COLLECTIVE EMOTIONAL INTELLIGENCE IN IT FIRMS:THE ROLE OF SUBJECTIVE WELL-BEING AND HAPPINESS

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Abstract: This paper addresses collective emotional intelligence as a construct that establishes a relationship among members of an organisational community and how this is a path for improving firms' performance. It is based on the premise that several factors influence the selected to solve a problem in any decision-making process. In addition to analysing the practical values that the information provides, it is also subject to the emotional responses that the decision-makers may have. These samples make up the emotional intelligence transferred from individuals and their organisational interactions to the organisation itself. This paper seeks to find the relationship between the variables of Collective Emotional Intelligence (CEI) with Subjective Well-Being (SWB) and Perceived Happiness (HP). To this end, a data collection instrument was applied to 384 workers in technology-based companies in northern Mexico. A descriptive, correlational, and multivariate analysis, including SEM study, was carried out to validate the hypotheses. The results validate the importance of SWB and HP in developing CEI and suggest specific actions on workers' perceptions. These actions meet expectations and requirements expressed by workers and aim to increase organizational intelligence and CEI to improve decision-making.

Key words: Collective Emotional Intelligence; Subjective Well-Being; Happiness Perception; Technology Management; Decision-Making Process.

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Introduction

The development of collective intelligence is a field of study that has been approached from different perspectives in academic and industrial contexts. (Boder,

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2006). It is mainly because a company can adopt an internal study based on the social complexity approach and be analysed as if it is an entity built by functional systems, which have led to changes in leadership styles in times of crisis and organisational change.

This paper takes an approach to collective intelligence based on technological and human elements or factors circumscribed by the influence of the social complexity in which modern companies compete and interact. Currently, organisations are carrying out processes for developing strategies based on technologies and human resources that help increase their competitiveness. (Ahumada Tello and Perusquia Velasco, 2016). To achieve this, organisations implement a systematization of activities that must be developed to acquire knowledge and thus develop processes that reflect the collective intelligence that influences socio-economic growth and intervene in decision-making.

Bearing in mind that, in today's business environment, there is a combination of the human and technological elements, in which the former depends on an immeasurable number of variables that condition its behaviour, level of satisfaction and performance. For this study, two variables are taken to verify the level of impact they have on the development of collective intelligence based on complex processes in the social sphere: subjective well-being and perception of happiness. Accordingly, this paper analyses the degree of influence that subjective well-being has on developing collective intelligence from a socially complex approach. At the same time, the analysis of the influence on the perception of happiness among the members of technology-based companies (Gao et al., 2009).

This approach analyses the advances made in studying collective intelligence and how it should be understood together with other disciplines in the social and economic sciences. The study of this construct is vital because collective intelligence and the collaboration problems required between the technological and human sides seem familiar in the social sciences but do not necessarily fit into any established disciplines straightforwardly. Moreover, collective intelligence is often associated with the notion of the wisdom of crowds, which demands differentiated scrutiny, and consequently, its study complements the understanding of phenomena generated by human groups (Søilen, 2019).

Thus, the field of collective intelligence or organisational intelligence is of interest from multidisciplinary approaches that propose paradigms of change in the study of social sciences. Applying this approach is important to understand other social phenomena associated with business and economics. To achieve this assimilation, it is necessary to adjust to the paradigm of its study. It is changing the traditional linear analysis. The cause-effect and inferential approaches are associated with the inclusion based on complexity as part of an integral approach to the phenomenon. Collective intelligence is now transformed and includes the emotional component to its definition (Massotte and Corsi 2020).

However, when addressing the issue of subjective well-being, economics and management are part of a duo identified with increasing well-being and,

consequently, wealth. Happiness and well-being are reflected in the livelihoods that people consider valuable in their individual, social and relational aspects (Medrano López and Ahumada-Tello, 2018). Creating a positive work environment helps employees develop an upbeat personality and enable staff to experience positive emotions through establishing an excellent corporate culture, among other organisational strategies (Gao et al. 2009).

It is thus a critical analytical study of the impact that collective intelligence can have on the field of social science. However, suppose the emotional aspect is added to collective intelligence. In that case, this will mean that in addition to a data-driven decision-making process, the perspective of the variability that the leaders of the organisation can exercise at the very moment of observing the pragmatism of information and quantitative data and being influenced by its emotional aspect immediately affecting the option they choose to take is preserved (Shankar and Shewari 2021).

A balance must then be maintained with a focus on the evolution and evaluation of human resources and labour relations in the transition to a welfare economy and a digital economy. This evolution is manifested in the development of talent within the organisation and towards the fulfillment of the global objectives derived from the Horizon 2030 movement. The vision of a 'Knowledge Society' will include, in a complementary way, the emotional valuation of the collective intelligence process in managing happiness and developing organisations. Organisations must include, among their objectives, the protection of individuals, sustainability and corporate social responsibility. That is why the CEI study approaches an initiative that impacts elements of corporate social responsibility (Hernández et al., 2020) and adds relevant aspects to the decisions formulated for sustainability and creativity as initiatives for the firm’s competitive strategies.

This paper is structured in a three-way approach, firstly to analyse the state of the art of the constructs raised so that relevant studies on collective emotional intelligence, subjective well-being and happiness perception are addressed. Secondly, the methodological strategy is presented, consisting of a descriptive, exploratory and multivariate analysis of the variables in question. Thirdly, the results of these techniques present and discussed, considering other recent results. Finally, new research lines discuss this work's theoretical and practical implications.

Literature Review

Among the applications where collective intelligence finds a vital impulse is in supply chain development. In this sector, an analysis is carried out of the intermediation business processes that allow companies to use multiple distribution channels to expand their market horizon of potential customers interested in acquiring their products and services. By representing the distribution channels in sequences of intermediation transactions, new representation molds are sought that speed up intelligence growth in supply chain extension. It can lead to more efficient

management of the decision-making process, from design to development of innovative products and services (Ahumada-Tello et al., 2019).

A characteristic of collective intelligence is in the decision-making process. This process is cognitive and considered essential and inherent to human behaviour, whereby a preferred option or a particular course of action is chosen from a set of alternatives that are discerned based on established criteria (Wang and Ruhe, 2007). Decision theories are studied and applied in different areas of knowledge. These include technology, management, economics, psychology and many others. Selecting the best alternative among the group of options is then part of forming and establishing new knowledge that has applicability in organisations and allows for its sustainability over time and continuous improvement in organisational competence activities. In addition, the applicability of the cognitive decision-making process encompasses a wide range of decision-based systems, such as cognitive computing agent-based systems, expert systems and decision support systems.

In addition, collective intelligence emerges from several conditions that arise when working groups are formed (Riedl et al., 2021). It makes the characteristics of individuals influential. Their personality, resilience, leadership style and level of stress management are just some of these conditions that each person brings to the work team (Gilad et al., 1992). Then, from that mix, it is possible to analyse an expected result and assess which type of study is the most suitable to explain this social phenomenon that makes the characteristics of organisations come from the configuration of its members.

Furthermore, the concept of emotional intelligence (EQ) emerged at the end of the 20th century. It brought to the attention of managers that EQ was as important as intellectual intelligence (IQ). The function of this concept lies in the proper management of emotions in the productive processes of any organisation (Druzkat and Wolff, 2001). To understand the concept of EQ more broadly, it is defined as the ability of a group to create a collectively formed emotional management and emphasize its importance for the quality of teamwork that is observed and emerges in organisations (Sager, 2017).

Collective emotional intelligence is shaped by the decision-making processes that take place within the organisation. However, it is observed from the human perspective since it is in this factor that the emotional aspect that affects decisions originates. Leadership is the most vulnerable component in the decision-making process since it is based on data that are analysed using proven scientific techniques, such as big data, data mining, statistical analysis and social stimulation. The director of the organisation must take a path to follow. However, human beings depend on their intellectual capacity, self-perception, mental and psychological state, as well as the other elements that are part of their personality and will affect their way of arriving at the selection of their action plan. It means that just as people possess a logical and an emotional component. In the same way, organisations will emulate these components in a complimentary group and organisational environment (Riedl et al., 2021)

Workgroups are social systems with emergent cognitive and emotional properties. Traditionally the concept of 'emotion' has been a distinctive one bestowed only on individuals, and emotions have been conceptualised as a hallmark of individuals because of their very human nature (Mayer et al., 2008). Work has been done to classify this characteristic within work groups (Curşeu et al., 2015; Druzkat and Wolff, 2001). It responds to the recognition given to the members of a team and their influence on the results obtained from the interaction between them. Likewise, it is recognised that in these work teams, different configurations emerge for the emotions that arise. On the one hand, a certain affective and relational similarity appears among the members. On the other, the formation of collective emotional competencies, which are not precisely an accumulation of emotions from the team, together emerges as a new entity to be analysed with the capacity for emotional management of their decisions (Sager, 2017).

Khan, Zubair and Shah (2022) mention that emotional intelligence in Small and Medium Enterprises in Pakistan influences their performance. However, it depends on the entrepreneur's high score on this indicator. They also state that this organisational capacity helps overcome crises as complicated as the COVID-19 pandemic. However, other psycho-emotional skills are also required, such as the resilience of the enterprise in the presence of impediments to its development and the economic crises that may arise.

Team cohesion influences the development of collective emotional intelligence, as the environment for collaboration makes the process of defining strategies and actions in competitive spaces less complex for the organisation (Kim and Ko, 2021). Other aspects to consider are emotional intelligence's impact on family businesses. The confirmation of the organisational structure is affected by the highly effective relationship between the leaders and the team (Neffe et al., 2022). In companies with high cultural diversity, it is also essential to consider the members' characteristics to understand how intercultural work competence is affected. In this aspect, education, religion, ethnicity and other anthropological variables affect leadership and the process of consolidating emotionally stable and functional work groups (Arghode et al., 2022).

On the other hand, the state of well-being proposes a relationship between satisfaction and perception. Between needs and means of fulfilling the requirements are used to supplement their fulfillment. It is assessed and evaluated by individuals who carry out this well-being determination (Nasr et al., 2018). It makes the perception of well-being subjective in essence. It is how the study of this concept has multiple edges that finally impact the conceptualisation of its construct and its initial conception itself (Wong et al., 2020).

Subjective well-being has been analysed from different approaches. It is mainly because there is no globally accepted concept. Keyes (2006) mentions that there are different dimensions to which attention should be given to understanding the context of social well-being. Among them are social integration, social contribution, social coherence and social actualisation. These concepts lead to the consideration of

subjective well-being, physical health and optimism as indicators that drive their understanding. A public policy trend is required to promote the construction of spaces perceived as part of well-being (Diener and Ryan, 2009). It can help build a social ecosystem that puts the well-being of individuals at the forefront (Douglas, 2017). So that, at a certain point in time, the means of appreciating this management approach can be standardised.

It can be concluded that subjective well-being is the scientific term used to conceptualise happiness and satisfaction with life. It is a way of manifesting that it is necessary to think and feel that life is pleasant and everything is going well. So that personal and organisational plans and projects will be positive. Internal and external factors influence people's levels of subjective well-being. The individual personality and the society in which it develops as a group influence it and builds a personal perception.

Some of the main determinants of subjective well-being correspond to the characteristics of the individual, such as character, temperament, resilience, stress management, adaptive capacity, among many others. Moreover, others come from their interaction with other individuals in their social group and how they create relationships in a society where they seek to satisfy their basic needs (Lyubomirsky et al., 2005; Yildirim and Belen, 2019; Hanif et al., 2022). The relationship between these internal and external factors to build subjective perception is part of the questions that are part of the study of subjective well-being and how this can influence the development of efficient work teams (Joshanloo, 2017). These constructs raise the subjective perception of the general population (Solanes et al., 2021). It, in turn, will help generate work engagement and professional satisfaction (Joo and Lee, 2017).

From this approach, happiness is a concept that is often associated with subjective well-being, but they are not the same (Raibley, 2012; Rani et al., 2022). There are epistemological differences, meaning that both concepts have their area of knowledge. On the one hand, happiness has a philosophical foundation based on the continuous presence of sensations and feelings of satisfaction. It can be defined as an instant in time in which the individual can perceive a high state of satisfaction. However, this feeling is ephemeral. It does not last for more than a few moments and is usually accompanied by a significant waste of energy.

Happiness is associated with well-being since maintaining the same feeling of satisfaction for a prolonged period and emphasizing an objective perception of the satisfiers surrounding the person is considered a state of subjective well-being created. Subjective because the person and state of well-being perceive it because it is validated by social, economic and personal evidence that manifests it (Dambrun et al., 2012).

Other concepts are associated with happiness, such as organisational productivity, (Oswald et al., 2015), success in the work environment and regional development in the economic and social sphere and networks and their role in belonging (Zhu et al., 2013), the creation of a sense of entrepreneurship (Fachrudin et al., 2022;

Foncubierta-Rodríguez, 2021; Ravina-Ripoll et al., 2020), governance as part of organisations (Dumitrescu, 2020; Robina-Ramírez et al., 2021; Somrit and Romprasert, 2022). Moreover, the development of happiness management is a critical element in the competitive environment of companies and organisations (Gao et al. 2009; Paul et al. 2020).

Likewise, it must be established that it is increasingly noticeable that abstract and subjective concepts have taken on particular importance in the first two decades of the 21st century. To bring these new points of view, according to the accepted ideological approaches, it defines the abstract constructs of happiness and subjective well-being. It is required to increase the alternatives for studying social problems, which confirms the need to include studies based on advanced software techniques, qualitative content analysis, sentiment analysis, and the study of complexity in social and technical problems (de Camargo et al., 2020).

Hypotheses

In this paper, the association of the dependent variable, Collective Emotional Intelligence (CEI), with the independent variables, Subjective Well-being (SWB) and Perceived Happiness (HP), is carried out. With this approach, the latter two variables are positioned as triggers of organisational scenarios. The evolution of a state of knowledge allows the increase of CEI using SWB and HP mechanisms. Therefore, the following working hypotheses are developed:

H_1. There is a relationship between the subjective well-being of individual members of an organisation (employees, managers, stakeholders. suppliers. etc.) and the development of collective intelligence, i.e., income, property, and status, among others, and how they increase the organisations' ability to become an intelligent enterprise.

H_1. Subjective well-being is positively associated with CEI

H_{1a} Income is positively associated with CEI

H_{1b} Property is positively associated with CEI

H_{1c} Status is positively associated with CEI

H_2. There is a relationship between the perception of happiness of individual members of an organisation (employees, managers, stakeholders, suppliers, etc.) and the development of collective intelligence, i.e., life expectancy, family issues, self-perception, among others, and how they increase organisations' intelligent capacity.

H_2. Perceived happiness is positively associated with CEI.

H_{2a} Life expectancy is positively associated with CEI

H_{2b} Family issues are positively associated with CEI

H_{2b} Self-perception is positively associated with CEI

The literature suggests that individuals and organisations have a common purpose. In this research, it is presented that the correlation between the two entities is higher than the one dealing with it. It means that in the future, it is mandatory to develop public policies to increase employee happiness and collective goals.

Research Methodology

Scope, population, and sample

It is a quantitative study, as the responses were recorded on a scale to proceed to statistical measurements. The design was non-experimental, as the study variables were not modified but were analysed according to their nature without affecting their structure. It was cross-sectional because a single data collection was conducted at a single time (early 2022). The scope of this research is correlational between the independent and dependent variables. However, this nature is limited to the number of variables considered in the proposed model.

The population for this research is 412,575 employees in the Information Technology sector, selected by IT function or by providing IT solutions to other firms (Ministry of Economy, 2022). The sample was selected with a non-probabilistic approach, consisting of 384 valid responses with a 5% error and 95% confidence level. The responders were Mexican IT workers from middle and lower management who voluntarily agreed to complete a questionnaire with items related to the study: collective emotional intelligence (CEI), subjective well-being (SWB), and happiness perception (HP). This survey was applied using an online survey and a print instrument from January to April 2022. The instrument was composed of positive affirmative statements about the respondent's perception, and the response options comprised 7 points on the Likert scale and 9 items for each variable.

Univariate and multivariate analysis techniques were used in this research. The former was aimed at the individual analysis of the proposed variables and the verification of fundamental aspects, such as the mean, modes, standard deviations, variance and levels of asymmetry and kurtosis, i.e., the assessments that made it possible to determine the internal consistency of each of the items that make up the constructs. Additionally, the instrument's reliability was tested by determining Cronbach's alpha for each variable. The multivariate analysis techniques used were multiple linear regression and Structural Equation Modelling by the covariance method (CB-SEM) with the following phases: measurement evaluation, identification, verification of the model fit and hypothesis testing.

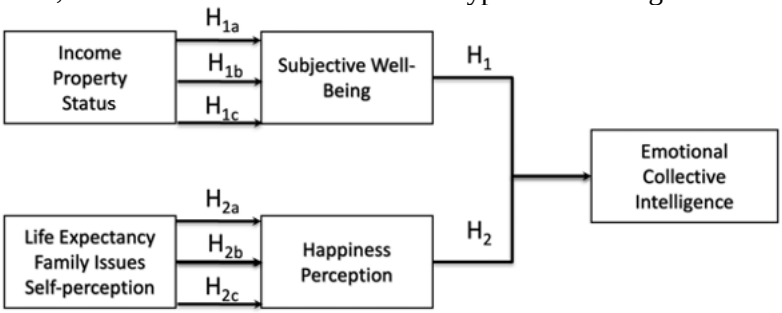

Figure 1: Proposed theoretical model.

Research Results

Descriptive analysis

The descriptive data of the surveyed sample indicates that most people identified as females, 52.3% against 47.7% male. 61.6% of the respondents are under 30 years of age. The minimum age is 24, and the oldest is 57, which shows a young population group in the information technology sector. The majority (89.3%) have a bachelor's degree, as shown in Table 1.

Table 1. Demographic data of respondents

Variable	Options	Frequency	Percentage
Sex	Female	201	52.3%
	Male	183	47.7%
Level of education	High school		10.7%
	Undergraduate school		78.9%
	Graduate school		10.4%
Variable	**Minimum**	**Maximum**	**Standard deviation**
Age	24	57	9.18

Reliability analysis

Table 2 shows that when the reliability analysis of the results of the questionnaire application was carried out, high Cronbach's Alpha indices were obtained, indicating that the instrument's reliability was significant. Also, the relationship between factors and Cronbach's Alpha indicates that the instrument has significant content validity.

Table 2. Reliability Analysis

Dependent Variables	Independent Variables	Items	Cronbach's Alpha
CEI		9	0.880
	SWB	9	0.911
	HP	9	0.904

According to Nunally (1967), Cronbach's Alpha values between 0.6 and 0.7 are acceptable for items that form a single construct in social sciences. The result of 0.880 for Collective Emotional Intelligence, 0.911 for Subjective Well-Being and 0.904 for Perceived Happiness has a high internal consistency for each variable.

Correlations

Table 3 shows a high correlation between CEI and SWB ($r = 0.726$ and $p < 0.010$), as well as CEI and HP ($r = 0.705$ and $p < 0.010$); these data are under Pearson's method. In the same way, when Spearman's correlation analysis is performed, it can be found as follows CEI and SWB ($rho = 0.684$ and $p < 0.010$) and CEI and HP (rho

= 0.624 and p < 0.010). Therefore, both methods confirm the same result and accept the research hypotheses. It is important to clarify that this interpretation does not imply causality. The significant relationship only implies that the variables covary with each other. This correlation is confirmed by both Pearson's and Spearman's methods. It confirms the validity of the hypotheses included in the study. The result implies that when one of the variables is present, such as SWB or HP. CEI is modified somehow, and the positive relationship between them is maintained.

Table 3. Reliability Analysis

		SWB	HP
CEI	**Pearson**	0.726**	0.705**
	Sig. (2-tailed)	0.001	0.000
	Spearman's Rho	0.684**	0.624**
	Sig. (2-tailed)	0.002	0.000

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Regression analysis

The value of (R^2) presented in Table 4 indicates that a high explanatory reference of the statistical model is observed. It is because 56.5% of the phenomenon is explained by the two variables studied. Given this exercise, the model's applicability is adequate and helps confirm the working hypotheses.

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Std. The error in the Estimate
1	0.752[a]	0.565	0.562	0.55005
a. Predictors: (Constant). HP. SWB				

Table 5 shows that the constant and the independent variables of study (SWB and HP) have a highly significant value in the incidence of the dependent variable (CEI) and form the algebraic expression shown in Equation 1. It also validates acceptable VIF values that confirm lower collinearity.

Table 5. Regression Model Coefficients

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.120	.179		11.834	.000		
SWB	.393	.051	.451	7.706	.000	.334	2.993
HP	.286	.050	.337	5.768	.000	.334	2.993

Equation 1. Regression Model

$$CEI = 2.120 + 0.393SWB + 0.286HP$$

Structural Equation Model

To adequately validate the theoretical assumptions, the analysis of structural equations is carried out using the SPSS AMOS 21 software. For this, it was previously determined that the answers to the questionnaires were presented on a Likert scale. With seven items that vary from perceptions of "Strongly agree" to "Strongly disagree". Figure 2 shows the structural equation model that describes the theoretical appreciation of the relationship of variables.

The model integrates twenty-seven observable variables and three latent variables, two exogenous and one endogenous. In this sense, nine observable variables define the construct and exogenous latent variable of Subjective Well-being (SWB), the construct and exogenous latent variable of Happiness Perception (HP) and the construct and endogenous latent variable of Collective Emotional Intelligence (CEI). After verifying the measurement model, it is necessary to identify the structural model, assess the structural model fits and test the hypotheses raised in the literature review. Therefore, the model has been identified in all its parameters thanks to the rule of degrees of freedom. Where a value greater than zero suggests, the structural model has 324 degrees of freedom. So, it is assumed to have a good parsimonious fit.

In addition, an absolute fit was found in the model because X_i^2 was evaluated from the CMIN, which is a recommended measure for assessing CB-SEM structural models. It is more significant than twice its degrees of freedom. As measured by the RMSEA, the overall fit presented appropriate values. A measure between 0.05 and 0.08 is recommended, and this model presents an accepted value.

Regarding the incremental fit measures, a good indicator is found in the Comparative Fit Index (CFI), the Incremental Fit Index (IFI) and the Turkey Lewis Index (TLI) since values are nearly all close to 0.900, which are the value recommended for them. So, according to these indicators, the comparison between the proposed model and a null model is appropriate by a marginal value. The results of the model fit measures are presented in Table 6.

Table 6. Measures of structural model fit

Type of adjustment	Adjustment measures	Acceptable levels	Model results	Acceptability
Absolute or global	CMIN	CMIN = double GL	324	Acceptable
	P-value	> 0.05	0.000	Marginal
	RMSEA	< 0.08	0.080	Acceptable
	GFI	> 0.90	0.800	Marginal
	AGFI	> 0.90	0.766	Low
Incremental	IFC	> 0.900	0.929	Acceptable
	IFI	> 0.900	0.870	Marginal
	TLI	> 0.900	0.859	Marginal
Parsimony	CMIN/DF	< 5	3.507	Acceptable
	PRATIO	> 0.5	0.923	Acceptable
Sample size	CN (AMOS)	HOELTER 0.05	124	Acceptable

The main results shown in Table 7 indicate that the proposed hypotheses have been validated. The subjective well-being factor (income, property, status) is an element of influence in developing collective intelligence in organisations. Elements, such as age, gender and academic preparation, are essential to consider in assessing these results. It makes it necessary to carry out studies to confirm the results obtained and, therefore, the importance that this factor corresponding to human capital can be included in public and organisations' internal policies.

Table 7. Hypotheses testing

Hypotheses	Variables			Influence	SE.	CR.	P	Contrast
H_1 $H_{1a, 1b, 1c}$	CEI	<---	SWB	0.454	0.099	4.591	0.000	Not Rejected
H_2 $H2_{a, 2b, 2c}$	CEI	<---	HP	0.278	0.091	3.052	0.002	Not Rejected

In the same way, the perception of happiness (life expectancy, family issues, self-perception) is accepted as a determining factor in the development of collective intelligence. In this case, the term "collective emotional intelligence" is proposed as part of a new perspective where happy employees lead the organisation to be a "happy company", which invariably has the same effect on their strategic projection, self-concept and sense of success as a person, this vision comes from complexity.

It is important to confirm that the three secondary hypotheses mentioned and derived from the main ones are considered to be valid due to the results obtained in the statistical analysis. An analysis proposal based on complexity confirms the importance of uniting the analysed constructs in conceptual modeling schemes that can be used in this study to exemplify how an organisation can be analysed as an

individual entity made up of multiple subsystems that shows success and complements the effects this has on their performance. According to these results, scenarios are confirmed in which companies adopt strategies to make the organizational and economic interests of the company equivalent to the objectives that employees, managers and others interested in their performance may have. By turning these actions into strategic issues related to social responsibility (Hernández et al., 2020), with the provision of adequate spaces for personal development in workspaces (Joo and Lee, 2017) as well as compliance with laws and public policies that consider employees to be an essential part of an effective welfare state (Diener and Ryan, 2009; Douglas, 2017, Khan et al., 2022). In addition to these considerations, the construction of collective intelligence in groups is part of strategies that have an economic impact on companies (Druzkat and Wolf, 2001) because decisions usually have an emotional component that cannot be eliminated due to the human factor (Khan et al., 2022; Kim and Ko, 2021). Besides, this ultimately impacts the decision-making process (Massote and Corsi, 2020, Nasr et al., 2018) and develops higher productivity by making holistic decisions than they include internal and external factors to decision makers (Oswald et al., 2015; Ravina-Ripoll et al., 2020; Riedl et al., 2021; Sager, 2017; Wang and Ruhe, 2007).

Conclusion

From a management perspective, organizations are now challenged to consider employees equally important to their financial goals. This way of appreciating employees' work is increasingly important due to the changing social and psychological characteristics of the workforce. The managers and owners of companies need to include in their strategies actions that improve the employees' quality of life. A change must be carried out because there is no greater force than the shared collective vision. This is achieved when the employee feels satisfied and is perceived to be happy. When the mission and vision of the organization become their own goal of self-improvement, and they manage to perceive that work is an activity that allows them to meet their individual goals, then the firm is on a path to success and to continue with the acquisition of CEI and better decision-making process. Subjective well-being and happiness have similarities but, epistemologically, are different constructs. The first involves real issues, such as income, property and status, and how they influence workers' perceptions. In addition, happiness has internal foundations and is characterised by each person's emotional stability and is related to their training, life experience, expectations and social environment. Having ratified through the verification of hypotheses that both the concept of subjective well-being and happiness perception influences the development of collective emotional intelligence processes. It is concluded that the happiness of individuals determines "organisational happiness" or "collective emotional intelligence" these proposed concepts exemplify the complexity approach that proposes a correspondence between "happy employees" and "happy organisations". In the same way that "successful employees" generate "successful

companies". Finally, it is essential to recognise that this academic work has several limitations, as discussed in a previous section. The first is using a cross-sectional survey design and limiting the ability to assert causality. The second is the impossibility of generalising the results achieved in this study outside the geographical framework of Mexico. Hence, Future research recommends replicating this theoretical model in other emerging countries. Third, the existence of biases derived from a single source of information data. They all come from employees in Mexican technology-based firms. Finally, the collective emotional intelligence variable is a multifaceted concept affected by multiple managerial factors. This fact calls for future research to provide a more comprehensive view of organisational performance.

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ZBIOROWA INTELIGENCJA EMOCJONALNA W FIRMACH IT: ROLA SUBIEKTYWNEGO DOBROBYTU I SZCZĘŚCIA

Streszczenie: Niniejszy artykuł omawia zbiorową inteligencję emocjonalną jako konstrukt, który ustanawia relacje pomiędzy członkami społeczności organizacyjnej oraz wskazuje dlaczego jest to ścieżka do poprawy wyników firm. Opiera się na założeniu, że na wybór rozwiązania problemu w dowolnym procesie decyzyjnym wpływa kilka czynników. Poza analizą praktycznych wartości, których dostarczają informacje, podlegają one również reakcjom emocjonalnym, które mogą wystąpić u decydentów. . Próbki te składają się na inteligencję emocjonalną przeniesioną z jednostek i ich interakcji organizacyjnych na samą organizację. W niniejszej pracy podjęto próbę znalezienia związku między zmiennymi zbiorowej inteligencji emocjonalnej (CEI) z subiektywnym dobrostanem (SWB) i postrzeganym szczęściem (HP). W tym celu zastosowano narzędzie do gromadzenia danych w odniesieniu do 384 pracowników firm technologicznych w północnym Meksyku. W celu potwierdzenia hipotez przeprowadzono analizę opisową, korelacyjną i wielowymiarową , w tym badanie SEM. Wyniki potwierdzają znaczenie SWB i HP w rozwoju CEI i sugerują konkretne działania w zakresie postrzegania pracowników. Działania te spełniają oczekiwania i wymagania wyrażone przez pracowników i mają na celu zwiększenie inteligencji organizacyjnej i CEI w celu usprawnienia procesu decyzyjnego.

Słowa kluczowe: Zbiorowa Inteligencja Emocjonalna; Subiektywne dobre samopoczucie; Postrzeganie szczęścia; Zarządzanie technologią; Proces podejmowania decyzji.

IT 公司的集体情商：主观幸福感和幸福感的作用

摘要：本文将集体情商视为在组织社区成员之间建立关系的结构，以及这是提高公司绩效的途径。 它的前提是，在任何决策过程中，有几个因素会影响选择来解决一个问题。 除了分析信息提供的实用价值外，它还受到决策者可能具有的情绪反应的影响。 这些样本构成了从个人及其组织互动转移到组织本身的情商。 本文旨在找出集体情绪智力 (CEI) 变量与主观幸福感 (SWB) 和感知幸福感 (HP) 之间的关系。 为此，对墨西哥北部科技公司的 384 名员工应用了数据收集工具。 进行了描述性、相关性和多变量分析，包括 SEM 研究，以验证假设。 结果验证了 SWB 和 HP 在发展 CEI 中的重要性，并建议针对工人的看法采取具体行动。 这些行动满足员工表达的期望和要求，旨在提高组织智能和 CEI 以改进决策

关键词：集体情商； 主观幸福感； 幸福感； 技术管理； 做决定的过程