

Research Article

# Exploring Role of Employee Security Awareness, Workplace Safety and Security, Self-efficacy to Enhance Organizational Commitment: Mediation of Employee Satisfaction

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**Abstract:** Security and safety of employees are important for enhancing employee satisfaction and organizational commitment. Therefore, the main purpose of this research is to examine the relationship between workplace safety, employee security self-efficacy, and employee security awareness with organizational commitment through employee satisfaction. The hypothesis of the research was examined using a self-administered questionnaire. The usable response rate was 60.21%. Smart PLS 4 and SPSS were used to evaluate the collected questionnaires. Smart PLS applied bootstrapping and algorithms for this purpose. Results showed a significant effect of employee satisfaction on organizational commitment. Findings also demonstrated a significant effect of workplace safety, employee security self-efficacy, and employee security awareness on employee satisfaction. Results supported the mediating role of employee satisfaction in the relationship between workplace safety, employee security self-efficacy, and employee security awareness and organizational commitment. Present study integrate employee security self-efficacy, employee security awareness and workplace safety in a single framework and demonstrate its effect on organizational commitment and employee satisfaction empirically.

**Keywords:** Workplace safety, Employee security self-efficacy, Employee security awareness, Organizational commitment, Employee satisfaction.

## 1. Introduction

Elements related to employee security impact their decision to stay within organization for a longer period. Employee long-term stay impacts organizational productivity and profits. Employee security awareness is one of the security factors that develops positive emotions among employees. Employee security awareness is the level at which employees understand the importance of organizational guidelines, rules, and security policies. It also represents the level at which employees behave while following these guidelines, rules and policies [1]. Additionally, Employee security awareness focuses on the employee's intention toward security to understand security issues and respond accordingly. Employee security awareness deals with the knowledge of an employee toward policies of security, understanding their responsibility, awareness regarding security threats and maintaining confidentiality of information. Enhanced employee security awareness allows employees to respond appropriately to security incidents and comply with security policies of organization. Thus, employee security awareness is increased as basic capability of organization that supports effective management of security system and minimizes vulnerability to both external and internal security threats [2]. The role of employee security awareness is to make sure that employees within organization have awareness regarding regulations, rules and policies regarding information security. It also involves a state of knowledge and consciousness regarding issues of security and can be an important predictor of behavior of security compliance. Employees should have the ability to take decisive decisions regarding employee security. Therefore, information security awareness is considered as an important and essential form of security to mitigate risks associated with security [3].

Workplace safety is also important for businesses in present dynamic environments. The vitality of security in workplace is very important for optimum performance [4]. By handling these security risks, workplace safety helps to minimize the harm and also develops stability, confidence and trust among employees for the organization. It also enables employees to work in resilient and secure organizational environment. In present digital age, offices have become vulnerable to a number of threats related to workplace that have made work environment more complex and sophisticated [5]. Workplace safety issues can be of different forms

including vandalism, violence, and theft. Sometimes digital issues like hacking, data breaches and cyberattacks create safety issues for the employee. Organizations cannot afford to let their security down whether its failure of IT, phishing attacks, workplace incidents, and theft. Whereas organizations must be able to proactively anticipate the threats with purpose of secure their business, ensure safety and avoid threats at later stage. Workplace safety needs careful employee behavior so they can remain safe from different threats [6].

Employee security self-efficacy is the belief of employees regarding their capability to perform certain actions that enact safe online behaviors, manage digital security settings, and protect information systems influencing employee motivation and satisfaction. Studies mentioned that employee self-efficacy represents ability of employees to fulfill their goals and tasks [7]. Employee security self-efficacy affects the level of initiation, self-regulation and effort is needed by the employee to handle obstacles related to work. Employee security self-efficacy has the ability to affect employees' behaviours, thoughts and emotions, thus plays an important role in their personal and professional achievements [8]. The higher the level of employee security self-efficacy, the more confident an employee will be in handling issues related to safety and security. Employee security self-efficacy has roots in social learning theory with purpose of judging ability of employees to handle safety and security related issues. Employee security self-efficacy has the ability to affect employees' performance. There are many factors that influence employee security self-efficacy including interaction of employees, and individual factors [9]. Overall, organizations should work on the factor of Employee security self-efficacy as if the employees will feel safe, they will take certain actions to make improvement in their performance.

In present digital age, demand for skilled employees is mounting as each sector is becoming more competitive. On the other hand, employees also look forward to fulfilling their professional and personal demands leading to increasing concern among organizations about organizational commitment and employee satisfaction [10]. Employees are important investments of organization. Their satisfaction with their job plays a key role in their productivity. The management of people at workplace is an important part of managing employees [11]. It is vital for management level staff to understand importance of people in organization in terms of its effectiveness on their ability to achieve goals. Employee satisfaction is

important to make employees stay in the workplace [12]. It develops commitment and loyalty among the employees because of which employees work hard to achieve their professional goals [13]. Employee satisfaction also plays a key role in reducing turnover and absenteeism and enhancing employee commitment towards organization.

Motivated employees play key roles in the success of organization. It is very important that employees get appreciated for their achievement, so they get motivated and develop organizational commitment. Employees are treated as valuable human capital of organization which is key organizational asset. Organizations need to take steps that lead to employee satisfaction. Decision makers of the organization should also consider factors that help in enhancing organizational commitment among employees [14]. Organizational commitment has a critical role to play to shape willingness among employees so they can align their goals with the objectives of organization and make effort for organizational success [15]. Enhanced organizational commitment fosters positive work behaviour by reducing turnover intention and enhancing employee loyalty. It is important for organizations to look for factors that help in development of organizational commitment and employee satisfaction. Therefore, the purpose of this study was to examine the effect of workplace safety, employee security self-efficacy, and employee security awareness on employee satisfaction and organizational commitment.

## 2. Literature Review

### 2.1 Employee Satisfaction and Organizational Commitment

Employee satisfaction is explained as the thought and feelings of employees regarding the place of work and their job [16]. Employee satisfaction is unfavourable or favourable with the opinion of work. Employee satisfaction and organizational commitment are some studied variables in context of employees and organizations. Employee commitment is the attitude regarding job that develops ties between employees to the organization [17]. Organizational commitment plays a very important role in determining whether the employee wants to work in an organization for a longer period of time. It also determines the passion of employees to achieve organizational goals.

Organizational commitment and employee satisfaction are constructs related to attitude. They have differences in terms of their scope and focus. Employee satisfaction shows evaluation of employee towards job experience and certain condition of job [18]. On the other hand, organizational commitment reflects the psychological attachment of an employee towards the organization. A number of studies have shown a relationship between organizational commitment and employee satisfaction. Several studies showed that both extrinsic and intrinsic employee satisfaction has a significant role in enhancing organizational commitment. The employees who are satisfied are likely to contribute to a positive culture, collaborate effectively with colleagues, support organizational changes and remain with organization for a longer period [19]. Employee satisfaction also reduces employee turnover intention and has a direct positive effect on organizational commitment.

Some of the studies have debated the relationship between these two variables despite past strong relationships. Some of the scholars argued that employee satisfaction is developed through organizational commitment [20]. Some other studies argued that employee satisfaction develops employee loyalty among them. Studies also proposed that commitment among employees is increased through organizational commitment with the passage of time [21]. Employee satisfaction is strongly linked to employee intention to leave the organization whereas turnover behavior of employee is linked to organizational commitment. As a nutshell, studies suggest that employee satisfaction is one of the antecedents of employee commitment. Lee and Kim [19] as employee commitment develops long term relationship among employees for the organization. Therefore, this study assumes that.

**H1:** Employee Satisfaction significantly affects Organizational Commitment.

### 2.2 Employee Security Awareness and Employee Satisfaction

Employee security in literature is referred as employee ability to respond, understand and recognize the threats towards digital and physical assets, specifically in terms of IT based security risks such as unauthorized access, phishing and data breaches [3]. Studies emphasized that giving protection to assets like Information technology is not responsibility of security or IT departments. In fact, it is the shared responsibility with all

employees of organization. When employees have required information and skills regarding security, they will develop confidence in handling sensitive information and digital systems [22]. This confidence minimizes the perceived risk, fear of mistakes and uncertainty. Therefore, employee satisfaction, morale and psychological comfort are reduced. Employees who are competent to manage information in a secure manner also have control over their work environment. Their employee satisfaction is also higher as compared to other employees [23].

Training regarding security awareness enhances employee responsibility, risk perception, and employee confidence towards organizational security. Therefore, errors related to human are reduced [24]. As a result, employee security awareness plays a very important role to strengthen organizational resilience and security against external and internal threats. Studies reflect that a higher level of employee security awareness has a significant role to improve follow-up rules regarding policies of security. It enables them to handle threats including social engineering attacks and phishing. Information security develops a sense of collective responsibility and ownership regarding organizational information. Rather than perceiving policies of organizations as restrictions, employees view themselves as key contributors towards the safety of organization. As a result of this involvement, work engagement and emotional attachment of employees towards organization is enhanced. The secure behavior towards data handling should be part of daily life like reporting of incidents, and handling of data so that tasks of employees can be conducted with less stress [25].

Furthermore, studies mentioned that information security awareness is very important to develop satisfaction among employees [26]. Fair enforcement, guidance, open communication, and training of security policies develop trust among employees and give signs that organization gives value to both employee's well-being and protection of data. In this situation, employees show commitment with practices regarding information security, so they remain committed towards achievements of goals. As a result, employees' awareness regarding security strengthens employee satisfaction through engagement, trust and empowerment [27]. Studies also revealed the effect of employee security awareness on employee satisfaction [28]. Study hypothesis that

**H2:** Employee Security Awareness significantly affects Employee Satisfaction.

### 2.3 Workplace Safety and Employee Satisfaction

Employee workplace safety in literature is referred as behaviors, technologies, practices and policies designed to protect employees from information-related threats, psychological threats and physical threats [29]. It is based on protecting employees against unsafe work conditions, data breaches, cyberattacks, unauthorized access, theft, and violence ensuring a secure environment to support productivity, trust and well-being [30]. It also involves safeguarding employees against risks such as misuse of information, data breaches, cyberattacks, unauthorized access, theft, and workplace violence by ensuring the security of employees and supporting employees to perform their duties. This concept embeds cybersecurity protections, information, physical security measures and safety culture to encourage workers to report vulnerabilities and incidents without fear [31].

Employee worker safety is an important factor in impacting employee safety as it shapes the perception of employees regarding their organizational concern about their well-being. Employees having a positive attitude regarding their job have strong emotional attachment towards organization and satisfaction towards their job [32]. Work environment that is safe reduces fear of injury, anxiety, and stress enabling them to focus on tasks, improving their efficiency. Psychological comfort developed from safety enhances engagement and motivation, impacting employee satisfaction. From the perspective of organization, employee satisfaction is shaped through meaningful practices, beliefs, norms and values within safety practices and workplace are important reflectors of organizational values [33].

Perception of employees regarding safety is based on different factors such as satisfaction towards safety programs, management safety, supervisor safety, co-worker safety and job safety. When employees perceive safety programs as important, worthwhile and clear, a higher level of employee satisfaction is reported [34]. Studies indicate that employees who experience strong safety environments show reduced turnover intentions, fewer accidents, lower job stress and higher job satisfaction. On the other hand, workplace injuries and poor safety considerations are linked to higher intentions to leave, reduced satisfaction and increased stress [35]. Overall, workplace safety performs as a function of protective mechanisms. Moreover, it is also a relational resource and motivational resource that enhances retention, commitment, and employee satisfaction [36].

**H3:** Employee Workplace Safety significantly affects Employee Satisfaction.

## 2.4 Employee Security Self-efficacy and Employee Satisfaction

Studies have discussed relationships between technology and self-efficacy extensively. Studies have reported that there exists relationship between security protection adoption and self-efficacy. Scholars have defined self-efficacy in terms of employee security as belief that employees capability to protect information systems and information from lack of availability, destruction, loss, modification, and unauthorized disclosure [37]. This opinion plays very important role in shaping the perception of employee towards their experience of job, challenge handling and work environment. When employees are capable to address and preventing security threats, they experience less work-related stress, anxiety, and uncertainty [38]. As a result of this psychological safety, emotional well-being is enhanced that later effect employee satisfaction positively [39].

Intrinsic motivation is also strengthened by security self-efficacy by developing sense of control and competence. Employees who are confident in their abilities related to security perceive responsibility of security as manageable role rather than an obligation. This perception enhances positive attitude, personal accomplishment and engagement towards their job [40]. Additionally, employees having higher self-efficacy develop motivation towards extrinsic and intrinsic rewards. They understand benefits such as reputation building, career advancement, and professional recognition linked with their performance. The desire regarding self fulfillment and professional reputation reinforces employee commitment to perform well in security related issues. This self-validation and recognition also strengthen employee satisfaction by enhancing sense of worth and professional identity [7].

Management encouragement, clear policies, and training as part of organizational support mechanisms play important role in developing self-efficacy security. When organizations take actions regarding issues of employees and invest in capabilities of employees, this action is perceived as sign of value and trust that later enhance attachment of employees with organization and increase employee satisfaction [41]. Employee satisfaction is influenced by employee security self-efficacy, fostering perception of organizational support, enabling self-fulfillment and reputation, increasing motivation and confidence and reducing stress lead to satisfied work force. Study by *Abun ,Javier* [42] empirically revealed positive effect of employee security self-efficacy on employee satisfaction.

**H4:** Employee Security Self-efficacy significantly affects Employee Satisfaction.

## 2.5 Mediation Hypotheses building

Employee satisfaction plays the role of mechanism by which employee security awareness is converted into stronger organizational commitment. When employees understand risk prevention procedures, data protection practices, security policies, they feel more confident, more informed and safer at workplace [43]. This sense of clarity and safety reduces stress and uncertainty that enhances employee satisfaction. Satisfied employees mostly develop positive attitude for the organization. Employees perceive it supportive and responsible. They also feel like trusted and valued stakeholders.

Therefore, satisfaction of employees strengthens willingness to stay in organization, loyalty and attachment with organization. So, employee security organizational commitment is not created directly through employee security awareness, in fact employee security awareness improves employee satisfaction that later develop organizational commitment [3]. The study by *Reeves ,Parsons* [44] also revealed positive effect of employee security awareness on employee commitment in their studies.

**H5:** Employee Satisfaction is a mediator between Employee Security Awareness and Organizational Commitment.

Studies mentioned that relationship between workplace safety and organizational commitment is mediated through employee satisfaction. It is mediated through translation of safe working conditions into positive attitude of employee. When organizations give priority to the psychological and physical safety of the employee, they feel respected, valued and protected. Their fear of injury, work related stress and anxiety is reduced that later enhances employee satisfaction [44].

Motivation level of satisfied employees is higher that later develop emotional connection and engagement for the organization. Such employees develop trust in management and try to accomplish their goals. So, workplace safety gives strength to organizational commitment by

improving employee satisfaction at the first stage and developing attachment to remain in organization. Research conducted by [45] studied mediating role of employee satisfaction in their study.

**H6:** Employee Satisfaction is a mediator between Employee Workplace Safety and Organizational Commitment.

Employee satisfaction develops positive attitude and confidence among the employees. When employees view that they can follow procedures of security and prevent risk, they feel themselves in control, empowered and competent [44]. This sense of capability minimizes uncertainty and frustration among employees leads to higher employee satisfaction. Satisfied employees are more emotionally attached, motivated and engaged towards the organization.

Such employees assume organization to be more well managed and supporting that later strengthen loyalty and trust. Therefore, employee satisfaction is enhanced through employee security self-efficacy that is later translated into organizational commitment. In other words, employee security self-efficacy impacts organizational commitment indirectly through employee satisfaction. Empirical studies in past studied mediating effect of employee satisfaction between different relationship [46] and [47] ; So, this research assumes that:

**H7:** Employee Satisfaction is a mediator between Employee Security Self-efficacy and Organizational Commitment.

Framework developed mentioned in *Figure 1* on the basis of literature review demonstrates that employee security awareness, workplace safety, and employee security self efficacy effecting organizational commitment indirectly through employee satisfaction.

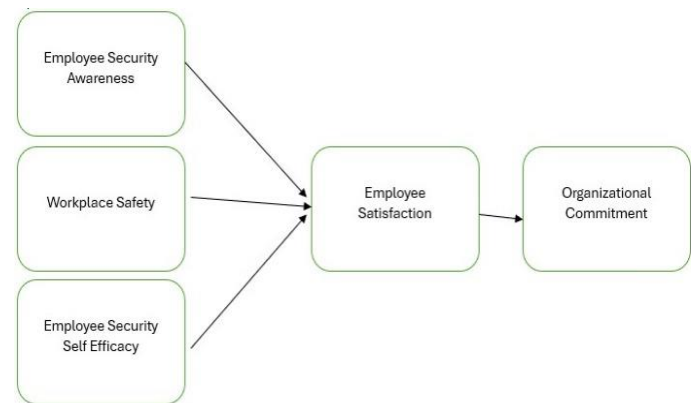


Figure 1: Framework

## 3. Methodology

For the collection of data self-administered questionnaire was used. With purpose to test the relationship among variables of the study, we used cross sectional survey design that was conducted among the employees working in organizations. Questionnaire was distributed among 300 employees using simple random sampling technique as recommended by [48]. The response rate of the present research was 60.21%. The questionnaire was developed from the related items of past studies. This study used items from *Barakat ,Isabella* [49] for the questionnaire of Employee satisfaction, scale from [50] was adapted from organizational commitment, items from [38] were adapted for the questionnaire of employee security self-efficacy, scale of workplace safety was adapted from [51], and measurement scale of employee security awareness was adapted from [38]. This research used Smart PLS and SPSS 25 for the analysis of collected data. SPSS was used for descriptive analysis and Smart PLS was used for assessment of proposed hypotheses.

## 4. Results

In terms of descriptive analysis, findings showed that 81.01% respondents were male and 18.99% respondents were female. In terms of marital status, 61.19% of respondents were single and remaining were married. From the perspective of education, 41.21% of employees had BS level degree, 52.65% has MS level degree and remaining had the PhD degree.

On the basis of AVE, composite reliability and factor loading, convergent validity was assessed. *Hair Jr ,Howard* [52] suggested that the cut off value for factor loading should be 0.50. In other words, items having factors loading more than 0.50 should be eliminated. *Table 1* of the study shows that all items have loading more than 0.50, meeting criteria.

**Table 1:** Loading

ESA1	0.817		
ESA2	0.841		
ESA3	0.845		
ESA4	0.840		
ESA5	0.637		
ESSE1	0.886		
ESSE2	0.880		
ESSE3	0.860		
ESSE4	0.889		
EST1		0.876	
EST2		0.862	
EST3		0.857	
EST4		0.747	
EST5		0.758	
OCM1			0.880
OCM2			0.877
OCM3			0.874
OCM4			0.885
WPS1			0.888
WPS2			0.817
WPS3			0.860
WPS4			0.862
WPS5			0.742
WPS6			0.906

Henseler, Ringle [53] recommended the value of composite reliability should exceed 0.70. Table 2 confirms that value of CR exceeds limit of 0.70. Moreover, Hair, Ringle [54] revealed that minimum benchmark of AVE is 0.50. This test having value of more than 0.50 indicates that variable has the ability to explain more than half of its indicators.

**Table 2:** Validity

	CR	AVE
ESA	0.898	0.640
ESE	0.931	0.773
EST	0.912	0.675
OCM	0.931	0.773
WPS	0.938	0.718

Discriminant validity was also examined to explore correlation between variables, that must not be overlapping. Scholars mentioned that AVE of a variable must be higher that correlation among variables along with correlation between variables should be lower than square root of AVE [55]. Table 3 confirms the fulfilment of this criterion.

**Table 3:** Fornell & Larcker

	ESA	ESE	EST	OCM	WPS
ESA	0.800				
ESE	0.621	0.879			
EST	0.724	0.676	0.822		
OCM	0.713	0.677	0.774	0.879	
WPS	0.700	0.716	0.783	0.775	0.848

Table 4 of the study shows the Values of R square showing effect of independent constructs on dependent constructs. Based on Cohen [56] criteria, an R<sup>2</sup> value around 0.10 reflects a meaningful effect size in behavioral research, values of R square of 0.02 is considered as small, 0.13 is considered as medium and 0.26 is considered as large. Table 4 shows the values of R square as large.

**Table 4:** R<sup>2</sup>

	R-square
EST	0.686
OCM	0.599

Findings in table 5 demonstrate the direct results. They show that ESA has positive influence on EST, supporting hypothesis (t=4.473), ESE has positive effect on EST, accepting hypothesis (t=2.06). EST has positive effect on OCM, supporting hypothesis (t=25.831), and WPS has positive effect on EST, accepting hypothesis (t=5.231)

**Table 5:** Direct Results

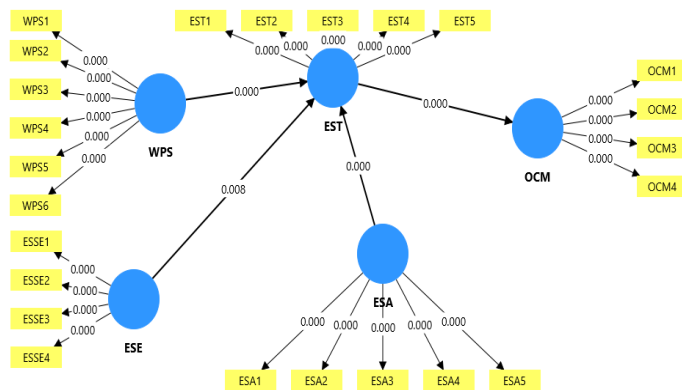
	B	SD	T	P values
ESA -> EST	0.306	0.069	4.473	0.000
ESE -> EST	0.163	0.067	2.406	0.008
EST -> OCM	0.775	0.030	25.831	0.000
WPS -> EST	0.454	0.087	5.231	0.000

In the last stage, study explored mediating results. Table 6 and Figure 2 demonstrated that EST mediates the relationship between ESA and OCM.

**Table 6:** Mediating Results

	B	SD	T	P values
ESA -> EST -> OCM	0.238	0.055	4.326	0.000
ESE -> EST -> OCM	0.124	0.052	2.385	0.009
WPS -> EST -> OCM	0.350	0.068	5.118	0.000

Results also confirm the mediating findings between ESE and OCM. In the end, mediating effect of EST between WPS and OCM is also supported.



**Figure 2:** Structural Model

## 5. Discussion

This research was designed to examine the effect of different antecedents of organizational commitment. The findings of this research revealed that employee satisfaction has positive effect on organizational commitment. These findings emphasize that satisfied employee is more likely to develop certain level of connection and attachment with organization. When employee satisfaction is shown in terms of current job, feeling is developed in employee to improve processes of work, and employee perceive his or her work as important for the success of organization. In this situation employees often show high level of organizational commitment. Moreover, employee satisfaction is developed among employees on the basis of opportunities regarding career development and professional growth that later strengthen organizational trust, which is the basic factor of organizational commitment.

Employees also perceive that working in certain organization is beneficial for their life and will enhance their career. They also feel proud regarding their relationship with such organization and work extra hours to achieve organizational success. In this scenario, employee satisfaction force employees to recommend their organization to others for the purpose of job. It also reflects strong organizational commitment. The results confirms that employee satisfaction is important to develop advocacy, loyalty, pride and trust. Therefore, enhancing significantly organizational commitment. This result is aligned with the finding of [19] in literature.

The results also demonstrated positive influence of workplace safety on employee satisfaction as revealed in study of [36]. These results underscores the importance of well managed and safe work environment. When employees acknowledge the reporting person in case of accidents, their perception regarding workplace safety enhances leading to strengthening employee satisfaction. Employees following well established procedures to handle safety hazards also reflects culture of workplace safety. Such culture assures safety of the employees and enhance their work comfort. Furthermore, informing top management regarding safety threats and avoiding usage of equipment that has the potential to create safety issue reflects employee confidence in the workplace safety system.

Furthermore, knowledge regarding placement of safety equipment and usage of protective material strengthen employees view regarding workplace safety. Such practices of safety make employees perceive as supported, valued and protected, enhancing employee satisfaction in return. As employees perceive themselves safe, they will start like their work and contribute more towards organizational success. In other words, workplace safety practices by the organization develop employee safety.

Results also show positive effect of employee security self-efficacy on employee satisfaction [42]. These findings highlight the importance of employee confidence to manage responsibilities related to information security. When it is perceived by the employees that they possess required skills to protect themselves from violations of information security, factor of employee security self-efficacy among them increases shaping their

employee satisfaction. Confidence to prevent unauthorized access towards confidential information also provide strength to employee security self-efficacy that enables employees to feel more controlled and secured while completing assigned tasks. Furthermore, activating different security measures such as antivirus software and firewalls show high level of employee security self-efficacy that reduces anxiety linked to threats of information security, enhancing employee satisfaction. The belief to protect employee from violation of information security is within the personal control of employee, reinforcing empowerment and personal responsibility, which is the important element of employee security self-efficacy. As employees have feeling that they are capable of protecting information about their assets, employees will most probably enjoy their job. Such employees also perceive their work and job role as meaningful, and opined that their organization provide support to their effectiveness. The stronger employee security self-efficacy is important to enhance employee satisfaction.

Findings also reveal that Employee Security Awareness has positive effect on employee satisfaction as mentioned in the research of [28]. These findings demonstrate that informed employees often feel more confident at their work place. The plausible reason for such findings can be that employees who are well informed regarding their security problems mostly experience greater comfort and confidence at work. Regular briefing to employees regarding information security breach with the help of work shops, seminars, and campaigns signify employee security awareness, enabling employees to remain proactive towards potential threats. In this situation, employee satisfaction also enhances. When employees get regular updates from institute about preventive actions against security breach, employee security awareness is enhanced and help the employees to reduce anxiety and uncertainty in daily activities.

Regular education about individuals computer security responsibilities also improves employee security awareness, which allows employees to understand their role to protect organizational assets. Additionally, structured training programs related to security also plays its role to develop employee security awareness as employees remain well informed regarding appropriate behavior of protection and security threats. Initiatives related to awareness focuses on development of security skills that also lead to employee security awareness showing control and competence of employee. Employees feel protected and supported by the organization that in turn lead to enhanced employee satisfaction.

Results also supported the mediating effect of employee satisfaction between workplace safety and organizational commitment. A secure and safe work environment develop positive evaluation of employees regarding their jobs leading to enhanced level of employees satisfaction. In turn, satisfaction develops strong attachment among employees towards the organization. The results also suggest that workplace safety do not have direct impact on organizational commitment, whereas the impact on organizational commitment is transmitted through employee satisfaction. As a result, organizations that give priority to safe organization practices cultivate employee satisfaction. Such employees show higher level of commitment towards organizational goals.

Study postulate mediating effect or employee satisfaction between employee security awareness and organizational commitment. In other words, employee satisfaction is an important mechanism that links employee security awareness to organizational commitment. When employees of organizations are well informed regarding proactive practices, risks, and security policies, they develop sense of control and confidence on the work environment. As a result, perceived vulnerability and uncertainty is reduced that shapes overall job related attitude among employees. Consequently, enhanced level of employee satisfaction is develop by strengthening employees loyalty to remain part of organization. The results show that employee security awareness has significant contribution to develop employee commitment by going through employee satisfaction. The results emphasize the strategic importance of security awareness and education for employees.

Results confirmed the mediating effect of employee satisfaction between employee security self efficacy and organizational commitment. Employees who are confident about their capabilities and know the way to handle challenges and security related tasks experienced autonomy and sense of competence at work. The competence develop satisfaction among employees by reducing work related stress and fostering confidence. In turn, employees are inclined to develop strong relationships with organization. Therefore, employee security self efficacy make organizational commitment strong by shaping employee satisfaction. These mediating findings are aligned with the results of [47].

## 6. Limitations and Directions

Few Limitations of the study will be highlighted in the study. Present study used framework based on mediating relationships. It is proposed to develop framework based on moderating mediating relationships with

purpose to assess more complex relationships. Additionally, this research used quantitative research design for research methodology. In depth data collection and analysis is possible through qualitative research design as open ended questions are part of the qualitative research. Moreover, employees were respondents in the present study as the population of study. It is proposed to collect data from higher management in future as they have more in depth information regarding organization.

Furthermore, Likert scale type of questions were developed for survey purpose. It is proposed to use open ended questions by using qualitative research in future. Also, data was analysed using Smart PLS in this study. Upcoming studies may use NVIVO or QualCoder as part of qualitative research design. In the end, researcher used only three IVs in the proposed framework. Keeping in view the value of R square, future studies may use more IVs as part of the present framework.

## 7. Theoretical and Managerial Implications

From the point of view of theoretical implications, this research extend literature of information security and organizational behaviour by empirically discussing employee satisfaction as mediating link between employee security self-efficacy, employee security awareness, and workplace safety with organizational commitment. By embedding security and psychological variables, the research enhances understanding the way employees values the effect of different variables towards commitment. Findings also demonstrate that safety, competence and support are translated to shape attitude through satisfaction.

From managerial lens, results show that organizations and their decision makers should think ahead of security and safety initiative. They should adopt integrated strategies focusing on satisfaction of employees. Decision makers of organizations should invest in employee self-efficacy, security training and safety systems to foster satisfaction that ultimately strengthen organizational commitment.

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