td>
<td>2.375*</td>
<td>Not rejected</td>
</tr>
<tr>
<td>Self-sufficiency→professional skepticism</td>
<td>0.244</td>
<td>2.655*</td>
<td>Not rejected</td>
</tr>
<tr>
<td>Superiority→professional skepticism</td>
<td>0.217</td>
<td>2.539*</td>
<td>Not rejected</td>
</tr>
<tr>
<td>Entitlement→professional skepticism</td>
<td>0.212</td>
<td>2.458*</td>
<td>Not rejected</td>
</tr>
</tbody>
</table>

Table 8. Hypothesis testing results

Note(s): * Significant at 5% level
Source(s): Table created by the authors
reliance (adjustment) and accessibility have a negative and significant impact on auditors’ professional skepticism. Moreover, Mardijuwono and Subianto (2018) showed that there is a positive and insignificant relationship between auditors’ independence and audit quality but there is a positive and strong relationship between professionalism and skepticism among auditors and audit quality. Farag and Elias (2016) also showed that there is a positive relationship between the big five personality characteristics and professional skepticism. Samagaio and Felicio (2022) found that personality traits of agreeableness, conscientiousness and openness are positively related to auditors’ professional skepticism, but the characteristics of extraversion and neuroticism have a negative effect on professional skepticism. Marcal and Alberton (2020) indicated that narcissism positively influences professional skepticism as it raises the auditors’ self-esteem and questioning ability. Going through another relevant study, Yahya et al. (2021) revealed that both personalities of conscientiousness and openness to experience motivate auditor independence, which eventually results in professional skepticism improvement. However, Hobson et al. (2020) showed higher dark triad auditors are relatively more resistant to lapses in professional skepticism due to the effects of social interaction.

Our findings have also significant practical implications. First, according to the results, the increase in the level of auditors’ narcissism leads to professional skepticism improvement. But because of the negative qualities associated with high narcissists, we recommend to auditing firms improve the effectiveness of their audit processes by weighing the trade-offs of employing people with certain personalities. For instance, audit partners with a greater level of narcissism may be preferable choices for solving challenges and complications when dealing with clients. In this regard, Church et al. (2020), Ham et al. (2015) and Judd et al. (2017) indicated that the narcissism of audit partners can moderate the narcissism of clients’ managers who seek earnings management. Second, we recommend auditing firms, in addition to carrying out personality skills training courses, show more sensitivity and allocate more time to the psychological matters of their employees, so that auditors perform more desirable and more intelligent judgments and decision-making when applying their professional skepticism.

The following recommendations are also offered considering future studies. First, we suggest carrying out a study on the potential linkages between auditors’ personality traits and their professional skepticism. For this purpose, the auditors’ personality traits can be measured through the abstract form of the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders, (DSM-V), which is introduced by the American Psychiatric Association (2013). These personality disorders include antagonism (confrontational behavior towards others), detachment (feeling away from work conditions), negative affect (balanced tendency to experience negative emotions), disinhibition (lack of self-control) and psychoticism (showing common behavioral characteristics in people with mental disorders). Second, it is suggested to investigate the effect of other behavioral and psychological disorders, such as anxiety and bipolar personality, as influential factors for independent auditors’ performance, on their professional skepticism. Third, considering the impact of auditors’ narcissism on the level of their professional skepticism, we recommend researchers investigate the effect of auditors’ narcissism on other aspects of auditing, such as the way of collecting audit evidence, audit planning, implementation of operations and auditing of accounting estimates.

Our results should be interpreted with caution because of potential limitations. First, our data were collected through a questionnaire. Although issues like reliability and validity of the data are of our core concern, still some issues like choosing the right sample, the lack of motivation required for responders, and the honesty of the questioners may deserve room for further attention. Consequently, it is important to cautiously remark on the accuracy of the obtained results. Second, our statistical sample is restricted to Iranian auditors. Hence, there
are some concerns about its overseas validity, and it is important to mindfully and carefully generalize our findings about auditors from other countries.

References


Carpenter, T., Durtschi, C. and Gaynor, L. (2002), The Role of Experience in Professional Skepticism, Knowledge Acquisition, and Fraud Detection, Working Paper, Department of Accounting, Florida State University, FL.


Fogelin, R.J. (1994), Pyrrhonian Reflections on Knowledge and Justification, Oxford University Press, London.


**Corresponding author**
Mohammad Hossein Safarzadeh can be contacted at: m_safarzadeh@sbu.ac.ir

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com