

# Evaluation Of Psychosocial Factors And Burnout Syndrome In Workers Of A Cooperative, Manabí Province, Ecuador.

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#### **Abstract**

The workers of the savings and credit cooperatives (COAC) carry out work activities with high cognitive demands. The objective of the research was to carry out an evaluation of the psychosocial factors and the prevalence of burnout syndrome (job exhaustion) in cashier and credit-collection employees of COAC Chone Limitada. The psychosocial risk assessment instrument proposed by the Ministry of Labor of Ecuador and the Maslach questionnaire for Burnout syndrome were applied. The total number of workers who participated was 31, belonging to the two study areas. Correspondence analysis techniques, the Kruskal Wallis H test and the Pos Hoch test were used, in order to observe statistical differences in the responses of the respondents. The result obtained showed that there was an association between the dimension of recovery and high risk in the psychosocial evaluation in the COAC, evidencing a workload, excessive work under pressure, among other factors, there were levels of Burnout in credit employees. Collection, shown in emotional exhaustion, depersonalization and personal fulfillment. The results achieved show an individual reaction to emotional and interpersonal stress, related to work pressure and occupational stress.

**Keywords:** Correspondence analysis; Analysis by H Kruskal Wallis; Burnout, psychosocial factors, cooperative.

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#### Introduction

Psychosocial risks nowadays are related to work, being these recognized as one of the fundamental concerns that must be addressed in working life throughout the world (Schulte et al., 2020). Psychosocial risk refers to unfavorable working conditions in terms of the way work is organized and managed. For example, high workload, long working hours, lack of autonomy and support at work, harassment, and intimidation at work (Leka et al., 2015). In the workplace, psychosocial risks are emerging and increasing (Houtman et al., 2020). The core problem of stress is its significant influence on the reduction of employee productivity in companies, especially in the financial sector (Kröll et al., 2017). The accumulation of work stress leads to a chronification, which is known as the

occupational burnout syndrome. This syndrome reflects a social problem that has been increasing in recent years. Burnout is a psychological syndrome that arises as a response to prolonged exposure to chronic interpersonal stressors at work. It implies feelings of emotional exhaustion, depersonalization, and a decrease in the workplace (Maslach & Leiter, 2016).

Studies based on the above arguments give rise to a large amount of evidence on the relationship between psychosocial risks and negative outcomes such as work stress (Netterstrøm et al., 2008), cardiovascular diseases (Kivimaki et al., 2012), depression and anxiety (Madsen et al., 2017) and even mortality (Taouk et al., 2020). Psychosocial risks are linked to absenteeism due to illness (Russo et al., 2021) and presenteeism (Navarro et al., 2018). As well as, with the early abandonment of the workforce due to disability (Leineweber et al., 2019).

The International Labor Organization introduces in 1986 induce a concept in relation to the psychosocial factors of work. This concept is based on the flows and interactions between the work environment (content, conditions, organizational capacities, needs, culture), personal attitudes that externally influence health, work performance through perception, experience, and job satisfaction (Seilerová, 2019). Numerous studies point to the substantial impact of chronic work stress on health (Kivimäki & Kawachi, 2015), with psychosocial hazards and risks in the workplace being the main contributors to these problems (Papadopoulos et al., 2010).

A psychosocial risk can be any occupational risk that directly affects workers in psychosocial well-being and health. In such a way that, this danger is conceived as the possibility that they produce damages because of psychosocial dangers (Leka et al., 2010). When accompanied by an economic burden, psychosocial risks become problems for organizations and society (Bliese et al., 2017). Recent empirical research, as well as surveys conducted by the European Agency for Safety and Health at Work, reveal that nearly half of workers in the European Union experience work stress and it is considered a common problem in their work environment. (Metzler et al., 2019).

The Ecuadorian legal regulations on safety and health at work are based on agreements and statutes that regulate the assurance of healthy and safe environments in companies for workers, and that guarantee their safety, among these are Executive Decree 2393, Resolution CD 333, Resolution 390, while the Labor Code is responsible for establishing standards for the development of employees and ensures their rights and obligations, to improve their quality of life, which is contemplated in the articles 42 in numerals 2 and 3, and also what is established in Chapter V, in 412, 434, 435 and 436, (Zambrano-Farias, 2019). In the province of Manabí there is no specific information in relation to Executive Decree 2393, Resolution CD 333, Resolution 390 of the Labor Code.

In such a way that, the present investigation hypothesizes that there are no differences between the dimensions of the psychosocial risk evaluated (methodology proposed by the Ministry of Labor of Ecuador) and likewise there are no differences between the items of burnout syndrome and employees of cash and credit-collection at Cooperativa de Ahorro y Crédito Chone Limitada (COAC-Chone Limitada). The objective was to evaluate the dimensions of psychosocial risk and burnout syndrome among cashiers and credit-collection employees of COAC-Chone Limitada.

Technological and business developments around the world have caused important changes in our way of working. These changes have had a direct impact on working conditions. In such a way that these are the sources of psychosocial risks (Iavicoli et al., 2015). Psychosocial risks refer to occupational risks that are adversely influencing the psychological well-being of workers and their ability to participate in a work environment, among others. These are related to the organizational outline and work management, within the economic and social contexts and are linked to psychiatric, psychological and/or physical illnesses in the financial sector (Tagoe & Amponsah-Tawiah, 2020). In recent times, psychosocial risks in the financial sector have been identified as unique and important contemporary challenges for organizations since, they affect the well-being of employees. Among them are work stress, violence (Leka & Jain, 2010; Way, 2012).

The foundation of the meaning of burnout syndrome was used to describe this situation for the first time by Freudenberger (1974), although it was not until Maslach's (1981) study that it became popular. Burnout syndrome comprises 3 factors: (a) personal fulfillment, which refers to how the person evaluates professionally, their ability at work and their relationship with the people they care for; (b) emotional exhaustion, related to how daily interaction with other people can exhaust workers; and (c) depersonalization, which includes negative attitudes, irritability, and rude responses toward people they work with or customers.

The World Labor Organization reports a variety of alarming problems, especially among workers in the financial services sector including credit unions, due to increased time pressure, ergonomics issues, job conflicts, job demands considered enormous, interaction with clients, the increase in the number of cases of stress and violence (Giga et al., 2003). There is a lot of literature that supports the idea of work stress as a promoter of illnesses in workers in the financial sector, as a promoter of illnesses, putting the social health of workers at risk, which negatively influences their social, professional, and affective lives. Additionally associated with poor performance at work, a high level of absenteeism and turnover, and violence at work in the financial sector (Dalgaard et al., 2017; Burke, 2010; Bhagat et al., 2010; Stansfeld and Candy, 2006; Godin et al., 2005;).

In Ecuador, the relationship between psychosocial risk and labor practice in savings and credit cooperatives, most of the investigations are conducted at the undergraduate or graduate thesis level, being conducted mostly within the highland region. Thus, one can mention Ramírez Albán, 2021; Escobar Salinas, 2021; Dark Bravo, 2018; Hurtado Noboa, 2020; Melvi, V; Melvi, 2016; Loachamín Játiva, 2014; Sanchez Villacreses, 2019; Gallo Pazmiño, 2018; among others.

#### Materials and methods

The design of this research was exploratory, to better understand the existing research problem, it does not provide conclusive results (Cañadas, 2005; Bortz and Schuster, 2011). It started from the formulation of a general idea, and it was used to identify problems that could be the foundation for future research, it is an interpretative research, it is used to answer the questions: what, why and how (Cañadas, 2005; Bortz and Schuster, 2011).

The investigation was conducted at COAC-Chone Limitada, Chone, province of Manabí, Ecuador, 100% of the workers were considered as the population that work in the cash

and credit-collection area of COAC-Chone Limitada, applied to 31 workers (13 cash area and 18 credit-collection).

A questionnaire was applied to substantiate the dimensions of work-related psychosocial risks and recommended by the Ministry of Labor of Ecuador (2018), whose responses were ordered according to the Likert scale (Bortz and Schuster, 2011). Subsequently, the burnout questionnaire was applied, and the responses were also arranged on a Likert scale, made up of 22 items (Fajardo-Lazo et al., 2021).

### Analysis and discussion of results

To establish the psychosocial risk within the COAC-Chone Limitada, the respective survey was carried out in January 2023. The information was entered into the Excel database and the 16 dimensions were quantified according to the methodology proposed by the Ministry of Labor of Ecuador. (2018). The statistical technique of correspondence analysis (CA) was applied to show the relationships between the psychosocial risk variables and risk dimensions in concomitance with the answers obtained (contingency table) and its objective is to show in a biplot and reveal any hidden structure in the multivariate configuration of the contingency table (Bortz and Schuster, 2011). To evaluate the burnout questionnaire, the Kruskal-Wallis test was applied by frequency ranges. It consists of a one-way analysis of variance by ranges, being a non-parametric method used to demonstrate that the frequency distribution. Showing differences or equal frequency distribution and see if they are statistically significant (Bortz and Schuster, 2011). A Post Hoc multiple comparison was used. Statistical analyzes were performed using the SPSS software (IBM Corp. Released, 2016).

## Psychosocial risks in COAC-Chone Limitada

The CA was conducted to see if how the risks and their dimensions were associated. Figure 1 presents the AC of psychosocial risks and their dimensions in the COAC-Chone Limitada, 2023. The objective of the AC is to capture the maximum variance (inertia) along the first axis. A total of 60.5% of the inertia was concentrated in the first dimension. Locating the left side of the Biplot to the high risk that was associated with dimension 6. While the medium risk was related to dimensions 1, 4 and 8.8. Leaving the risk low on the right side affected many dimensions of psychosocial risk in COAC-Chone Limitada.

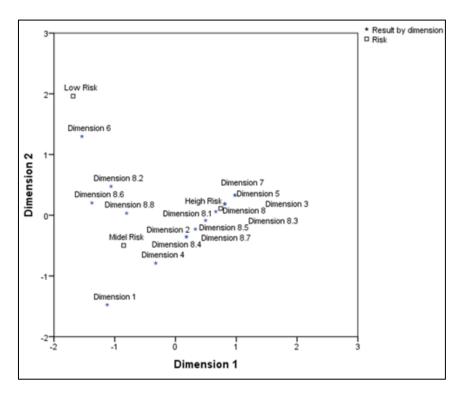


Figure 1. Correspondence analysis for psychosocial risks and their dimensions in COAC-Chone Limitada, 2023

The second dimension accumulated a total of 11.8% of the inertia, separating dimension 8.2 (high risk) at the top, dimension 7 and 5 with low risk. While dimension 1 was placed in the lower part of the Biplot (medium risk).

## Burnout syndrome "burnout syndrome"

A high significance was detected both for the 22 items of the burnout syndrome and among employees (cash and credit-collection), the results obtained are shown in the table.

Table 1. Kruskal Wallis H test for the 22 items of burnout syndrome, employees (cash and credit-collection), in the COAC-Chone Limitada.

Variable			Freedom grads	H-Test	p Values
Employees	(cashier	and	1	17,51	<0,00001
credit-collect	ion)				
Burnout syndrome		21	551,10	<0,000001	

A high significance was registered between workers and the range of significance was presented according to the Pos Hoch test. The frequency range of both cash and credit-collection employees of the COAC-Chone is presented in Figure 2.

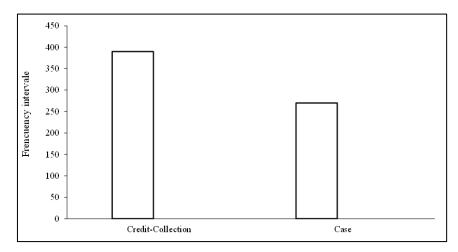


Figure 2. Difference in the range of frequencies observed between employees in charge of cash and credit-collection in relation to burnout syndrome in COAC-Chone Limitada, 2023 (A and B are the ranges of statistical significance)

The Post Hoc multiple tests was summarized in Table 2, for the Likert scale of frequent (5) and very frequent (6) in relation to the burnout syndrome items by type of employee of the COAC-Chone Limitada, year 2023.

Table 2. Post Hoc test for the frequent and very frequent Likert scale in relation to the type of worker and burnout syndrome, COAC-Chone Limitada, 2023.

Variable	Answer	Ranks	Significance ranges
Item 15 Credit-combination emp.	5,00	76,50	A
Item 20 Cash.st.emp.	5,00	76,50	A
Item 21 Emp.cashbox	5,00	76,50	A
Item 1 Emp.cashbox	5,00	76,50	A
Item 1 Credit-comb.st.emp.	5,00	93,90	A
Item 12 Emp.cashbox	5,00	101,50	A
Item 14 Emp.box	5,00	114,50	A
Item 2 Emp.box	5,00	119,93	A
Item 9 Emp.box	5,00	122,10	A
Item 7 Emp.box	5,00	131,77	A
Item 2 Credit-comb.pack.	5,00	133,50	A
Item 17 Emp.cashbox	5,00	137,30	A
Item 18 Emp.cashbox	5,00	137,30	A
Item 8 Emp.box	5,00	137,30	A
Item 4 Emp.box	5,00	145,59	A
Item 7 Credit-comb.st.emp.	5,00	152,50	A
Item 22 Credit-combination emp.	5,00	152,50	A
Item 12 Credit-combination emp.	5,00	152,50	A
Item 4 Credit-to-combination emp.	6,00	156,97	В
Item 21 Credit-to-combination emp	6,00	163,36	В
Item 19 Cash.dep.	6,00	165,17	В
Item 8 Credit-to-combination emp.	6,00	174,85	В
Item 14 Credit-to-combination emp	6,00	174,85	В
Item 9 Credit-to-combination emp.	6,00	177,83	В
Item 11 Credit-to-combination emp	6,00	177,83	В

Item 19 Credit-to-combination emp	6,00	177,83	С
Item 18 Credit-combination emp.	6,00	192,74	C
Item 17 Credit-combination emp.	6,00	201,68	C

The burnout syndrome items were in analogy with the type of COAC worker. Figure 3 showed the COAC-Chone Limitada cashiers who presented less diversity in burnout syndrome and concentrated 36.4% in emotional exhaustion and 64.6% in personal relationship.

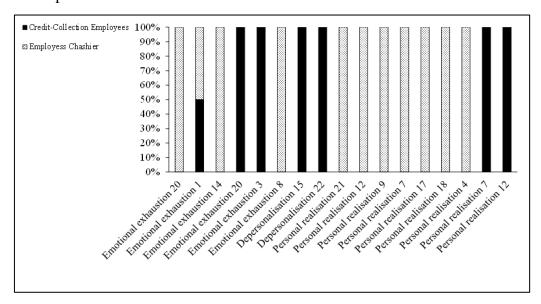


Figure 3. Breakdown of burnout syndrome by employee of the COAC-Chone Limitada, from the first significance range of the Kruskal Wallis analysis.

While credit-collection employees revealed a variety of burnout syndrome. The percentages of this type of work were 42.8% emotional exhaustion, 28.5% depersonalization and 28.7% personal fulfillment.

## Psychosocial risk factors

The CA Biplot relates high risk to dimension 6 (Recovery). This association statistically means that the null hypothesis proposed in this research is rejected. In a diagnosis of psychosocial risk at the Technical University of Cotopaxi, it was also found to be equally associated with high risk with the dimension of recovery (dimension 6) (Velastegui et al. 2020). This would be an analogy between the professors of this institution and the credit-collection employees of the limited COAC Chone due to the lack of time to present reports and results. The teacher does not have enough time to recover from physical and mental fatigue, all these bad habits can trigger physical diseases and psychological diseases that can alter people's health (Cao et al., 2020).

Thus, there is strong evidence that work-related psychosocial risks are risk components for a wide range of somatic and mental health outcomes (Leka & Jain, 2010). In addition,

psychosocial risks, such as high psychological demands, high emotional demands, continue to have a high prevalence in working populations (Parker et al., 2017; Vargas et al., 2014). Thus, eliminating or at least reducing work-related psychosocial risks through proper (re)design of work remains a major challenge to ensure occupational safety and health (Schuller, 2020). An important legal instrument in this context from the Ministry of Labor of Ecuador (2018) establishes the commitment of employers to implement appropriate measures in order to reduce risks by conducting psychosocial risk assessments.

The data from the surveys carried out in the COAC-Chone Limited show that psychosocial risk assessments are far from being applied in a generalized way, for example, in the European reality, although companies assess psychosocial risks, they do not go beyond diagnosis and measures and interventions are not developed or applied and according to Hasle (2011); Schuller (2020) mitigation remains a challenge.

The psychosocial risk recovery dimension detected in health workers COAC-Chone Limited it is considered an early predictor and a sensitive indicator of reduced well-being (Sonnentag & Zijlstra 2006). In a work environment, the fatigue experienced during or after a workday can negatively influence health in the long term, when there is not enough time to recover from fatigue between two work periods (Kiss et al. 2013). The subjective need for recovery is an indicator of fatigue in the workplace and according to van Veldhoven and Broersen (2003) and de Croon et al. (2006) can be measured using the "need for recovery scale" and it is a scale that proves to be a reliable instrument. Important aspect that should be considered for future research in this field.

On the other hand, the dominant perspective in the international literature is that the vast majority of people who are faced with a potentially shocking event are able to cope with the psychological impact and self-recover (Bonanno et al., 2010). Some individuals will develop problems that they cannot overcome on their own. Additionally, Jimenez & Dunkl (2017) find an inversely proportional relationship between the organizational climate dimension and the psychosocial risk resources/recovery dimensions. Both dimensions describe aspects of the possibilities of participation and interaction in the workplace. For this reason, this relationship could be explored within the COAC-Chone Limited in future research.

#### **Burnout syndrome**

The Kruskal Wallis H test used reveals the difference in the burnout syndrome between workers in the cash and credit-collection areas, rejecting the null hypothesis proposed in this research. Employees in the credit-collection area showed a higher incidence of the evaluated aspects of burnout syndrome compared to employees in the cash area. These results are in contrast with the findings found by Varga et al. (2016) in a Hungarian credit institution, where the level of burnout among the employees of the credit institutions that show the highest frequency of burnout symptoms are those that have more and frequent contact with clients (reception, cashier/deposit). ), being higher than that of those who work in managerial positions (managers, department heads, section heads, regional directors). Credit-collection employees are the most affected by work pressures, which is understandable since they are accountable to both subordinates and managers, a double responsibility that can place greater demands and mental pressure on the individual. The double task of "remaining human" and "being a loan officer" can exert a strong psychological burden (Kalandatzis & Hyz, 2021).

The credit-collection agents of the COAC-Chone Limitada are associated with responses with a greater diversity of burnout syndrome items (emotional exhaustion, depersonalization, and personal fulfillment). Employees in finance, banking, or credit unions with higher levels of extrinsic effort and overcommitment spend too much time and energy meeting their performance targets. These employees are running out of time to alleviate competitive pressures from layoffs and policy reform (Li et al., 2015). However, bank and credit union employees, in a service profession, rarely receive praise, either from clients or their superiors. These factors can contribute to their high emotional exhaustion, their depersonalization and their low personal fulfillment. Therefore, in the burnout syndrome of Chinese bank employees. Bank managers should try to reduce the workload and working hours. Offering appropriate rewards based on individual ability (Maslach & Jackson, 1981).

According to Cordes & Dougherty (1993), emotional fatigue is considered the first step in the development of the syndrome, which in most cases negatively influences the state of health. The responses on the Likert scale are of a frequency of the items of the syndrome. In very frequent cases, physical/mental health and subjective/psychological well-being can be negatively affected and, according to Arrogante & Aaricio-Zaldivar (2020), psychological intervention is urgent. These interpositions must first treat employees of the financial sector and even include intensive care, those professionals, employees who experience high levels of emotional fatigue, depersonalization and low levels of self-realization (Elçi et al., 2015).

#### **Conclusions**

The null hypothesis on the non-existence of differences between the dimensions of psychosocial risk assessment proposed by the Ministry of Labor of Ecuador in the COAC-Chone Limitada was rejected. The association of the recovery dimension and the high psychosocial risk confirmed this. Evidencing a workload, excessive work under pressure, among other factors. It would seem that the efforts made by banking or savings and credit institutions to minimize health and work safety problems tend to focus more on physical risks, neglecting psychosocial risks.

From the perspective of organizational development, the research offers a step-by-step approach to diagnose the problem of psychosocial trances in savings cooperatives in Ecuador. It would be of scientific interest to investigate this relationship in depth inversely proportional between the organizational climate dimension and the recovery of the psychosocial risks. On the other hand, the null hypothesis that the burnout syndrome items are the same among employees of cash and credit-collection of COAC-Chone Limitada was rejected. The response of frequency on the Likert scale by the employees of credit-collection of the burnout syndrome items in emotional exhaustion, depersonalization and personal fulfillment was an indication of professional burnout in credit employees. This being an individual reaction to emotional and interpersonal stress and is related to work pressure and occupational stress.

The study suffers from several limitations. The first is that it is limited to a single COAC and secondly; it was impossible to establish much broader causal relationships. In the future, the results of the study should be confirmed by means of a prospective study in several COACs by regions of Ecuador.

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