Psychological contract and organizational misbehavior: Exploring the moderating and mediating effects of organizational health and psychological contract breach in Iraqi oil tanks company

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Abstract: The study aimed to link psychological contract with organizational misbehavior directly and through the moderating and mediation effects of organizational health and psychological contract breach. For testing these relationships, the sample gathered from 224 employees, working in Iraqi Oil Tanks Company. The data collection tool was a structured questionnaire. The preliminary analysis was performed by using SPSS 22.0 while the hypothesis testing was done through AMOS, which measures structural equation modeling that helped in simultaneous testing of multiple relationships. The
hypotheses of study underpinned by the social exchange theory and other related theoretical and empirical justifications found in the previous research results suggest a negative effect of PC on OM through the mediation of PCB. The findings were also consistent with prior studies concerning the interactive relationship between organizational health and psychological contract and their influence on organizational misbehavior. The theoretical and practical implications are also provided in this study, especially managers in Iraqi oil companies to be proactive in their role to minimize the impact of organizational misbehavior of employees through an open-door policy. Finally, this study helps managers to express their feedback, suggestions, and interaction with employees.

1. Introduction

Previous studies which had investigated on organisational misbehaviour found that employees expected favourable behaviour from their employers; however, disappointment occurred when the employers were not able to fully achieve their objectives. This prevented them from making organisational decisions, resulting in stress among the employees and consequently exhaustion and burden. As a result, they began showing negative performance in the organisation.

Based on the finding above, the negative impacts have become the focus among researchers, as highlighted by prior studies from the behavioural and organisational fields (Jahangir, Akbar, & Haq, 2004). Moreover, putting the perception of potential organisational misbehaviour away from being faced by management assists in controlling and mitigating its adverse impacts on the organisation. Besides, employers who feel uncertainties towards their employers may react towards their attempts to harm the organisation (Firoozi, Mokhtari, & And Mokhtari, 2016). Following these views, researchers have to emphasise on organisational misbehaviour which is caused by the breach of psychological contract perceived as a crucial sociological discipline (Işık, 2015; Alhamdi, Alnoor, Eneizan, 2019).

Furthermore, with the occurrence of globalisation and prevalence of business competition, some policies have to be drawn up, including those pertaining to operations engineering, strategic reunion, outsourcing, affiliation, reorganisation, and flat organisation. Consequently, organisations fall short of meeting the demands of employees, resulting in the lay-off of some employees, dissatisfaction and disloyalty among the remaining employees, and low performance. This results in hostile and negative attitudes in the workplace (Li & Dai, 2015). Following this phenomenon, there is an importance of conducting a review of work misbehaviour which highlights a breach of psychological contract leading to employees’ negative attitudes towards jobs, poor self-perception, and other issues related to confidence (Bal, 2009). Moreover, several negative behaviours and attitudes can have adverse effects on the organisation and its members. As an example, misbehaviour in the form of employees’ negative attitudes is considered as a breach of organisational regulations (Al-Abrow et al., 2019; Ahmed, Kiyani, & Hashmi, 2016). Despite the prevalence of organisational misbehaviour leading to rising organisational costs, this issue has not been thoroughly examined at the workplace (Bennett & Robinson, 2000). In this regard, limiting organisational misbehaviour calls for the development of an integrated framework that explains how the relationship between leaders and employees can be balanced during their social interactions (Martin, Thomas, Charles, Epitropaki, & McNamara, 2005).

Psychological contract is the main connection between employees and employers where some promises are expected by the employees, while the promises expected by the employers are
created without written terms and conditions. Based on the employee's perspective, efforts will be paid to fulfil their obligations in return for the expectation that the organisation will fulfil for them (Rousseau, 2011). In the case of negative psychological contract, employees are not concerned with their performance or organisational objectives. Therefore, there is no development of contract liabilities among employees and employers. These are the basis of developing negative perceptions and obligations between both parties, provided that employees do not gain trust in employers who do not develop psychological contract. As a result, the efficiency and performance of both sides will be reduced (Rousseau, 2011; Alhamdi, Alnoor, et al., 2019).

Psychological contract is important for the organisation as it will directly impact the organisation's health, provided if it is not effective in any way. Furthermore, internal and external controls are the responsibilities of the management. Therefore, psychological contract breach arises if the management fails in performing its duty, leading to problems in the form of organisational misbehaviour. It was suggested in previous studies that three features were linked and related to each other (Rousseau, 2011). The absence of trust between an employee and his employer due to non-fulfilment of obligations will breach the contracts that come under the psychological contract. Consequently, these issues become an obstacle to organisational health development (Chaudhry, Coyle-Shapiro, & Wayne, 2011). This study aims to examine psychological contract, contract breach, and organisational behaviour in a cross-sectional study as suggested by Chaudhry et al. (2011). This issue is related to most issues occurring in developing countries, particularly the Asian and African countries. For this reason, it is important to understand the phenomenon occurring in these countries, specifically the Middle Eastern country of Iraq, in the context chosen for this study.

Behaviour-related work issues are widespread in less developed countries such as Iraq due to the significant impact of negative behaviour on organisations and workers (Ahmed et al., 2016). Among the issues occurring in these organisations is organisational misbehaviour which gives negative impacts on employees' performance and the process of productivity. In relation to this, employers with negative perceptions and attitudes towards their employees contribute less to the achievement of organisational goals, innovation, and creativity (Firoozi et al., 2016). In turn, low confidence, apprehension, and resentment towards organisation may occur among employees. This study primarily aims to examine, “the extent to which psychological contract influences organisational misbehaviour through the mediating role of psychological contract and moderating role of organisational health”. The mitigation of organisational misbehaviour calls for the development of an integrated conceptual framework to shed light on the relationships between variables that can lead to negative behaviours. This study aims to determine the relationship between psychological contract and psychological contract breach, including the relationship between psychological contract and psychological contract breach and organisational misbehaviour. It also examines the moderating role of organisational health in the relationship between the aforementioned variables and the mediating role of psychological contract breach on psychological contract breach and organisational misbehaviour. Putting the above main objectives into consideration, this study focuses on the oil transportation sector as it is deemed to be an important economic sector in Iraq.

This study begins with an introduction which presents an overview of the concepts related to the focused issues, the significance of psychological contract research, and research questions and objectives. In the following sections, the theory and hypotheses development are discussed. In these sections, the relevant underpinning theory known as “social exchange theory” is presented, and it is utilised to develop this study's hypotheses. This is followed by a discussion on relevant literature works which support the research framework of the study. This study focuses on the energy sector as it is the most important economic sector in Iraq. According to the International Economic Forum, majority of failed organisations belong within the energy sector scope due to higher risk, which results in misunderstanding regarding the importance of psychological contracts. Consequently, this leads to organisational misbehaviour. Therefore, investigating into psychological contract in the Iraqi context is important.
2. Literature review

2.1. Psychological contract

The concept of psychological contract was first introduced in his book entitled “Understanding of Organisational Behaviour”, which provides a description of formal and informal consistencies between managers and employees (Li & Dai, 2015). Essentially, psychological contract has its basis on the premise of giving and taking where the social exchange theory is built (Cassar & Briner, 2011). The social exchange theory, which is formulated by Blau (1964), supports the notion that employees react to negative job attitudes as a breach of their psychological contract with the organisation, leading them to organisational misbehaviour (Law & Zhou, 2014). This misbehaviour may include absenteeism, withdrawal behaviour, and deviant work behaviour (Daouk-Öyry, Anouze, Otaki, Dumit, & Osman, 2014; Bordia, Restubog, et al., 2008; Hanisch & Hulin, 1990). It is evident from this literature that psychological contract breach (PCB) can trigger anti-citizenship behaviour which results in anger and frustration among employees (Eckerd, Hill, Boyer, Donohue, & Ward, 2013; Kickul, 2001).

Essentially, psychological contract is a subject that has a tendency to be formed on employees’ actual conditions (McLean Parks, Kidder, & Gallagher, 1998). It functions in creating employees’ beliefs such as responsibilities and obligations towards organisations due to imagination and commitment that are established in job relationship (Zhou, Plaisent, Zheng, & Bernard, 2014). This necessitates the balance between employee and organisation’s relationship while taking employee’s efficiency, input, and honesty and provision of promotion and satisfactory workplace environment from the employer (Cassar & Briner, 2011). Moreover, psychological contract is described as employees’ perception of their subject of commitment and what they receive in return of their commitment. Furthermore, this is an employer-employee contract which involves mutual expectations (McLean Parks et al., 1998). Therefore, it can be stated that employees’ predictions are focused on the provisions and implied agreements/contracts. These agreements are bound between them and their employers through a mutual commitment which follows the acknowledgement of contributions and compensations (Rousseau, 1989). This contract may also be described as an intellectual contract between employers and employees without proclamation or expectation (Li & Dai, 2015). It also involves unstated promises based on views and imaginations, although they are not necessarily pre-defined by the organisations (Morrison & Robinson, 1997).

Negativity between employers and employees will occur when the psychological contract is not developed among them in a case where issues are present between the organisation and the employees. This increases conflicts with management and turnover intention, which negatively impact organisational health (Chaudhry et al., 2011). Moreover, this negativity continues when employees are not performing and complying with the obligation based on mutual understanding between the two parties. In the case of the absence of trust between employees and employers, it is likely that more issues and lack of confidence will occur. This negativity in the relationship between these parties is the most significant disadvantage to organisational success and the development of anarchy in the organisation (Chaudhry et al., 2011).

The focus of behaviour and organisational studies on psychological contract represents an employer-employee contract, involving employees’ perceptions of the bargains involved. Both parties would consider whether the bargain has been met or breached (McLean Parks et al., 1998). This contract assists in facilitating employer and employee’s exchange process as it produces expectations in the individual’s part regarding the obligations to be fulfilled. Therefore, it determines the perception process that takes place in a mutual understanding between employees and organisations. It also consolidates the relationship between employees and the organisation and lays down the objectives of both parties (Cassar & Briner, 2011). According to previous studies (e.g. Ay & Özgün, 2016; Guest, 2004; Robinson, Kraatz, & Rousseau, 1994; Zhou et al., 2014), this type of relationship may lead to relational dimension and transactional dimension.
Relational dimension refers to a long-run dynamic contract, which indicates employees’ feelings regarding social and emotional concerns, confidence and beliefs, good intention, and fair operation. According to Rousseau (2000), this dimension is a concept related to employment arrangements with long-run open ends depending on mutual loyalty and trust. Furthermore, employees will have expectations and interests on what the organisation provides, and they hope to be respected, well paid for a long term, motivated to do their jobs, and maintain job stability. In turn, the organisation should facilitate stable payment and long-term work relationship. Therefore, this contract appears to be based on emotions and social relationships. Besides, the relational contract may have its basis on the mutual comfort of both parties as reflected through organisational support and loyalty. It also reflects employee’s emotional engagement and belief in the organisation by the employee in a sense that the organisation provides financial outcomes and safety insurance, training, and career development (Zhou et al., 2014). There are two conditions which must be considered under this contract, which are stability and loyalty (Rousseau, 2000).

In respect of transactional dimension, persistence and limitation are two of its characteristics (McLean Parks et al., 1998), and it can be viewed as a contract where employees can obtain balanced incurred costs and benefits from their relationship with the organisation (Robinson et al., 1994). Under this contract, employment arrangements are made according to interests in economic exchange, tasks, and participation appropriated to the employee in a specific period of time (Rousseau, 2000). In other words, this contract type is based on satisfaction with financial advantages for employees and the organisation as they are inclined towards rewards and personal characteristics (Zhou et al., 2014).

2.2. Psychological contract breach

Majority of cases stemming from the breach of psychological contract seems to have been a result of organisation’s failure in keeping a promise stated in the contract. Consequently, the breach reflects the perception of obligations violated by the organisation or agent. This breach is identified as the organisation’s poor intention to meet the promises it has made to employees. This phenomenon is attributed to the circumstances faced by the organisation which prevents it from fulfilling the promise or the employees perceive that the promise has not been met although the organisation perceives otherwise (Ahmed et al., 2016). Psychological contract breach may be related to two major reasons, namely opposition and disclaimer. The former indicates misunderstanding between the organisation and employees concerning the real nature of an obligation, while the latter indicates the organisation’s cognizance of mutual obligations with employees. However, the obligation may be left unfulfilled in a voluntary manner.

A breach of contract is basically a phenomenon that arises with spontaneity, and the idea of it may stem from the actual contract breach which either has happened or imagined to be. This may be exemplified by the management’s promise to promote an employee three years in the future; however, the promotion is nowhere in sight when the time comes. This is considered as a real breach of psychological contract. In respect of a breach which may be brought by employee’s implied imagination, it is clear that this occurs due to employee mishearing the manager stating that they would be promoted in three years’ time, automatically interpreting it as a promise. Therefore, when the promise is not fulfilled, the manager may be accused of having breached the psychological contract (Schauupp, 2012). In other words, according to Bal (2009), psychological contract breach is reflective of an individual’s cognitive experience.

The breach of psychological contract is always considered as a negative feature in the organisation due to the adverse impact it causes on employees (Robinson & Wolfe, 2000). However, in the context of law, breach is considered as an offence that can have an ethical or non-ethical impact on values and reduce the obligation in a contract for both sides. Essentially, organisations have a psychological contract with their employees. Provided if any of the party is convicted of contract breach, the other party with a similar restriction will not remain obligated to the contract terms and conditions (Robinson and Wolfe, 2000). Similarly, in the case of mutual contracts, such as
psychological contract which is not in its writing form, breach occurs in trust and mutual understanding. For this to happen, it requires one party to fail in fulfilling the obligation, while the other party acknowledges the non-fulfilment or breach of the psychological contract between them.

2.3. Organisational health

The concept of organisational health is a discipline that is linked to the field of psychology, management, education, and professional health (Nicolay, 2014). Health is primarily viewed as a significant resource which takes the individual, organisation, and social level into account. On the other hand, work can be a stressful experience which results in bad health condition despite it may be conducted in a satisfactory manner (Cartwright & Cooper, 2014). In a medical sense, health is a case where no illness or impairment exists, but this definition appears to be lacking as it fails to illustrate the positive aspects of health. From the perspective of organisational behaviour, the presence of individual health and the features of healthy individuals have been passed off as the achievement of organisational efficiency (Quick, Macik-Frey, & Cooper, 2007). Moreover, organisational health depends largely on individual differences in personality and work environment characteristics such as organisational climate. This indicates that organisational health development offers an integrated framework for the achievement of individuals and organisational factors which are essential for the acknowledgement of achievements in the organisation (Miller, Griffin, & Hart, 1999).

According to Ryff and Singer (1998), organisational health can be positively defined through an approach that does not place much emphasis on medical implications, however, it involves three major principles which are as follows;

1. Health is a philosophical view linked with the meaning of organisational life.
2. Health describes a healthy mind and body and how both interact or influence each other.
3. Health is a dynamic process involving three dimensions.

According to the above discussion, organisational health is considered as an important tool which can be utilised to consolidate worksite health by taking the organisation’s increased ability to tackle various values into account (Orvik & Axelsson, 2012). Similarly, in Farahani, Mirzamohamadi, Afsouran, and Saied Mohammadi (2014) study, organisational health is identified as a reflection of quality and productivity. The implications of it can be seen through features namely communications, strategy prediction, efficiency of employees, ability of workforce, administrative skills, morale of employees, workplace, awareness of employees, cooperation of employees, their demographics and educational characteristics, and the professional development that influences their behavior (Farahani et al., 2014). The aforementioned features may also influence employees’ physical, psychological, and spiritual characteristics and moralities, which will consequently influence the health of workplace and the organisation in overall (Quick et al., 2007). Consequently, organisational health can be described as the organisation’s ability to adapt to the environment and achieve balance with its employees. This attribute will aid the organisation to achieve its objectives (Zahed-Babelan & Moenikia, 2010).

Organisation health can be determined through organisational human resources and its performance which are essential to meet strategic objectives (Turnley, Bolino, Lester, & Bloodgood, 2003). Therefore, successful organisations in the market are those with good organisational health which leverages its overall advantage in the market. It is evident that most organisations do not meet their standards and are lacking appreciation and reputation in the market due to the absence of organisational health and high performance (Zahed-Babelan & Moenikia, 2010). In the case of psychological contract, organisation health can be affected by breach of contract among employees and their employer. With a lack of psychological contract, no one will pay attention to any instruction by the organisation and there will be no successful implementation of order or strategy (Turnley et al., 2003). This shows the high effectiveness of a positive employee-employer relationship. However, there are
some cases where negative association between these parties would lead to bad organisational health.

2.4. Organisational misbehaviour

Organisational misbehaviour refers to conduct violating the values and regulations established by the organisation which could harm both employees and organisation. Misbehaviours vary from the simple types such as time and resource wastage to serious ones such as theft, firing, verbal, and physical abuse (George, Jones, & Sharbrough, 2002; Vardi & Weitz, 2002). Furthermore, stress, turnover, and absenteeism are more likely to be prevalent in organisations where misbehaviour occurs (Chernyak-Hai & Tziner, 2014; Kelloway, Francis, Prosser, & Cameron, 2010). This misbehaviour (individual or organisational) can manifest through five major dimensions, namely disruption in production, vandalism, theft, mistreatment, and retreat (Hadi, Alnoor & Abdullah, 2018; Spector & Fox, 2002).

According to the majority of previous studies which focused on organisational misbehaviour, this phenomenon occurred on half of the employees throughout the globe and they often ended up quitting their careers. In a study by Robbins, Judge, and Millett (2015) which involved 1500 respondents, organisational misbehaviour was found to lead to turn-over, psychological stress, and physical sickness. Moreover, Fagbohungbe, Akinbode, and Ayodeji (2012) revealed that organisational misbehaviour is an extensive issue in organisations, where statistics showed that 33% to 75% of employees around the globe were faced with hostile behaviour with their co-workers. As a result, this phenomenon affected organisations’ economic, psychological, and physical aspects, and positive behaviours were proposed to limit negative behaviours at work.

Furthermore, the extensive permeation of organisational misbehaviour has also been recorded in the developing countries in Asia, with bribery and financial corruption being the most significant behaviours (Bashir, Nasir, Qayyum, & Bashir, 2012). Several factors are attributed to this behaviour, which include suitable reward system, social pressures, negative attitudes, poor job performance, unfair treatment, and poor confidence in management (Kidwell & Valentine, 2009; Litzky, Eddleston, & Kidder, 2006). Additionally, weak management systems which fail to meet the demands of employees, unfair incentive systems, and inefficient provision of job descriptions are other factors which could lead to organisational misbehaviour (Griffin & Moorhead, 2014). Several other contributing factors found in prior studies are unsuitable organisational environment, immoral leadership, and poor organisational culture (Al-Abrrow & Alnoor, 2017; De Schrijver, Delbeke, Maesschalck, & Pleyers, 2010). These factors may negatively affect employees and lead to work-fatigue, non-cooperation, and increased negative attitudes which would undermine team coordination and communication (Robbins et al., 2015). Consequently, organisational misbehaviour can be referred to as any behaviour violating the standards, expectations, social values, and traditions of the organisation (Weitz, Vardi, & Setter, 2012).

Misbehaviour in the organisation involves breaching the rules and regulations that are set for the improvement of human resources management, utilisation of finance, reward, compensation, and hiring. However, not all organisations adhere to improving and maintaining these features. For this reason, all the possible options for the betterment of organisation’s resources will be ruled out, and this may be considered as organisational misbehaviour (Middlemiss, 2011). The top element that will be affected by this kind of behaviour is the human resource, therefore, conflicts will arise and a significant number of employees will leave the organisation (Middlemiss, 2011). The application of psychological contract emphasises that an organisation should fulfil its commitment and obligations accordingly, inculcate the right direction, and follow the vision provided to the employees in order to overcome challenges and achieve objectives. However, the increase of conflict among employees and employers will reduce effectiveness and motivation among them, hence impacting organisation health (Khammarnia, Baghbanian, Mohammadi, Barati, & Safari, 2013). In the case of psychological contract, the breach of promise included in it is indicated through
organisational performance, creating a more serious condition for management to overcome and sufficiently control (Khammarnia et al., 2013).

3. Hypotheses development

3.1. Psychological contract, psychological contract breach, and organisational misbehaviour

Psychological contract may mitigate the insecurity that arises between employees and employers. Furthermore, it may lead to employees feeling valued by the organisation. It assists employees in acknowledging their appropriated roles and colleagues’ behaviours. The feeling of safety and comfort by employees leads them to create a balance between their duties and obligations towards the organisation and make appropriate changes in their behaviours in accordance with their responsibilities and obligations. In other words, employees will attempt at achieving their obligations and keeping their promises (Shore & Tetrick, 1994).

Based on the above discussion, individuals under the effect of social reciprocal theory have a higher tendency to search for a fair and balanced reciprocal relationship with their employers. However, with the breach of psychological contract and unbalanced reciprocal relationship, employees will adopt steps to recreate the balance. This occurs when the decline of obligation, contribution, or performance arises. On the organisation’s perspective, breach of psychological contract weakens its prosperity with the display of negative behaviours among employees. According to Kuang-Man (2013), psychological contract breach may possess a positive relationship with organisational irony. Stated clearly, organisational misbehaviour manifests frustration, despair, and poor confidence in businesses and managers and influences organisational behaviours (Andersson, 1996). This result was in agreement with the result reported by Johnson and O’Leary-Kelly (2003), who explained that psychological contract breach could influence the behaviour among employees. In a study of the same calibre, Bashir and Nasir (2013) highlighted the effects of psychological contract breach through the employees’ behaviours. Besides, Bashir, Nasir, Saeed, and Ahmed (2011) explained that organisational misbehaviour arises when employers lose the maintained relationship balance and breach their promise to employees, which will consequently bring negative effects to their behaviour.

In respect of another perspective on the concept of organisational misbehaviour, Sharkawi, Rahim, and Azura Dahalan (2013) define it as the behaviour that harms the organisation and employees’ jobs which lead to their inefficiency. It may also be caused by various factors such as disrespect, mitigated opportunities, increased oppression in the organisation, rising job requirements, and mitigated resources among others (Ahmed et al., 2016). However, most of the related studies revealed that negligence of psychological contract leaves a significant impact and negative behaviours among employees. It was shown in previous studies that employees work while carrying expectations which represent the psychological contract. Therefore, frustration and negative behaviours will be formed when these expectations are not fulfilled (Bashir et al., 2011).

Evidently, psychological contract significantly depends on trust. For this reason, a stronger contract will require a higher amount of trust from the organisation. On the other hand, poor organisational contract would result in negative emotional reactions which will turn into disloyalty (Kuang-Man, 2013). Negative behaviours can be prevented with the presence of efficient psychological contract between the organisation and its employees. Following Ay and Ozgun’s (2017) recommendation, this study develops three hypotheses concerning psychological contract and its two dimensions (relational and transactional). These hypotheses may result in misbehaviour among employees and influence the two dimensions of employees’ behaviour in the contract.

Kaung-Man (2013) suggested in his study that psychological contract is a positive feature while the contract breach is a negative feature which impacts employees and employers’ relationship. To be specific, this negative behaviour is brought by employees, as observed by similar studies.
conducted by Partacha (2014), Sharkawi et al. (2013), and Andersson (1996) among others. The study proposes the following hypothesis for testing;

**H1: There is a negative relationship between psychological contract and psychological contract breach.**

It was found in a previous study that with the occurrence of psychological breach, it is possible that the organisation will lose its determination (Sharkawi et al., 2013) due to the impacts inflicted on its benefits. Therefore, researchers emphasised on the significance of negativity for psychological contract breach and organisation misbehaviour (e.g. Mohamad & Badawy, 2016). The following hypothesis was proposed for testing;

**H2: There is a negative relationship between psychological contract breach and organisational misbehaviour.**

It was suggested that organisational psychological contract breach is related to organisational behaviour. The relationship between these variables brings a reciprocal impact which aids with the lack of motivation and organisation in terms of managing human resources and other resources (Al-Abrrow & Alnoor, 2017; Bal, 2009; Cassar & Briner, 2011). This study proposed the following hypothesis;

**H3: There is a negative relationship between psychological contract and organisational misbehaviour.**

### 3.2. The moderating effects of organisational health

Positive organisational health has an interactive effect on the psychological contract-psychological contract breach relationship (Alnoor, Eneizan, Makhamreh, & Rahoma, 2018; Bauer & Jenny, 2012). Organisations are responsible for the psychological health of their employees and they pay effort to eliminate any breaches to this contract. Several studies related to this matter proved the relationship between organisational health and psychological contract, including the relationship between operations and psychological contract breaches (e.g. Cartwright & Cooper, 2014; Wainwright & Sambrook, 2012).

Moreover, psychological contract breach negatively affects the performance of the organisation and individuals working for it. In solving negative organisational performance, the improvement of organisational health is necessary. This is the same case to the wellbeing of employees, as it is a self-condition that encompasses physical, psychological, and social health, and is closely related to job satisfaction (Abdulaal, Alnoor, & Eneizan, 2019; Khammarnia et al., 2013). Accordingly, suitable and efficient policy practices and procedures contribute to efficient individual behaviour. In addition, organisational health is a major part of employee’s prosperity and job satisfaction, which would also result in positive behaviour in the organisation (Chernyak-Hai & Tziner, 2014). The improvement of organisational health is achievable only when work accidents are reduced, sick leaves are mitigated, and organisation team and departments work together to combat negative behaviours through common policies and regulations (Roxana, 2013).

Organisational health factor contributes to the limitation of misbehaviour sources in organisation and organisational injustice. Age and education are the factors which lead to misbehaviour in organisations. Besides, it is worthy to note that psychological contract breach indicates the obligations which are not fulfilled by the organisation (Bal et al., 2009). Therefore, organisational health maximises employees’ positive impression towards transaction and relational psychological contract. This would contribute to employees’ confidence in the organisation which is achieved
through reduced organisational misbehaviour and optimum increase of organisation's effectiveness and efficiency (Jensen, Opland, & Ryan, 2010).

It was suggested by previous studies that psychological contract and its breach pose significant positive impacts on organisational health, although negative impacts are present sometimes (Chernyak-Hai & Tziner, 2014; De Schrijver et al., 2010; Farahani et al., 2014). Based on the review created in previous study's findings, this study proposes the following hypothesis for testing;

H4: There is a moderating effect of organisational health on the relationship between psychological contract and psychological contract breach.

According to Chernyak-Hai and Tziner (2014), Roxana (2013), and Oboyle et al., (2011) psychological contract and organisation misbehaviour are the main factors of weak organisational health which leads to the decline in organisational operation. Based on this finding, the researcher proposes the following hypothesis for testing;

H5: There is a moderating effect of organisational health on the relationship between psychological contract and organisational misbehaviour.

3.3. The mediating effects of psychological contract breach

Employees are concerned with psychological contract as it represents their views and impressions of the promises and obligations made by their employers. Provided if the organisation fails to maintain its obligations or this failure is based on employees’ perception, psychological contract breach will occur. This breach may influence the employer-employee relationship, hence resulting in disappointed employees who will react towards uncertainty and negative behaviour, feelings, and recognition. These traits are identified as organisational misbehaviour (Kuang-Main, 2013). Furthermore, an organisation attempting to realise economic success would pay all its efforts to achieve efficiency and effectiveness. However, an organisation that does not put emphasis on the social aspect and job rights of employees may risk in breaching the psychological contract. As a result, distrust towards the organisation will likely develop among employees, as evidenced by their misbehaviour (Andersson, 1996). To illustrate this point, employers who are incapable of keeping their promises and obligations towards their employees could risk in losing employees’ motivation and performance as misbehaviour occurs (Bal et al., 2008). Additionally, employees who perceive that the psychological contract is breached tend to feel deceived by the employers and may give negative emotional and behavioural responses which will negatively impact the organisation (Kickul, Neuman, Parker, & Finkl, 2001). According to the social reciprocation theory, reciprocating parties share mutual benefits, such as money, and intangible benefits such as social and emotional support. This theory is effective on the reciprocation premise, therefore putting it together with psychological contract breach will be deemed as a violation of the reciprocation principle. The violation of this principle involves a breach of organisational confidence, the occurrence of misbehaviour, and mitigating effectiveness of the organisation (Suazo, 2009). The broken promises of the organisation are deemed to breach the psychological contract. This is due to the occurrence of negative behaviours due to weakened reciprocation and relational processes between employers and employees (Kickul & Lester, 2001).

It was revealed in Suazo’s (2009) that breaching psychological contract develops systematic disorder and leads employees towards rejecting organisational hierarchy, which result in negative behaviour in the organisation. Other studies suggested that the breach of psychological contract reduces the organisation’s efficiency and performance and develops conflicts between the
employees and management (Bal et al., 2008; Kickul et al., 2001). In view of these findings, this study develops the following hypothesis for testing:

H6: There is a mediating effect of psychological contract breach on the negative relationship between psychological contract and organisational misbehaviour.

The breach of psychological contract motivates the relationship between psychological contract and organisational misbehaviour (refer to Figure 1) as evidenced in previous literature. Therefore, a research was proposed in this study, which is as follows:

4. Methodology

4.1. Sample and data collection
This study focused on the Iraqi Oil Tank Company in Basra, which was founded in 1972 after the Iraqi government’s realisation of the importance of oil transportation. Owning a fleet of oil transportation, this company is still in operation. Questionnaires were distributed among the employees of IOTC, who were this study’s target population which comprised of 444 individuals. Following this, 244 survey questionnaires were distributed in accordance with the Zikmund standard. Random sampling technique was implemented, where respondents were randomly selected from the list of 444 employees. The standard was represented on a table, listing appropriate sample measurements for different levels of the research population. To be specific, 244 individuals were appropriate at the level of confidence of 0.05. The final questionnaire comprised 92 items, with 4 key variables and 14 sub-variables measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

4.2. Measurement of variables

4.2.1. Psychological contract
This variable was measured using Millward and Hopkins (1998) scale which consisted of 33 items. Twenty of the items were dedicated to the psychological reciprocal (transactional) contract (e.g. I do this job just for the money) and 13 items were dedicated to the relational contract (e.g. this job is a stepping stone in my career development).
4.2.2. Psychological contract breach
This variable was measured by Robinson and Morrison’s (2000) scale comprising nine items. Five of the items were dedicated to the psychological contract breach, and four items were dedicated to psychological contract violation. Almost all promises made by the employer during employee recruitment were included in these items.

4.2.3. Organizational health
Consisting of 21 items, Hoy and Fedman (1987) scale was used to measure this variable. Seven dimensions were dedicated to organisational health, three items were dedicated to integrity (e.g. the organisation is vulnerable to outside pressure), three items were dedicated to the effects of managers (e.g. the principal puts the suggestions made by the members into operation), three items were dedicated to consideration (e.g. the principal is friendly and approachable), three items were dedicated to the preparation of organisational structure (e.g. the principal makes his attitudes clear to the organisation), three items were dedicated to resource support (e.g. extra materials are available or requested), three items were dedicated to morals (e.g. employees in this organisation like each other), and three items were dedicated to concentration (e.g. the organisation sets high standards for organisational performance).

4.2.4. Organisational misbehaviour
This variable was measured with the scale adopted from Spector et al. (2006) consisting of 33 items. Five dimensions were dedicated to organisational misbehaviour, 3 items were dedicated to sabotaging (e.g. purposely damage a piece of equipment in the property), 4 items were dedicated to withdrawal (e.g. come to work late without permission), 3 items were dedicated to production deviance (e.g. purposely did your work incorrectly), 5 items were dedicated to theft (e.g. stolen something belonging to your employer), and 18 items were dedicated to abuse (e.g. told people outside the job what a lousy place you work for).

4.3. Data analysis
This study employed several statistical analyses and provided a description of the study variables and hypothesis testing. To be specific, Amos Version 22 and SPSS Version 22 based on Hayes method were conducted.

5. Study results
Based on Table 1, the demographic profile of the study showing that 68% of the respondents were male while 32% were female. As far as the age of the respondents was concerned, approximately 13% of the respondents aged between 21 and 25 years old, 21% aged between 26 and 30 years, 25% aged between 31 and 35 years category, 31% aged between 36 and 40 years old, while the remaining 10% aged 41 years old and above. Moreover, when putting the qualification of the respondents into consideration, 21% of the respondents held high school certificates, 27% were diploma holders, 35% were bachelor degree holders, and the remaining 17% were master’s degree holders. In the aspect of experience, it was revealed that 8% of them held less than a year of experience, 11% held 1 to 3 years of experience, 16% held 3 to 5 years of experience, 29% held 5 to 10 years of experience, 12% held 10 to 20 years of experience, while the remaining 24% held over 20 years of experience.

5.1. Reliability
Reliability is described as the consistent values produced by the tool used for data collection. In other words, it is the extent or the level where the test results remain the same in all contexts in terms of questionnaire items (Zikmund, Babin, Carr, & Griffin, 2010). In order to obtain reliability, the item-to-total correlation was adopted to measure the effects of each questionnaire item in relation to the fundamental variables. Following that, items with correlation values less than 0.40 were left out, while those with correlation values higher than 0.40 were taken into consideration (Table 2).
Several common measures, which had been used in previous management studies, were also implemented in this study. The scales were characterised with high credibility and consistency. The overall measures were developed based on the Likert Penta-scale, and Cronbach's alpha was employed to ascertain the consistency of the study's measures. Based on the display of Cronbach's alpha in Table 3, it is clear that its values ranged from 0.78 to 0.88. These values were statistically acceptable in management and behavioural literature as they exceeded the 0.70 value (Pallant, 2011).

5.2. Descriptive statistics and correlation coefficients

The descriptive statistic and correlation coefficient results are listed in Table 4. Based on the results, it can be seen that the mean values were higher compared to the assumptive mean values. This difference in value indicated the consistent responses from the sample population regarding the roles of psychological contract, organisational health, and psychological contract breach in organisational misbehaviour. Moreover, it could be seen from the table that there was a slight difference between the values of standard deviation for each variable. The correlation coefficient matrix findings supported the positive relationship between these variables with a mean level of 0.05 which also indicated support for this research hypothesis. Overall, based on the results, it can be said that the data is credible for further statistical analyses and hypothesis testing.
| Corrected item–total correlation | No. items | Corrected item–total correlation | No. items | Corrected item–total correlation | No. items | Corrected item–total correlation | No. items |
|---------------------------------|-----------|---------------------------------|-----------|---------------------------------|-----------|---------------------------------|-----------|
| 0.465                           | 70        | 0.564                           | 47        | 0.598                           | 24        | 0.564                           | 1         |
| 0.576                           | 71        | 0.876                           | 48        | 0.665                           | 25        | 0.572                           | 2         |
| 0.642                           | 72        | 0.657                           | 49        | 0.623                           | 26        | 0.587                           | 3         |
| 0.467                           | 73        | 0.653                           | 50        | 0.743                           | 27        | 0.577                           | 4         |
| 0.768                           | 74        | 0.678                           | 51        | 0.645                           | 28        | 0.766                           | 5         |
| 0.877                           | 75        | 0.560                           | 52        | 0.456                           | 29        | 0.565                           | 6         |
| 0.675                           | 76        | 0.878                           | 53        | 0.782                           | 30        | 0.887                           | 7         |
| 0.609                           | 77        | 0.453                           | 54        | 0.455                           | 31        | 0.604                           | 8         |
| 0.676                           | 78        | 0.692                           | 55        | 0.566                           | 32        | 0.600                           | 9         |
| 0.456                           | 79        | 0.501                           | 56        | 0.984                           | 33        | 0.712                           | 10        |
| 0.519                           | 80        | 0.691                           | 57        | 0.633                           | 34        | 0.510                           | 11        |
| 0.583                           | 81        | 0.554                           | 58        | 0.757                           | 35        | 0.587                           | 12        |
| 0.565                           | 82        | 0.695                           | 59        | 0.673                           | 36        | 0.755                           | 13        |
| 0.531                           | 83        | 0.656                           | 60        | 0.806                           | 37        | 0.751                           | 14        |
| 0.520                           | 84        | 0.538                           | 61        | 0.789                           | 38        | 0.598                           | 15        |
| 0.678                           | 85        | 0.638                           | 62        | 0.638                           | 39        | 0.522                           | 16        |
| 0.884                           | 86        | 0.746                           | 63        | 0.699                           | 40        | 0.754                           | 17        |
| 0.820                           | 87        | 0.828                           | 64        | 0.546                           | 41        | 0.712                           | 18        |
| 0.848                           | 88        | 0.617                           | 65        | 0.662                           | 42        | 0.767                           | 19        |
| 0.746                           | 89        | 0.722                           | 66        | 0.634                           | 43        | 0.699                           | 20        |
| 0.755                           | 90        | 0.736                           | 67        | 0.749                           | 44        | 0.745                           | 21        |
| 0.760                           | 91        | 0.707                           | 68        | 0.833                           | 45        | 0.580                           | 22        |
| 0.736                           | 92        | 0.736                           | 69        | 0.635                           | 46        | 0.750                           | 23        |
5.3. Hypothesis testing

The direct and indirect effects of variables were involved in this study’s hypotheses. As a result, AMOS 22 found to be the most appropriate for hypothesis testing, particularly trajectory analysis and mean variable test. In respect of hypothesis testing, hypothesis paths presented in the research framework were tested according to the relationships hypothesised in this study. This process started with testing the structural model in order to fulfil certain requirements, where one of them was the validity and reliability of the items. Successful results were achieved from the measurement model test, particularly after testing the structural model. Moreover, the trajectory analysis depended on the notion of least squares which were employed in the regression test. This test involved regression weights that consisted of the outcomes of the estimated trajectory coefficient. Meanwhile, regression weights were similar to trajectory estimates (Bar B).

Trajectory analysis consisted of the critical ratio (CR) which indicated the difference between deviation weights (t value). In the context of regression analysis, hypothesis support was indicated when a CR value was greater than (−) (+) 1.96 at the 0.05 level. Table 5 presents the relationship between effects and the research variables.

In Table 5, the trajectory coefficient results which indicated support for the hypotheses are shown. It can be seen that psychological contract had a negative effect on psychological contract breach (−0.333, −6.234), while psychological contract breach had a positive effect on organisational misbehaviour (0.424, 8.098). Moreover, a direct and negative relationship was present between psychological contract and organisational misbehaviour (−0.360, −6.174).

The direct and negative psychological contract-psychological contract breach was moderated by organisational health (0.355, 7.643). This was the same case to the direct and negative psychological contract-organisational misbehaviour relationship which was moderated by organisational health as well (0.250, 3.656).

Last but not least, the effects of psychological contract on organisational misbehaviour were negative with −.141 as the obtained values, while the obtained values of the mediating effects of

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Table 3. Cronbach’s alpha values

| The Scale                  | Alpha—Cronbach |
|----------------------------|----------------|
| Psychological contract     | 0.78           |
| Organisational health      | 0.88           |
| Psychological contract breach | 0.84         |
| Organisational misbehaviour | 0.81          |

Table 4. Descriptive statistics and correlation coefficients

|          | Mean | Std. Deviation | PC   | ORH   | PCB   | OMB   |
|----------|------|----------------|------|-------|-------|-------|
| PC       | 3.32 | 0.94           | 1    |       |       |       |
| ORH      | 3.10 | 0.77           | 0.563** | 1     |       |       |
| PCB      | 3.30 | 1.29           | 0.584** | 0.531** | 1     |       |
| OMB      | 3.19 | 1.18           | 0.542** | 0.596** | 0.567** | 1     |

N = 201. Alpha reliabilities appear in parentheses.
PC, psychological contract; ORH, organisational health; PCB, psychological contract breach; OMB, organisational misbehaviour.
* Correlation is significant at the 0.05 level (two-tailed).
** Correlation is significant at the 0.01 level (two-tailed).
psychological contract breach were $-7.237$. Following these results, hypotheses H1 to H6 were supported.

6. Results and discussion

Based on the research findings and hypothesised relationships developed through the reviewed literature works, a negative relationship was found between psychological contract and psychological contract breach. This result was in agreement with the finding reported by Shore and Tetrick (1994). The negative relationship between these variables may be attributed to the function of psychological contract which allows organisation managers to predict organisational issues and interaction. Furthermore, lack of confidence and control among managers and employees results in breached psychological contracts. To be specific, when Iraqi oil tank company’s employees perceive that the company breaks its promises and obligations, weak relational contracts could occur, which will lead to negative effects on the organisation.

A positive relationship was found between psychological contract breach and organisational misbehaviour, as evidenced in prior studies (e.g. Kuang-Man, 2013; Bashir & Nasir, 2013). This may be due to the fact that psychological contract breach may pose negative influence on positive behaviours and the organisation’s failure to realise its obligations. In this situation, employees will start suspecting breach and displaying negative attitudes towards their employers. It can be said that psychological contract breach comprises several factors which may lead to potential negative behaviours.

The direct negative relationship between psychological contract and organisational misbehaviour was supported by the findings, as suggested by previous studies by Ay and Ozgun (2017) and Kuang-Man (2013). This direct negative relationship may be due to the fact that the achievement of organisation’s psychological contract is indicative of its fulfilment of promises. This results in employees’ higher tendency to display favourable behaviour.

Moreover, this study’s findings supported the findings from previous studies. To be specific, the moderating effects of organisational health on psychological contract and organisational misbehaviour relationship and similarly on the relationship between psychological contract and psychological contract breach were found in previous studies. Based on these findings, it could be indicated that Iraqi Oil Tankers Co. should measure the level of employees’ perceptions, viewpoints, and feelings in order to create a healthy organisational environment and mitigate psychological contract breach. These efforts may lead to the reduction of negative employee behaviours and organisational misbehaviours.

Last but not least, the relationship between psychological contract and organisational misbehaviour was mediated by psychological contract breach. This finding was in agreement with the finding in studies by McCoy and Elwood (2009) and Schaupp (2012). The factor of this mediated relationship was due to the differences between contract breach views and varying impressions between one employee and another. Repetitive crises which were resulted from actual or perceived breach may disrupt the confidence of the employees who may perceive a breach in the

| Variables | Estimate | CR | P | Results |
|-----------|----------|----|----|---------|
| PC        | $-0.333$ | $-6.234$ | *** | Accept  |
| PCB       | $0.424$  | 8.098 | *** | Accept  |
| PC*ORH    | $0.355$  | 7.643 | *** | Accept  |
| OMB       | $0.610$  | $-6.174$ | *** | Accept  |
| PC*ORH    | $0.250$  | 3.656 | *** | Accept  |
| PC        | $-0.141$ | $-7.237$ | *** | Accept  |

Table 5. Hypothesis testing
psychological contract. In order to mitigate those perceptions, managers must pay more efforts and proactivity to reduce negative impacts on employees by adopting an open-door policy and reciprocal leadership methodology. Performing this action will create a significant positive relationship between managers and employees to the extent that employees can express their feelings and suggestions with ease (Arshadi, Zare, & Piryaei, 2012; Chernyak-Hai & Tziner, 2014).

It is recommended that management and leaders refrain from making promises they cannot keep as breaching those promises would lead to negative behaviours and increase organisational misbehaviour among employees. These effects would distort the social reciprocal relationship between the two parties. Furthermore, it is also advisable for employers to provide opportunity for employees to create a healthy work environment centred on their morale. Additionally, solutions to moral dilemmas may be introduced via workshops and training courses to enhance employees’ confidence in the company and organisational health (Suazo, 2009). To sustain high quality and healthy working environment, employees who work towards mitigating negative behaviours. This is because these employees overcome crises, bear heavy burden of jobs, and forward creative ideas which may assist in the preservation of organisation’s obligations towards employees (Frost & Robinson, 1999).

7. Practical implications

The practical implications of this study are related to the Iraqi oil tank company in terms of managing organisational misbehaviour among employees. To be specific, the breach of psychological contract can trigger a negative thought which affects employees’ behaviour towards their job and organisation. In solving this issue, it is suggested that the promises in the psychological contract are those that organisations can realistically fix and reasonably fulfil for employees. The management of many organisations has a tendency towards changes. Due to the pressure of this situation, they mostly fail to fulfil their promises to employees during recruitment (Bordia et al., 2008). In solving this problem, remedial actions need to be performed such as improvement of employee’s work engagement, which can build organisation–employee relationship (Costantini et al., 2017). Additionally, the organisation should explain the logical reasons for any occurrence of psychological contract breach and compensate in appropriate ways (Morrison & Robinson, 1997).

Moreover, organisations should pay efforts to eliminate the effects of psychological contract breach which may lead to negative behaviours among employees. In this regard, a fair and supportive work culture needs to be created to reduce the damage occurred by the breach. Additionally, honest communication can help develop better relationship between employees and the organisation as communication provides feedback and conveys a positive message that the organisation cares for the employees (Neves & Eisenberger, 2012). Additionally, there are several employees who do not prefer to complain face-to-face. In solving this problem, organisations can develop an online platform where employees can deliver messages regarding proposals or complains to the relevant individuals without facing them. This helps organisations improve communication, prevent future negative outcomes and behaviour from the employees, and establish a better relationship exchange. In conclusion, organisational misbehaviour is one of the most discussed topics in the context of organisations worldwide. Therefore, in order to mitigate organisational misbehaviours, several measures must be adopted. Psychological contract improvement is an action which may contribute to the practice of positive behaviours such as organisational co-existence. Psychological contract may be facilitated through a healthy workplace environment and effective leadership which can maintain organisational health. Furthermore, social reciprocities must be utilised as a tool to prevent psychological contract breach and limit organisational misbehaviour. The social exchange theory of Blau (1964) supports the notion that employees react to negative job attitudes as the breach of their psychological contract, hence leading them to organisational misbehaviour (Law & Zhou, 2014). Moreover, it is evident from previous literature works that PCB can trigger anti-citizenship behaviour which may lead to employees’ anger and frustration (Eckerd et al., 2013; Kickul, 2001). Overall, this study contributes to the social exchange theory by defining the role of psychological contract directly and the mediating role of psychological contract breach on organisational misbehaviour. It is also shown in the study that organisational health moderates employer–employee relationships. Last but
not least, this study’s findings contribute to theory and provide future researchers with new avenues to pursue in the field of organisational psychology and organisational behaviour.

8. Limitations and future research

There are limitations which need to be addressed in future studies, regardless of the support to the proposed hypotheses where the objectives were acknowledged and the answers to the research questions were determined. The first limitation is that Iraqi Oil Tank Co. was the only company focused in this study; therefore, more accurate findings may be present in other sectors. Furthermore, this study focused on psychological contract breach which was based on real situations occurring in the organisation. For this reason, real situations, issues, and cultural factors must be taken into consideration in a similar context in other countries. Focusing on these aspects will allow an extensive investigation of the psychological contract breach and its influence on the overall organisational performance.

This study’s focus was limited to the Iraqi oil tanks company. For this reason, the results obtained may not apply to other Iraqi organisations. Furthermore, the quantitative research method to investigate psychological contract and psychological contract breach may not provide an in-depth understanding of the phenomenon. Based on the methodological point of view, a qualitative approach would, in contrast, provide an in-depth understanding of the phenomenon as it can highlight areas of improvement needed in the study. It is suggested that a mixed method study is performed in the future to gain deeper insight into the issue.

This study focused on employee’s psychological contract breach and its impact on misbehaviour. As a result, it did not emphasis on the other side of this issue which is the organisation itself. It is suggested that future researches emphasise on both sides and take them into account in a case study research. Emphasising both sides of the issue will contribute to a better understanding of the whole phenomenon and better focus on the implications in the management’s side.

Although the issue of this study appeared to be extensive among employees, it may also be present among the organisation’s higher-ups such as heads of sections and departments due to the organisational structure. Therefore, the influence of psychological contract breach committed by top management on junior management should be examined to extend the results in terms of generalisation and accuracy. It is recommended that future studies create bigger research sample and add the variables which were excluded due to limited time and cost. The addition of more variables may lead to accurate and feasible results with several benefits for future studies.

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Correction

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References

Abdulaali, A. R., Alnoor, A., & Eneizan, B. (2019). A multi-level study of influence knowledge management small and medium enterprises. Polish Journal of Management Studies, 19(1), 21–31.
Ahmed, W., Kiyani, A., & Hashmi, S. (2016). The study on organizational cynicism, organizational injustice & breach of psychological contract as the determinants of deviant work behavior. Al-Abrrow, H., & Alnoor, A. (2017). The impact of locus of control and relationship quality in counterproductive
work behavior through trust in the leader and psychological empowerment: An empirical study on workers in public hospitals in Basra. Jordan Journal of Business Administration, 13(2), 201–231. doi:10.12816/0040703

Al-Abrow, H., Alnoor, A., & Abbas, S. (2019). The effect of organizational resilience and ceo’s narcissism on project success: organizational risk as mediating variable. Organization Management Journal, 16(1), 1-13.

Hadi, A. A., Alnoor, A., & Abdullah, H. O. (2018). Socio-technical approach, decision-making environment, and sustainable performance: Role of ERP systems. Interdisciplinary Journal of Information, Knowledge, and Management, 13, 397–415.

Ahmarli, M., Alnoor, A., Eneizan, B., Abdulla, M., & Alnoor, A. R. (2019). Determinants of the production system time (JIT) on reduce waste: Case study in a Salsal water company. International Journal of Academic Research in Business and Social Sciences, 9(7), 17–32.

Ahmarli, M., Noor, R. M. A. S., Abdulla, M., Alnoor, A., & Eneizan, B. (2019). How does financial analysis influence the firm’s failure of Iraqi private sector? The Journal of Social Sciences Research, 5(9), 1321–1328. doi:10.32861/jssr.59.1321.1328

Alnoor, A., Eneizan, B., Mokhamreh, H. Z., & Rahoma, I. A. (2018). The effect of reverse logistics on sustainable manufacturing. International Journal of Academic Research in Accounting, Finance and Management Sciences, 9(1), 71–79.

Andersson, L. M. (1996). Employee cynicism: An examination using a contract violation framework. Human Relations, 49(11), 1395–1418. doi:10.1177/00187267960901102

Arshadi, N., Zare, R., & Priyaoi, S. (2012). The relationship between leader-member exchange and workplace deviance with the mediating role of workplace exclusion. International Journal of Psychology, 6(1), 78–98.

Ay, F. A., & Ozgüın, Ü. N. A. L. (2016). The relationships between psychological contract, organizational cynicism, and turnover intention. Journal of International Health Sciences and Management, 2(2), 102–112.

Bol, P. M. (2009). Age and psychological contract breach in relation to work outcomes. Rozeneberg Publishers.

Bashir, S., & Nasir, M. (2013). Breach of psychological contract, organizational cynicism, and union commitment: A study of the hospitality industry in Pakistan. International Journal of Hospitality Management, 34, 61–65. doi:10.1016/j.ijhm.2013.02.004

Bashir, S., Nasir, M., Qoyyum, S., & Bashir, A. (2012). Dimensionality of counterproductive work behaviors in public sector organizations of Pakistan. Public Organization Review, 12(4), 357–366. doi:10.1007/s11115-012-0177-8

Bashir, S., Nasir, Z. M., Soeed, S., & Ahmed, M. (2011). Effect of psychological contract, the perception of politics and organizational cynicism: Evidence from Pakistan. African Journal of Business Management, 5 (3), 884–888.

Bauer, G. F., & Jenny, G. J. (2012). Moving towards positive organizational health: Challenges and a proposal for a research model of organizational health development. Contemporary Occupational Health Psychology: Global Perspectives on Research and Practice, 2, 126–145.

Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. Journal of Applied Psychology, 85(3), 349. doi:10.1037//0021-9010.85.3.349

Blau, P. M. (1964). Exchange and power in social life. Piscataway, NJ: Transaction Publishers, 49(4), 16.

Bordia, P., Restubog, S. L. D., & Tong, R. L. (2008). When employees strike back: Investigating mediating mechanisms between psychological contract breach and workplace deviance. Journal of Applied Psychology, 93(5), 1104. doi:10.1037/0021-9010.93.5.1104

Cartwright, S., & Cooper, C. L. (2014). Towards organizational health: Stress, positive organizational behavior, and employee well-being. In Bridging occupational, organizational and public health (pp. 29–42). Dordrecht: Springer.

Cassar, V., & Briner, R. B. (2011). The relationship between psychological contract breach and organizational commitment: Exchange imbalance as a moderator of the mediating role of violation. Journal of Vocational Behavior, 78(2), 283–289. doi:10.1016/j.jvb.2010.09.007

Chaudhry, A., Coyle-Shapiro, J. A. M., & Wayne, S. J. (2011). A longitudinal study of the impact of organizational change on transactional, relational, and balanced psychological contracts. Journal of Leadership & Organizational Studies, 18(2), 247–259. doi:10.1177/1548051810385942

Chernyak-Hai, L., & Tziner, A. (2014). Relationships between counterproductive work behavior, perceived justice and climate, occupational status, and leader-member exchange. Revista De Psicología Del Trabajo Y De Las Organizaciones, 30(1). doi:10.5093/rptl30.1

Costantini, A., De Paolo, F., Ceschi, A., Sartori, R., Meneghini, A. M., & Di Fabio, A. (2017). Work engagement and psychological capital in the Italian public administration: A new resource-based intervention programme. SA Journal of Industrial Psychology, 43(1), 1–11. doi:10.4102/sajo.v43i0.1413

Dauou-Öyry, L., Anouze, A. L., Otoki, F., Durnit, N. Y., & Osman, I. (2014). The JOINT model of nurse absenteeism and turnover: A systematic review. International Journal of Nursing Studies, 51(1), 93–110. doi:10.1016/j.ijnurstu.2013.06.018

De Schriijver, A., Delbeke, K., Maesschalck, J., & Pleyser, S. (2010). Fairness perceptions and organizational mis-behavior: An empirical study. The American Review of Public Administration, 40(6), 691–703. doi:10.1177/0275074010363742

Eckerd, S., Hill, J., Boyer, K. K., Donohue, K., & Ward, P. T. (2013). The relative impact of attribute, severity, and timing of psychological contract breach on behavioral and attitudinal outcomes. Journal of Operations Management, 31(7–8), 567–578. doi:10.1016/j.jom.2013.06.003

Fagbohungbe, B. O., Akinbode, G. A., & Ayodeji, F. (2012). Organizational determinants of workplace deviant behaviors: An empirical analysis in Nigeria. International Journal of Business and Management, 7 (5), 207. doi:10.5539/ijbm.v7n5p207

Farahani, M. F., Mirzamohammadi, M. H., Afsoori, N. R., & Soied Mohammadi, S. (2014). The study of the relationship of organizational health of the schools and the student’s academic achievement (A case study of high schools of Kohkiloie and Boheramda Province, Iran 2011). Procedia-Social and Behavioral Sciences, 109, 628-633. doi:10.1016/j.sbspro.2013.12.518

Firoozl, M., Mokhtari, A., & And Mokhtari, G. (2016). The relationship between organizational cynicism and innovative behaviors of sport and youth offices in Hormozgan province. International Journal Of Science Culture And Sport (Intjscs), 4(3), 295–303. doi:10.14486/IntJSCS519

Frost, P., & Robinson, S. (1999). The toxic handler: Organizational hero–and-casualty. Harvard Business Review, 77(4), 96–106.

George, J. M., Jones, G. R., & Sharbrough, W. C. (2002). Understanding and managing organizational behavior.
Griffin, R. W., & Moorhead, G. J. (2014). Organization theory and design (11th ed.). South-Western.

Guest, D. (2004). Flexible employment contracts, the psychological contract and employee outcomes: An analysis and review of the evidence. International Journal of Management Reviews, 5(1), 1–19. doi:10.1111/j.1460-8545.2004.00099.x

Hanisch, K. A., & Hulin, C. L. (1990). Job attitudes and organizational withdrawal: An examination of retire ment and other voluntary withdrawal behaviors. Journal of Vocational Behavior, 37(1), 60–78. doi:10.1016/0022-1031(90)90007-0

Hoy, W. K., & Fedman, J. A. (1987). Organizational health: The concept and its measure. Journal of Research and Development in Education, 20(4), 30–37.

Igic, O. G. (2015). A research on the relationship between organizational commitment and organizational cynicism. İletişim Kurum Ve Araştırma Dergisi, 4(11), 77–97.

Jahangir, N., Akbar, M. M., & Haq, M. (2004). Organizational citizenship behavior: Its nature and antecedents.

Jensen, J. M., Opland, R. A., & Ryan, A. M. (2010). Psychological contracts and counterproductive work behaviors: Employee reactions to transactional and relational breach. Journal of Business and Psychology, 25(4), 555–568. doi:10.1007/s10869-009-9148-7

Johnson, J. L., & O’Leary-Kelly, A. M. (2003). The effects of psychological contract breach and organizational cynicism: Not all social exchange violations are created equal. Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 24(5), 627–647. doi:10.1002/job.207

Kelloway, E. K., Francis, L., Prosser, M., & Cameron, J. E. (2010). Counterproductive work behavior as a protest. Human Resource Management Review, 20(1), 18–25. doi:10.1016/j.hrmr.2009.03.014

Khammarnia, M., Baghbanian, A., Mohammadi, R., Barati, A., & Safari, H. (2013). The relationship between organizational health and performance indicators of Iran university hospitals. The Organization, 4(5), 7–8.

Kickul, J. (2001). When organizations break their promises: Employee reactions to unfair processes and treatment. Journal of Business Ethics, 29(4), 289–307. doi:10.1023/A:1010734616208

Kickul, J., & Lester, S. W. (2005). Broken promises: Equity sensitivity as a moderator between psychological contract breach and employee attitudes and behavior. Journal of Business and Psychology, 16(2), 191–217. doi:10.1023/A:1011055132252

Kickul, J. R., Neuman, G., Parker, C., & Finkl, J. (2001). Settling the score: The role of organizational justice in the relationship between psychological contract breach and anticitizenship behavior. Employee Responsibilities and Rights Journal, 13(2), 77–93. doi:10.1023/A:1014586225406

Kidwell, R. E., & Valentine, S. R. (2009). Positive group context, work attitudes, and organizational misbehavior: The case of withholding job effort. Journal of Business Ethics, 86(1), 15–28. doi:10.1007/s10551-008-9790-4

Law, K. S., & Zhou, Y. (2014). On the relationship between implicit attitudes and counterproductive work behaviors. Asia Pacific Journal of Management, 31(2), 643–669. doi:10.1007/s10490-013-9346-8

Li, J., & Dai, L. (2015). A review of psychological contract. Scientific research publishing. A Journal of Psychology, 6(12), 1539–1544.

Litzky, B. E., Eddleston, K. A., & Kidder, D. L. (2006). The good, the bad, and the misguided: How managers inadvertently encourage deviant behaviors. Academy of Management Perspectives, 20(1), 91–103. doi:10.5465/amr.2006.19873411

Martin, R., Thomas, G., Charles, K., Epitropaki, O., & McNama ra, R. (2005). The role of leader-member exchanges in mediating the relationship between locus of control and work reactions. Journal of Occupational and Organizational Psychology, 78(1), 141–147. doi:10.1348/096371704X23763

McCoy, J., & Elwood, A. (2009). Human factors in organizational resilience: Implications of breaking the psychological contract. Journal of Business Continuity & Emergency Planning, 3(4), 368–375.

McLean Parks, J., Kidder, D. L., & Gallagher, D. G. (1998). Fitting square pegs into round holes: Mapping the domain of contingent work arrangements on the psychological contract. Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 19(5), 697–730.

Middendorf, S. (2011). The psychological contract and implied contractual terms: Synchronous or asynchronous models? International Journal of Law and Management, 53(1), 32–50. doi:10.1108/17542431111111872

Miller, R. L., Griffin, M. A., & Hart, P. M. (1999). Personality and organizational health: The role of conscientiousness. Work & Stress, 13(3), 7–19. doi:10.1080/026783799296156

Millward, L. J., & Hopkins, L. J. (1998). Psychological contracts, organizational and job commitment. Journal of Applied Social Psychology, 28(16), 1530–1556. doi:10.1111/jasp.1998.28.issue-16

Mohamed, M. S., & Badawy, S. M. (2016). Psychological contract violation, and affective commitment: The mediating effect of cynicism and the moderating effect of employees’ expectations.

Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. Academy of Management Review, 22(1), 226–256. doi:10.5465/almr.1999.970718265

Neves, P., & Eisenberger, R. (2012). Management communication and employee performance: The contribution of perceived organizational support. Management Performance, 25(5), 452–464. doi:10.1080/14767292.2012.721834

Nicolay, C. R. (2014). The organizational health of healthcare organizations: The concept and its measure.

Orvik, A., & Axellsson, R. (2012). Organizational health in health organizations: Towards a conceptualization. Scandinavian Journal of Caring Sciences, 26(4), 798–802. doi:10.1111/j.1447-0349.2012.26.issue-4

Quick, J. C., Mack-Frey, M., & Cooper, C. L. (2007). Managerial dimensions of organizational health: The healthy leader at work. Journal of Management Studies, 44(2), 189–205. doi:10.1111/j.1467-6486.2007.00684.x

Robbins, S. P., Judge, T. A., & Millett, B. (2015). Pearson higher education AU: OB the essentials.

Robinson, S. L., Kroatz, M. S., & Rousseau, D. M. (1994). Changing obligations and the psychological contract: A longitudinal study. Academy of Management Journal, 37(1), 137–152.

Robinson, S. L., & Wolfe Morrison, E. (2000). The development of psychological contract breach and violation: A longitudinal study. Journal of Organizational Behavior, 21(5), 525–546. doi:10.1002(1099-1379
Rousseau, D. M. (1989). Psychological and implied contracts in organizations. Employee Responsibilities and Rights Journal, 2(2), 121–139. doi:10.1007/BF01384942

Rousseau, D. M. (2000). Psychological contract inventory technical report. Pittsburgh: Carnegie Mellon University.

Rousseau, D. M. (2011). The individual–organization relationship: The psychological contract.

Roxana, A. C. (2013). Antecedents and mediators of employees’ counterproductive work behavior and intentions to quit. Procedia-Social and Behavioral Sciences, 84, 219–224. doi:10.1016/j.sbspro.2013.06.538

Ryff, C. D., & Singer, B. (1998). The contours of positive human health. The Psychological Inquiry, 9(1), 1–28. doi:10.1207/s15327965pli0901_1

Schaupp, G. L. (2012). An experimental study of psychological contract breach: The effects of exchange congruence in the employer-employee relationship (Doctoral dissertation, Virginia Tech).

Sharkawi, S., Rahim, A. R. A., & AzuraDahalan, N. (2013). The relationship between person organization fit, psychological contract violation on counterproductive behaviors. International Journal of Business and Social Science, 4(4).

Shore, L. M., & Tetrick, L. E. (1994). The psychological contract as an explanatory framework. Trends in Organizational Behavior, 1, 91–109.

Spector, P. E., & Fox, S. (2002). An emotion-centered model of voluntary work behavior: Some parallels between counterproductive work behavior and organizational citizenship behavior. Human Resource Management Review, 12(2), 269–292. doi:10.1016/S1053-4822(02)00004-9

Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? Journal of Vocational Behavior, 68(3), 446–460. doi:10.1016/j.jvb.2005.10.005

Suazo, M. M. (2009). The mediating role of psychological contract violation on the relations between psychological contract breach and work-related attitudes and behaviors. Journal of Managerial Psychology, 24(2), 136–160. doi:10.1108/02683940910928856

Turnley, W. H., Bolino, M. C., Lester, S. W., & Bloodgood, J. M. (2003). The impact of psychological contract fulfillment on the performance of in-role and organizational citizenship behaviors. Journal of Management, 29(2), 187–206. doi:10.1177/01492063022900204

Vardi, Y., & Weitz, E. (2002). Using the theory of reasoned action to predict organizational misbehavior. Psychological Reports, 91(3_suppl), 1027–1040. doi:10.2466/pr0.2002.91.3f.1027

Wainwright, D., & Sambrook, S. (2012). The role of the organization in managing the psychological contract: What local policies say to practitioners. The reform of health care: Shaping, adapting and resisting policy developments. In Organizational behaviour in health care series (pp. 21–36). Palgrave Macmillan.

Weitz, E., Vardi, Y., & Setter, O. (2012). Spirituality and organizational misbehavior. Journal of Management, Spirituality & Religion, 9(3), 255–281. doi:10.1080/14766086.2012.730782

Zahed-Babelan, A., & Moenikia, M. (2010). A study of simple and multiple relations between organizational health and faculty trust in female high schools. Procedia-Social and Behavioral Sciences, 2(2), 1532–1536. doi:10.1016/j.sbspro.2010.03.230

Zhou, J., Plaisent, M., Zheng, L., & Bernard, P. (2014). Psychological contract, organizational commitment and work satisfaction: Survey of researchers in Chinese state-owned engineering research institutions. Open Journal of Social Sciences, 2(9), 217. doi:10.4236/jss.2014.29037

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). Business research methods, 8th ed. Mason, OH: Cengage Learning.
Appendix A
Factor Loadings of the Construct

Table A1. Principal axis factor analysis, the oblimin rotation for psychological contract

| Item                                                                 | Transactional contract | Relational contract |
|----------------------------------------------------------------------|------------------------|---------------------|
| 1. I do this job just for the money.                                | .64                    |                     |
| 2. I prefer to work a strictly defined set of working hours.        | .51                    |                     |
| 3. I do not identify with the organization’s goals.                 | .53                    |                     |
| 4. It is important not to get too involved in your job.             | .68                    |                     |
| 5. I expect to be paid for any overtime I do.                       | .50                    |                     |
| 6. I come to work purely to get the job done.                       | .86                    |                     |
| 7. My long-term future does not lie with this organization.         | .47                    |                     |
| 8. My loyalty to the organization is contract specific.             | .59                    |                     |
| 9. I only carry out what is necessary to get the job done.          | .87                    |                     |
| 10. It is important not to get too attached to your place of work.  | .88                    |                     |
| 11. I work to achieve the purely short-term goals of my job.        | .52                    |                     |
| 12. My commitment to this organization is defined by my contract.   | .46                    |                     |
| 13. My long-term future lies within this organization.              | .74                    |                     |
| 14. I will work for this company indefinitely.                      | .81                    |                     |
| 15. My job means more to me than just a means of paying the bills.  | .53                    |                     |
| 16. It is important to be flexible and to work irregular hours if   | .66                    |                     |
| necessary.                                                          |                        |                     |
| 17. I am heavily involved in my place of work.                      | .68                    |                     |
| 18. I intend to stay in this job for a long time (i.e., over 2–3 years). | .89                  |                     |
| 19. As long as I reach the targets specified in my job, 1 am satisfied. | .85                  |                     |
| 20. I work only the hours set out in my contract and no more.       | .84                    |                     |
| 21. I expect to develop my skills (via training) in this company.   | .66                    |                     |
| 22. I expect to gain promotion in this company with a length of     | .45                    |                     |
| service and effort to achieve goals.                                |                        |                     |
| 23. I expect to grow in this organization.                          | .76                    |                     |
| 24. To me working for this organization is like being a member of   | .58                    |                     |
| a family.                                                           |                        |                     |
| 25. I go out of my way for colleagues whom I will call on at a later date to return the favor. | .56 | | |
| 26. My job means more to me than just a means of paying the bills,  | .51                    |                     |
| 27. I feel this company reciprocates the effort put in by its        | .53                    |                     |
| employees.                                                          |                        |                     |
| 28. The organization develops—rewards employees who work hard and   | .75                    |                     |
| exert themselves.                                                   |                        |                     |
| 29. I am motivated to contribute 100% to this company in return for future employment benefits. | .62 | | |
| 30. I have a reasonable chance of promotion if I work hard.         | .92                    |                     |
| 31. My career path in the organization is clearly mapped out.       | .77                    |                     |
| 32. I feel part of a team in this organization.                     | .71                    |                     |
| 33. This job is a stepping stone in my career development.          | .65                    |                     |
Table A2. Principal axis factor analysis, the oblimin rotation for psychological contract breach and psychological contract violation

| Item                                                                 | Factor loadings |
|----------------------------------------------------------------------|-----------------|
|                                                                      | Contract breach | Contract violation |
| 1. Almost all the promises made by my employer during recruitment have been kept so far. | .53             |                  |
| 2. I feel that my employer has come through in fulfilling the promises made to me when I was hired. | .76             |                  |
| 3. So far my employer has done an excellent job of fulfilling its promises to me. | .71             |                  |
| 4. I have not received everything promised to me in exchange for my contribution. | .78             |                  |
| 5. My employer has broken many of its promises to me even though I’ve upheld my side of the deal. | .73             |                  |
| 6. I feel a great deal of anger toward my organization.               | .67             |                  |
| 7. I feel betrayed by my organization.                               | .79             |                  |
| 8. I feel that my organization has violated the contract between us.  | .72             |                  |
| 9. I feel extremely frustrated by how I have been treated by my organization. | .75             |                  |
| Item                                                                 | Integrity | Effects of managers | Consideration | Structure | Resources' support | Morals | Concentration |
|----------------------------------------------------------------------|-----------|---------------------|---------------|-----------|-------------------|--------|---------------|
| 1. Managers are protected from the unreasonable community and parental demands. | .56       |                     |               |           |                   |        |               |
| 2. The organization is vulnerable to outside pressures.               | .80       |                     |               |           |                   |        |               |
| 3. A few managers can change organization policy.                    | .83       |                     |               |           |                   |        |               |
| 4. The principal gets what he or she wants from superiors.           | .51       |                     |               |           |                   |        |               |
| 5. The principal is able to work well with the superintendent.       | .65       |                     |               |           |                   |        |               |
| 6. The principal is impeded by superiors.                           | .49       |                     |               |           |                   |        |               |
| 7. The principal is friendly and approachable.                       | .83       |                     |               |           |                   |        |               |
| 8. The principal treats all members as his or her equal.             | .78       |                     |               |           |                   |        |               |
| 9. The principal puts suggestions made by the members into operation.| .70       |                     |               |           |                   |        |               |
| 10. The principal makes his or her attitudes clear to the organization.| .90       |                     |               |           |                   |        |               |
| 11. The principal lets members know what is expected of them.        | .64       |                     |               |           |                   |        |               |
| 12. The principal maintains definite standards of performance.       | .84       |                     |               |           |                   |        |               |
| 13. Extra materials are available if requested.                     | .54       |                     |               |           |                   |        |               |
| 14. Members have access to needed instructional materials.           | .76       |                     |               |           |                   |        |               |
| 15. Supplementary materials are available for work.                  | .89       |                     |               |           |                   |        |               |
| 16. Employees in this organization like each other.                  |           | .82                 |               |           |                   |        |               |
| 17. Employees accomplish their jobs with enthusiasm.                 |           | .86                 |               |           |                   |        |               |
| 18. Employees in this organization are cool and aloof from each other.|           | .80                 |               |           |                   |        |               |
| 19. The organization sets high standards for performance.            |           | .51                 |               |           |                   |        |               |
| 20. Members respect others who get good grades.                     |           | .65                 |               |           |                   |        |               |
| 21. The organization environment is orderly and serious.             |           | .59                 |               |           |                   |        |               |
| Item                                                                 | Factor loadings |
|----------------------------------------------------------------------|-----------------|
| 1. Purposely wasted your employer's materials/supplies.              | .76             |
| 2. Purposely damaged a piece of equipment or property.              | .89             |
| 3. Purposely dirtied or littered your place of work.                | .81             |
| 4. Came to work late without permission.                            | .55             |
| 5. Stayed home from work and said you were sick when you were not.  | .76             |
| 6. Taken a longer break than you were allowed to take.              | .48             |
| 7. Left work earlier than you were allowed to.                      | .87             |
| 8. Purposely did your work incorrectly.                             | .77             |
| 9. Purposely worked slowly when things needed to get done.          | .56             |
| 10. Purposely failed to follow instructions.                        | .81             |
| 11. Stolen something belonging to your employer.                    | .92             |
| 12. Took supplies or tools home without permission.                 | .75             |
| 13. Put in to be paid for more hours than you worked.               | .59             |
| 14. Took money from your employer without permission.               | .83             |
| 15. Stole something belonging to someone at work.                   | .87             |
| 16. Told people outside the job what a lousy place you work for.    | .75             |
| 17. Started or continued a damaging or harmful rumor at work.        | .49             |
| 18. Been nasty or rude to a client or customer.                     | .71             |
| 19. Insulted someone about their job performance.                   | .59             |
| 20. Made fun of someone's personal life.                            | .61             |
| 21. Ignored someone at work.                                        | .82             |
| 22. Blamed someone at work for the error you made.                  | .75             |
| 23. Started an argument with someone at work.                       | .57             |

(Continued)
| Item                                                                 | Factor loadings |
|----------------------------------------------------------------------|-----------------|
|                                                                      | Sabotage | Withdrawal | Production deviance | Theft | Abuse |
| 24. Verbally abused someone at work.                                |          |            |                    |       | .73    |
| 25. Made an obscene gesture (the Wnger) to someone at work.         |          |            |                    |       | .90    |
| 26. Threatened someone at work with violence.                       |          |            |                    |       | .54    |
| 27. Threatened someone at work, but not physically.                 |          |            |                    |       | .73    |
| 28. Said something obscene to someone at work to make them feel bad.|          |            |                    |       | .93    |
| 29. Did something to make someone at work look bad.                 |          |            |                    |       | .58    |
| 30. Played a mean prank to embarrass someone at work.               |          |            |                    |       | .61    |
| 31. Looked at someone at work’s private mail/property without permission. |          |            |                    |       | .87    |
| 32. Hit or pushed someone at work.                                  |          |            |                    |       | .80    |
| 33. Insulted or made fun of someone at work.                        |          |            |                    |       | .56    |
