

Safety-Seeking Behaviors in Driving: A Phenomenological Exploration of Taxi Drivers' Latent Beliefs

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ABSTRACT

Background: Human behavior has been worldwide reported as the main cause of road accidents. It has been mentioned that beliefs probably impress the driver's perception, and consequently, the driving behavior. It could be more important for professional drivers. Taxi drivers account for a high proportion of professional drivers. This study aimed at exploring belief-oriented safety-seeking behaviors in taxi drivers.

Methods: In this phenomenological study, eleven drivers were invited from different areas of Zanjan (in Iran). Using purposeful sampling, six in-depth interviews (IDIs) and one focus group discussion (FGD) were conducted.

Findings: In almost all the interviews, the participants highlighted the observance of traffic regulations and concentration on driving were the causes of accidents, however, they adopted other actions to be safe while driving. In this study, three themes emerged. The first two themes (verbal and practical endeavors) were mainly related to religion. Nonetheless, beliefs that were not related to religion (mental endeavors) emerged, as well.

Conclusion: The drivers' belief-oriented safety precautions are rooted in secondary and socio-instrumental control beliefs. From the point of view of road traffic safety, investments to change these beliefs do not seem to be necessary.

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INTRODUCTION

Human behavior has been worldwide reported as the main cause of road accidents (Fukui et al., 2018). Road traffic accidents will be the fifth leading cause of injury and disease in the world by 2030 if effective traffic measures are not adopted (World Health Organization (WHO), 2009). In Iran, following coronary cardiovascular diseases, road traffic accidents are the second leading cause of death (Montazeri, 2004). Iranian Legal Medicine Organization reported that road traffic accidents account for about 17,000 deaths and about 367,000 casualties per year (Iran Legal Medicine Organization (IMO), 2019).

Since the second half of the 20th century, driver behavior has been largely investigated in the fields of psychology and behavioral sciences as well as car developers and designers. Moreover, since the 1970s, some researchers have considered risk perception as a key factor affecting drivers' decisions and behavior (Colbourn, 1978; Rosenbloom et al., 2008; Timmermans et al., 2020). From the perspective of most of these researchers, risky driving behavior can be explained by the drivers' perceptions and attitudes toward risk-taking driving behavior.

Based on the Cultural Theory of Risk (CTR), the cultural structure and values, including beliefs, play a critical role in forming risk perception (Rippl, 2002). The vital role of beliefs in traffic safety behaviors has been frequently mentioned (Dinh et al., 2020; Omari & Baron-Epel, 2013; Teye-Kwadjo, 2019). In this regard, Heider (1958, p.5) thinks that "if a person believes that his palm lines will be his future, this belief must be taken into account in explaining some of his expectations and actions". Ngueutsa and Kouabenan (2017) defined beliefs as 'scientifically unjustifiable statements, considered to be truths to which an individual adheres consciously and which shape his/her actions and thoughts' (p.308). Kouabenan (2007) argues that beliefs are often formed when individuals are in complex situations such as risks or accidents and fail to realize the reasons. The beliefs would then help individuals to analyze and cope with such a situation by setting up a compensatory mechanism. A number of researchers mentioned

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that beliefs probably impress the driver's perception, and consequently, the driving behavior (Dixey, 1999; Kayani et al., 2012; Kouabenan, 1998; Şimşekoğlu et al., 2013), therefore, studying individuals' beliefs as well as their perception towards risk and safety are significant prerequisites for effective risk management and prevention (Peltzer, 2003).

The results of several studies have suggested that people who believe in fate disregard preventive measures while driving because they have accepted a predetermined destiny. Therefore, they take for granted that precautionary measures are not able to be effective in preventing accidents (Kayani et al., 2012; Kouabenan, 1998; Peltzer, 2003). Also, it was revealed that belief is an underlying factor in taxi drivers' safe driving behavior (Mehri et al., 2022). But, Ozkan and Lajunen (2005) did not find any significant relationship between this kind of belief and violation-induced accidents. The authors concluded that although drivers took some actions based on their beliefs to prevent mishaps, it was only after the accident that they turn to fate to explain why it happened; not before the accident. Furthermore, that conclusion was supported by Türküm (2006) claiming that there was no significant relationship between believing in fate and safe behaviors by drivers.

In regard to religious beliefs, the results of the study of Khammash and Al-Shouha (2006) showed that traffic accidents are reduced during Ramadan (i. e. a holy month of fasting, prayer, reflection, and community in the Islamic calendar). In Nigeria, Sarma (2007) claimed that some drivers used certain objects in their vehicles supposed to protect them against road accidents. They believed using these objects would miraculously save them in the case of the occurrence of an accident. However, the results showed that even people with such beliefs considered precautionary actions and did not ignore preventive measures (Sarma, 2007). It thus appears that research findings are contradictory in this area, and the need to explore the role of beliefs in driver behavior still remains. There are many psychosocial factors that affect driving behavior, that have not been fully detected yet. In such cases, the use of qualitative research is appropriate since the quantitative analysis of behavior cannot delve into the incentives behind the behaviors (Dotse et al., 2019). Adopting a phenomenological approach, this study explored belief-oriented safety-seeking behaviors in taxi drivers.

Since drivers' risk perception might be affected by different factors and lead to different behaviors, the present study would contribute to reaching a deeper understanding of human behaviors, detecting the causes of behaviors, delving into the participants' inner world, and extracting their knowledge and silent information. In Zanjan, taxi drivers account for a high proportion of professional drivers (Golhosseini et al., 2013). Driving offenses and accidents for taxi drivers are higher than for non-professional drivers (Arghami & Aliakbari, 2018; Jahangiri et al., 2013. [in Persian]). Therefore, it is worth studying the beliefs of this group of drivers.

METHODS

Methodology

This phenomenological study explored taxi drivers' experiences and attitudes to reveal the safety precautions arising from their beliefs. According to Creswell (2012), this

kind of methodology can describe the meaning of one's life experiences in association with a concept or phenomenon. In this regard, the main goal of phenomenological studies is to convert individuals' personal experiences of a particular phenomenon into a global one (Lewis, 2015). In this study, the researchers tried to collect data from those taxi drivers to find the answers to these primary questions: 1) what was their experience while driving? 2) How have they experienced it? 3) What were the causes as they believed?

Participants

Eleven taxi drivers were invited from different regions of Zanjan (Iran). Since there was no female taxi driver in Zanjan, all participants were male. In terms of age, the participants were 20-55 years old. They had different levels of education and working experience.

Procedure

Before each interview, the researcher explained the study objectives to the participants and assured them about anonymity as well as the confidentiality of information. The participants could freely ask questions and leave the study whenever they wished. After receiving their signed informed consent, the interview was initiated with open-ended questions. For example, the participants were asked to describe one day of their driving, and one of their memories of some accidents in which they had been involved or not. Then, they were asked why the accident had happened. The interviews were continued with probing questions.

During the interviews, the participants were allowed to quit the study if they felt exhausted or were unwilling to continue. The taxi drivers received cash as compensation for participating in the study during working hours, which was equal to the cost of one taxi trip.

In this study, six in-depth interviews (IDIs) were conducted. The interviews were electronically recorded in a quiet environment with the consent of the participants. During the interviews, the interviewer noted the participants' facial expressions and body language. By the end of each interview, the verbatim was transcribed. The noticeable participants' facial expressions or body language were mentioned in related written sentences. Subsequently, open coding was carried out before the next interview. The IDIs proceeded until coming to data saturation. Then, a 70-minute focus group discussion (FGD), consisting of five participants, followed in order to confirm the validity of the collected data in IDIs.

To analyze the data, the two phenomenological methodologies proposed by Colaizzi (1978) and Braun et al. (2006) were mixed, resulting in a seven-step integrated analytical approach, as described below: (1) The data were extracted through listening to the interviews, converting them into texts, and re-reading the texts, (2) The relevant sentences were then detected, (3) Afterwards, the concepts were extracted from the sentences, (4) In each interview, the codes were assigned to the predetermined concepts. Newer concepts were also extracted as further codes were detected. The researchers separately attributed pre-specified codes to the data. Then, both manual and electronic coding methods were used. In the early stages of coding, manual coding was used, and electronic coding

was adopted after specifying the coding structure in order to interpret the codes and retrieve the data better (the transcripts were imported to MAXQDA software version 10), (5) The codes were then arranged according to the systematic principles of the study method as such the subcategories, categories, and themes emerged, (6) In the next step, the researchers modified the previous themes as further potential themes emerged, and (7) Finally, following the emergence of a set of fully developed themes, the study results were presented. The validity of the study was examined through double-checking by the members, and aligning the data sources.

FINDINGS

The seven mentioned steps resulted in 22 subcategories, eight categories, and three themes. The detected themes were *verbal endeavors*, *practical endeavors*, and *mental endeavors*, which were obtained by open coding, implying the interviewees' focus on the impact of these themes on their driving behaviors. Their experiences regarding the significance of each subcategory were frequently noticed in each interview. This was even explicitly confirmed in the group interviews. In almost all the interviews, the participants highlighted the observance of traffic regulations and concentration on driving were the causes of accidents, however, they adopted other actions to be safe while driving.

Verbal endeavors

Verbal endeavors were the most common belief-oriented safety precautions to prevent road accidents and aid protect the participants from all evil and bad events. According to the collected data, the participants reported using verbal endeavors in the form of prayers, *salat*¹, recitation of the Quran, and mention. Considering the importance of prayers in destiny and their impact on traffic accidents, one of the participants mentioned: *'It all depends on the law but we can sometimes change our destiny, including the Three Nights [Laylat al-Qadr²]. I again emphasize that you can change your whole destiny. For example, if I was supposed to die this year, my prayers on these nights might change my destiny. This comes true in driving as well.'*

Another taxi driver highlighted the significance of prayers in driving as follows: *'First of all, one should concentrate [on*

driving] and take a grip on himself. One can prevent 90% of accidents by praying.'

Another driver said: *'Caution in driving is the first priority, however, I start the morning with a prayer, a Surat (He, Allah is one³), or Al-Kursi verse⁴. Now, there may be no accident or any mishap that day. Or there might have been a worse accident, which was avoided because of my prayers.'*

After emphasizing the need to follow driving rules, one of the drivers said: *'I experienced this issue when I had recited the Al-Kursi verse in the morning, and it was then a narrow escape for me. Surely, it was the effect of that prayer.'*

Another participant mentioned obeying the traffic regulations and then commented: *'I wake up in the morning, have salat, say my prayers (if I have time), and recite the Al-Kursi verse every day. It prevents accidents. In this regard, 12 times reciting the Surat Al-Ikhlās and 10 times reciting the Surat al-Ghadr can prevent many accidents.'*

The other driver said: *'I start like this. I recite a mention before opening the taxi door, and then I get into the car. This helps me a lot. When one says 'In the name of Allah', it is the closest mention and the Great Name. It has also helped me a lot. Once I was close to the crash, the taxi stopped after saying 'In the name of Allah'.*

Another participant in the FGD claimed: *'When I am to drive on the road, I recite the Surat Al-Ikhlās. I recite four Surahs starting with 'He, Allah is...' in order to be protected by God. I have experienced its impact ... I have never had an accident. I always repeat them [the Surahs]. I believe in them, and I have witnessed their positive consequences'.*

According to the participants' responses, they felt calm after praying because they believed that God was in charge of their safety. Such practices and customs seemed so important to them that if they did not perform them, they would feel forget or do wrong even when they follow driving regulations. Finally, the categories of the verbal endeavors noted by the participants were prayers, recitations of the Quran, and mentions during driving, which made them think of God and drive calmly. Such practices also improved their patience and tolerance when being caught in heavy traffic or other exhausting conditions.

Practical endeavors

Another theme, 'Practical endeavor' encompasses subcategories of removing evil eyes and keeping away from mishaps. Keeping mishaps away refers to the use of activities such as alms, tying some blessed to a car part, or sacrificing an animal (chicken or sheep) in order to avoid traffic accidents. The use of energy-healing jewelry and burning Spand⁵ were the ways to remove the evil eye. Almsgiving was a more active precautionary approach. From their perspective, it was exclusively to prevent bad accidents. Also, it was accepted that bad events go away through donating money, food, shelter, or other things to the needy (including animals, birds, etc.). The practical endeavors adopted to avoid mishaps or remove evil eye were expressed in all the interviews. It should be noted

1 Salat, one of the five pillars of Islam, consists of five prayers (Fajr, Zuhr, Asr, Maghrib, and Isha'a), each being undertaken at a different time of the day. It involves a person reciting the Holy Qur'an while being in several positions undertaking these five times a day. There is an expectation that as long as a Muslim person is conscious and alert and without altered mental status (e.g. mental illness), they should try to perform prayer.

Mohamed, C. R., Nelson, K., Wood, P., & Moss, C. (2015). *Issues post-stroke for Muslim people in maintaining the practice of salat (prayer): A qualitative study. Collegian, 22(3), 243-249.*

<https://doi.org/10.1016/j.colegn.2014.1001.1001>.

2 Laylat al-Qadr is the night of the revelation of the Quran and the predestination of the coming year for all persons. The exact date of Laylat al-Qadr is unknown. However, according to many traditions, it is one of three specific nights in the month of Ramadan.

Amiri, M., & Davari, K. (2017). *Manifestations of Quranic Verses in Odes of Naser Khosrow. Journal of History Culture and Art Research, 6(3), 950-965.*

<https://doi.org/10.7596/taksad.v7596i7593.7965>.

3 It refers to a part of the Holy Quran, the Surah Al-Ikhlās.

4 Al-Kursi is the name of one verse in Surah al-Baqarah and Muslims believe that reading this verse can keep them safe.

5 In Iran and some countries, it is believed that burning Spand (Peganum harmala) seeds will protect evil eyes.

that the majority of participants emphasized the importance of precautionary driving before or after mentioning practical endeavors.

From the participants' perspective, people sometimes face a problem to be dealt with; however, they need to adopt some preventive measures to avoid suffering and misery. In other words, prevention is better than cure. According to them, a wise person spares his efforts to avoid misery and intrigue. Almsgiving or using the blessed was mentioned as effective in preventing accidents. One of the participants declared that: '*Ajale moalaq⁶ is removed by wisdom, almsgiving, goodness, giving a hand to people, goodness to God, and goodness to others. Ajale moalaq is removed by alms. One should not be proud. When one wants to drive, cross the street, and when he is at home or with neighbors or relatives should not be proud. Goodness removes them. Commuting with relatives removes them but not the definite death. The definite death certainly does not go away.*'

Commenting on almsgiving, a participant mentioned the power of keeping drivers away from evils: '*We give alms for everything, for every mishap. When we go outside, we give alms for driving to keep us away from the evils on the streets or roads.*' He was followed by another one according to whom: '*Almsgiving is effective in preventing many traffic accidents.*', while another declared: '*In my idea, almsgiving to the needy, helping others, praying, and being right have an impact on preventing accidents.*'

Concerning the adopted measures to avoid disaster (e.g., tying some blessed), one of the taxi drivers said: '*This Sabze [a piece of narrow green ribbon] tied to the steering wheel is blessed. I took it from a mosque. It is good and helps me a lot. For sure, it is effective in preventing accidents.*' Another one added a personal experience showing the power of some objects they wear in preventing accidents: '*This ring [pointing to Opal ring on his finger]! It may be a superstition but I didn't wear this ring twice, and I got into accidents twice, at the same time.*'

Also referring to personal experiences with motorcycling, one of the taxi drivers said: '*I had a heavy motorcycle. Once, I got carried away and got up to speed. Suddenly, a car turned in front of me. The driver couldn't tolerate the motorcycle's loud noise and put his hands on his head, then he lost control of his car. We crashed. I was wearing a black shirt since I had gone to a mourning congregation⁷ the night before. When I fell down, my hands hurt, and my pants were torn out, but not my black shirt. I believe that the black shirt saved me.*'

6 Ajale Moalaq (Conditional death) refers to a life span that is variable. It varies on one's behaviors and actions. In contrast to Ajale Mosama's (Definite death) life span is definite and cannot be changed.

Bayat, M. H. (2016). *Ajale Moalaq and Ajale Mosama from the perspective of the verses and manifestation it in the Hadith*. *Seraj Monir*, 22(7), 7-38. [in Persian]. <https://www.noormags.ir/view/fa/articlepage/1134218>

7 The mourning gathering of Imam Hussein is a kind of religious gathering in which Muslims gather freely to mourn Imam Hussein, the grandson of the Prophet.

Menon, K. D. (2017). *Communities of mourning: negotiating identity and difference in Old Delhi*. *Contemporary South Asia*, 25(1), 23-37.

<https://doi.org/10.1080/09584935.09582017.01299690>.

Mental endeavors

Another extracted theme in this study is mental endeavors that include positive thinking, self-induced suggestion, and self-confidence. From the participants' viewpoint, those with positive energy avoid anything stressful. They do their best to have a positive and promising attitude towards their working day. In this regard, one of the participants noted: '*One needs to have a good point of view and think positively in order to experience desirable events. You should be optimistic in the morning to drive so that you can enjoy the day.*' Another one described pessimism and its negative impact: '*I know a driver who used to take children to school. He was totally pessimistic and always held negative thoughts. He held a pessimistic attitude toward everything. Finally, he had an accident with a child. The more pessimistic you are; the more negative events happen in your life.*'

According to participants, drivers with positive energy are always happy and satisfied to see others happy and content. In the support of this, one participant said: '*If you're calm and not too strict in driving, everything goes well and you would not have an accident. Just be a bit optimistic and let the other drive. It brings you a quiet day.*' Referring to a personal experience of the positive impact of optimism, another taxi driver noted: '*In the morning before I go out of home, I have a self-induced suggestion that I'm going to have a good day. This makes my day good with no accidents.*' The participants also believe that self-induced suggestion and self-confidence in driving promote their courage in driving and relieve their fears. According to them, self-induced suggestions make them have quick and right decisions in driving, as one of the participants declared: '*One has to believe in himself. This means that he is sure whether or not he can drive a path.*'

DISCUSSION

The present study aimed to explore the safety precautions arising from taxi drivers' beliefs. A phenomenological approach was adopted to analyze the participants' experiences in order to better explore the processes and factors involved in the taxi drivers' safety performance. As it was noted, 11 taxi drivers were interviewed, and the findings were categorized into three themes during the coding process.

Verbal endeavors

The data obtained for the verbal endeavors were classified as prayers, salat, recitation of the Quran, and mention. Regarding the prayers, the study participants clearly expressed that prayer was considered a form of self-care to avoid traffic accidents. According to them, everything stems from a superior power; hence, praying can protect people against harm. Green (2018) also noted that prayers have been employed as a way to maintain health for centuries. This study revealed that the target group (taxi drivers) considered observing the safety issues as a necessity; however, in accordance with their beliefs and to reach higher safety and avoid accidents, they exhibited behaviors reflecting such beliefs. A significant number of research studies have shown that prayer, as a coping mechanism, helps patients (such as cardiovascular disease, mental health, etc.) and thus reduces anxiety and indicates the occurrence of healthy behavior (Illueca & Doolittle, 2020; May et al., 2020; Svensson et al., 2020). According to the positive

impacts reported in some studies, accompanied by the findings of the present study, prayers seem to increase safe driving by improving self-esteem and promoting self-confidence (Yildirim, 2007). One can overall conclude praying could help drivers to acquire higher levels of self-confidence and lead them to better tackle stressful situations. There were, however, a few cases where safety had been violated while maintaining this belief. In such cases, it seems that the individuals' oversimplification resulted in misinterpreting. By all of the available literature, only Kayani et al. (2014) supported such a finding.

According to the participants, salat, recitation of the Quran, and mention somehow made them calm and removed their anxiety and concerns. They pointed out that these actions were relaxing and helped them drive safely. Some studies, addressing the significance and impact of these actions, showed a direct relationship between salat and mental health (Barzegar & Barzegar, 2019 [in Persian]). These actions are always concerned with safety considerations in driving. The only difference between these actions and prayers seems to be in their semantic interpretation as the participants referred to the concepts such as self-confidence and self-esteem in the case of prayers and the concepts 'calmness and confidence' in the case of the latter actions.

The results of a study on the effects of salat on mental health in Iran revealed that salat contributed to controlling anxiety and decreasing it (Asadzandi et al., 2018). In Turkey, Yildirim et al. (2016) showed there was a relationship between Ramadan, the month that people perform the more frequent salat and recite more often than ever the Quran, and safer driver behaviors (Yildirim-Yenier et al., 2016). The findings of these two studies in comparison to the findings of the present study suggest that since salat, recitation of the Quran, and mentions invoking a greater sense of safety in individuals, these kinds of actions can relax drivers and remove their stress and concerns. According to Khammash and Al-Shouha (2006), injuries and social crimes, especially driving offenses, are reduced during the holy month of Ramadan, indicating that the general public, even offenders, are affected by the spiritual climate and refrain from making mistakes.

Practical endeavors

Practical endeavors include the subcategories of removing evil eyes and keeping away from mishaps. According to the participants, giving alms, tying some blessing to their taxi, or using items believed to remove evil eye could help them to avoid accidents. From their perspective, almsgiving is a way to prevent accidents. They believed that almsgiving is a kind of donation for God's sake that protects them against accidents and injuries. An extensive body of literature, in line with the findings of the present study, confirmed that alms enhance calmness and safety. As noted in a study in Pakistan, the participants believed that almsgiving was able to decrease the severity of accidents and injuries (Kayani et al., 2012). In a study by Kpobi & Awartz (2019) in Ghana, it was noted that traditional/religious therapies such as prayer and recitation of Qur'anic verses are used to treat mental illness. In Berger's study (2012), the very popular geographical belief of the evil eye was described, along with the common manifestations that appear in a number of different countries and cultures. Some of the methods used to counteract the negative effects of the evil eye were praying and

invocating. The comparison of these findings and those of the present study indicate that almsgiving or using blessed objects can make individuals feel relaxed and protected.

In the available literature, only one study reported the nuanced effects of adopting such actions in driving. The authors indicated that almsgiving, tying some blessings, and the adaptation of some actions to avoid an evil eye might reduce a driver's perception of risk, thus leading to disregarding safety cases (Kayani et al., 2016).

Mental endeavors

Mental endeavors comprise two subcategories namely positive thinking, as well as, self-induced suggestion and self-confidence. In this category, the participants stated that whatever they had in mind and believed in, would happen. This did not exclude driving. Accordingly, they believed that positive thinking could provide them with a positive and promising perspective, and those who held a positive attitude would also experience health in driving. Moreover, self-induced suggestions and self-confidence played a critical role in reducing and eliminating anxiety and stress in drivers, thus promoting their focus and concentration. A large number of studies such as Danner et al. (2001), Kooshalshah et al. (2015), and Motamed-Jahromi et al. (2017) have emphasized that positive thinking has positive effects on individuals' behaviors, jobs, and life. Although no research specifically studied the impact of positive thinking on driver behavior, assorted studies have documented the helpful effect of positive thinking on human resistance to disease, promote cardiovascular health, and prolong individuals' lifetime (Bekhet & Sarsour, 2018; Cohen et al., 2006; Danner et al., 2001). Besides, Tully and Tao (2019) showed that positive thinking reduces stress and thus enhances acceptable performance in the workplace. The comparison of the present findings with the other relevant findings highlights the benefits of optimism in reducing stress in the participants, thus placating them to drive with less anxiety. This can be true again for optimism, suggestion control, and self-confidence in drivers, which promote the drivers' concentration while driving by decreasing the level of stress and fears. This might ultimately lead to proper behavior strategies to overcome the problems on the street and make the drivers drive calmly.

CONCLUSION

The present study adopted a phenomenological approach to explore the safety precautions arising from taxi drivers' beliefs. This study was able to represent the beliefs of taxi drivers in three different themes. The first two themes (verbal and practical endeavors) were mainly related to religion. Nonetheless, beliefs that were not related to religion (mental endeavors) also emerged.

From the findings, it can be inferred that these beliefs do not mostly affect the participants' perceptions of risk as they rely on such beliefs in two ways. First, such beliefs help them keep calm and be self-confident. Furthermore, they only return to their beliefs to analyze the cause of an accident, when it is already occurred, using a hindsight mindset; however, they do not adjust their behaviors based on such beliefs while driving. Accordingly, investments to change these beliefs do not seem to be necessary.

Believing in a superior power controlling everything and an evil threatening eye are found in many fatalistic belief scales in the literature (Kayani et al., 2012; Kouabenan 2007; Ngueutsa & Kouabenan, 2017; Peltzer & Renner, 2003). We could have concluded hurriedly that, participants' actions are rooted in fatalistic beliefs, known to have negative impacts on risk perception and safety-related behaviors (Nguetsa & Kouabenan, 2017). Yet, deepening the participants' inner world, the present study showed that these beliefs are not fatalistic per se. Indeed, believing in a superior power from which everything arises does not mean that people passively undergo dangerous traffic situations. They rather act using various means for preserving themselves through prayers directed to God or pressure on evil to keep it away. This is a sort of indirect control that Spector et al. (2004) found in collectivistic cultures and named socio-instrumental control beliefs. It is also known in many studies that control beliefs have a positive impact on protective behaviors (Kouabenan & Nguetsa, 2016; Riley & Baah-Odoom, 2012). Then, we think that participants believe in verbal and Practical endeavours as the way to be supported by God and to control evil. Their beliefs are then socio-instrumental control ones instead of fatalistic ones. This is one of the contributions of this article to the literature.

The second type of belief is found in the mental endeavours where participants showed positive thinking as a way to go through dangerous traffic situations. This is the internal control exerted by the drivers themselves, which is the typical primary control found in the literature (Rothbaum et al., 1982) as an important pre-requisite for protective behaviors. This article then suggests that in Iran as in many other Islamic countries, the drivers' belief-oriented safety precautions are hypothetically rooted in primary and socio-instrumental control beliefs. Further studies on this hypothesis are needed.

Study strengths

This study was able to illustrate the latent beliefs in taxi drivers' task performance. Based on a phenomenological approach, these beliefs could be separated into three different themes. These findings can be hardly found in the literature if there is any. Methodologically, some strategies were adopted to enhance the quality of the study and yield reliable findings including bracketing and triangulation in data gathering (IDIs, as well as FGD). Also, the triangulation of researchers was followed by coding, codes comparison, and data analysis. Finally, to obtain generalizability, theory triangulation was provided based on the literature.

Study limitations

The study was limited to a few taxi drivers, it is recommended to invite different groups of drivers for further studies.

Ethical Standards

This study was approved and financially supported with the Grant Number IR.ZUMS.REC.1398.144 in the Ethical Committee of the Zanjan University of Medical Sciences. In regard to the Committee codes, all the participants took part in the study only after receiving a description of the study objectives and signing informed consent. The study was conducted by informing the participants about the confidentiality of their identities and the right to withdraw participation at any time.

Conflict of interest: This study had no competing interests.

Authors' contributions: Zahra Farmani-fard conducted the interviews and transcribed the verbatim, analyzed the data, and wrote the draft of the paper. Robert Nguetsa effectively corrected the "questions guide", edited the themes, and reviewed the draft of the paper. Shirazeh Arghami designed the approach, analyzed the data, and provided the themes in full negotiations with Zahra Farmani-Fard, as well as, Robert Nguetsa. She prepared the final version of the paper.

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