

Relationship between emotional intelligence, congruence, and intrinsic job satisfaction

Relação entre inteligência emocional, congruência e satisfação intrínseca no trabalho

Jonatan S. Batista¹, Sônia M. G. Gondim¹, and Mauro O. Magalhães¹

¹ Federal University of Bahia (Ufba), Salvador, BA, Brazil

Author notes

Jonatan S. Batista is now a PhD student from the Postgraduate Program in Psychology of Federal University of Bahia (Ufba); Sônia M. G. Gondim is now a retired professor at Ufba; Mauro O. Magalhães is now an associate professor II at the Institute of Psychology of Ufba.

Correspondence concerning this article should be addressed to Jonatan S. Batista, Universidade Federal da Bahia, Faculdade de Filosofia e Ciências Humanas, Departamento de Psicologia, Estrada de São Lázaro, 197, São Lázaro, Salvador, Bahia, Brazil, ZIP Code 40.210730. E-mail: jsb.trevor@hotmail.com



This is an open-access article distributed under the terms of the Creative Commons Attribution License.

This paper may be copied, distributed, displayed, transmitted or adapted for any purpose, even commercially, if provided, in a clear and explicit way, the name of the journal, the edition, the year and the pages on which the paper was originally published, but not suggesting that RAM endorses paper reuse. This licensing term should be made explicit in cases of reuse or distribution to third parties.

Este artigo pode ser copiado, distribuído, exibido, transmitido ou adaptado para qualquer fim, mesmo que comercial, desde que citados, de forma clara e explícita, o nome da revista, a edição, o ano e as páginas nas quais o artigo foi publicado originalmente, mas sem sugerir que a RAM endosse a reutilização do artigo. Esse termo de licenciamento deve ser explicitado para os casos de reutilização ou distribuição para terceiros.

Abstract

Purpose: The purpose of the study was to explore the association between emotional intelligence, person-environment congruence and intrinsic job satisfaction in two professional groups, the first focusing on interpersonal relationships and the second, on data, things, and ideas.

Originality/value: The study presents the association between congruence, emotional intelligence and intrinsic satisfaction at work and tests the model in which congruence moderates the association between emotional intelligence and intrinsic satisfaction in two professional groups.

Design/methodology/approach: Survey-type study in which 486 workers participated in two groups of professionals using the realistic, investigative, artistic, social, enterprising and conventional (RIASEC) model. Participants responded to questionnaires of professional interest and occupational environments necessary to measure congruence, and, then, emotional intelligence and intrinsic satisfaction.

Findings: Positive associations were identified between emotional intelligence, person-environment congruence, and intrinsic job satisfaction, with higher associations in the group with high interpersonal demands, highlighting the relevance of emotional skills in this professional segment. However, it was found that the congruence does not moderate the association between emotional intelligence and intrinsic satisfaction in either group, emphasizing that the person-environment fit and emotional skills can contribute independently to explain worker satisfaction with the activities developed in the organization.

Keywords: person-environment congruence, emotional intelligence, intrinsic job satisfaction, personality, emotional skills

Resumo

Objetivo: O propósito do estudo foi explorar a associação entre inteligência emocional, congruência pessoa-ambiente e satisfação intrínseca no trabalho em dois grupos profissionais: o primeiro com foco nas relações interpessoais e o segundo voltado para o manuseio de coisas, dados e ideias.

Originalidade/valor: O estudo apresenta a associação entre congruência, inteligência emocional e satisfação intrínseca no trabalho e testa o modelo em que a congruência modera a associação entre inteligência emocional e satisfação intrínseca em dois grupos profissionais.

Design/metodologia/abordagem: Trata-se de estudo do tipo *survey* em que participaram 486 trabalhadores distribuídos em dois grupos de profissionais utilizando o modelo RIASEC. Os participantes responderam às medidas de interesse profissional e de ambientes ocupacionais necessárias para a mensuração da congruência, e em seguida às medidas de inteligência emocional e de satisfação intrínseca.

Resultados: Foram identificadas associações positivas entre inteligência emocional, congruência pessoa-ambiente e satisfação intrínseca no trabalho, com associações mais altas no grupo com elevadas demandas interpessoais, destacando a relevância das habilidades emocionais nesse segmento profissional. Contudo, identificou-se que a congruência não modera a associação entre inteligência emocional e satisfação intrínseca em nenhum dos dois grupos, salientando que o ajuste pessoa-ambiente e as habilidades emocionais podem contribuir de maneira independente para explicar a satisfação do trabalhador com as atividades desenvolvidas na organização.

Palavras-chave: congruência pessoa-ambiente, inteligência emocional, satisfação intrínseca no trabalho, personalidade, habilidades emocionais

INTRODUCTION

Many authors define intrinsic job satisfaction as the set of emotional answers linked to the worker's orientation and adaptation to job activities, which can influence organizational results (Davidescu et al., 2020; Dziuba et al., 2020; Hassan & Romle, 2015; Herzberg et al., 1959; Pritchard & Peters, 1974). Emotional intelligence (EI) has been associated with job satisfaction in professional categories whose activities involve intense emotional and interpersonal demands (Daryanto, 2014; Mayer & Salovey, 1997). There is also empirical evidence on the relationship between person-environment fit and the ability to use and manage emotional skills and job satisfaction (Ai-Hamami et al., 2015; Ghoreishi et al., 2014; Hoff et al., 2020; Kassim et al., 2016).

For Brito and Magalhães (2018), congruence, defined as the fit between the worker's occupational interests and work environment demands, is weakly or moderately associated with intrinsic job satisfaction. However, Tagoe and Quarshie (2017) found a more striking result: exercising tasks that are congruent with professional interests and using emotions at work positively affect intrinsic job satisfaction and individuals' permanence in the organization (Ishitani, 2010; Mayer & Salovey, 1997; Tagoe & Quarshie, 2017).

These results, still inconclusive, open new possibilities for investigating the relationships between EI, congruence, and intrinsic satisfaction. One possibility suggested in this study was to analyze whether congruence and EI could predict intrinsic job satisfaction. If so, it would open the way for analyzing if congruence acts as a moderating variable, increasing the strength of the relationship between EI and intrinsic job satisfaction.

Another justification for new research relating the three constructs mentioned above is that some studies bring evidence of the positive effects of congruence and EI on job satisfaction, but they neither differentiate their intrinsic and extrinsic dimensions, nor examine variations in work environments with different demands (Farh et al., 2012; Pervaiz et al., 2019).

In environments of greater pressure and conflict in work teams, emotional skills play a relevant role in coping with stressful situations and interpersonal tensions (Ghoreishi et al., 2014). Thus, some authors assume that in environments with many interactions and group work, EI is relevant for understanding intrinsic job satisfaction (Dust et al., 2018; Farh et al., 2012). The advance of that understanding could occur by testing if congruence interacts with EI, increasing its positive effect on intrinsic job satisfaction, since these relationships shift from weak to moderate (Brito & Magalhães,

2018). In other words, the best environment-person fit (professional interests and work environment) could increase the effect of EI on intrinsic job satisfaction, and this effect would be stronger on those professional groups with higher emotional and interpersonal demands in their activities. This would justify testing a model in which congruence would be the moderating variable of these relationships.

The assumption is that the perception of fit in a workplace with more visible emotional and interpersonal demands would act as a support for identifying opportunities at work and possibilities of personal expression; hence, the most emotionally intelligent professionals would become more capable of performing their tasks, feeling more satisfied with what they do. This effect would not be so visible in work environments or professions of a more technical or operational nature, with little requirement for interaction among individuals to carry out their activities.

When considering the need to test differences between work environments focused on people (human interactions) and those with an operational and technical focus, we defined as the study's objective to analyze the association between EI, congruence, and intrinsic job satisfaction, in these two kinds of workplaces. We developed four hypotheses to test prediction and moderation:

- H1 tested if EI was positively associated with intrinsic satisfaction.
- H2 tested if congruence was positively associated with intrinsic satisfaction.
- H3 sought evidence that groups with higher personal and interpersonal demands would have the highest scores in EI.
- H4 tested if congruence would act as a moderator of the relationship between EI and intrinsic satisfaction, thus increasing the effect on professional groups that demand higher interaction among people.

Afterward, we present additional arguments that support these hypotheses.

The results of this study may contribute to professional guiding and selection processes, helping young people and those in career transition with their choices. The findings may also support people management policies, with relevant information on their professional profile, occupational fit, emotional skills, and eventual impacts on the intrinsic dimension of job satisfaction.

INTRINSIC JOB SATISFACTION AND EMOTIONAL INTELLIGENCE

In general, studies on intrinsic job satisfaction rest on the two-factor theory of motivation, by Herzberg et al. (1959), which differentiates intrinsic and extrinsic factors. Extrinsic factors are necessary to ensure satisfaction, but they do not motivate. Intrinsic factors, in turn, would be responsible for the motivation and satisfaction of the worker, as they relate to emotional responses and engagement in the exercise of professional activities.

Intrinsic satisfaction is a more stable dimension of the link with work, distinct from that type of satisfaction resulting from the material conditions of work, more connected to circumstantial factors, such as leadership, physical environment, and work tools (Rueda et al., 2012). Intrinsic satisfaction relies on an affective bond with what we do at work, activities that allow the expression of interests and personal traits.

The effects of intrinsic job satisfaction are important for the organization, because, when pleased, the individual does the task effectively, keeps his performance stable, and seeks to improve it, taking on new challenges. However, when intrinsically dissatisfied, they will tend to produce less and inefficiently (Herzberg et al., 1959; Miao et al., 2016). In this perspective, being satisfied with the work means having individual needs met, by performing a set of activities in a work environment that offers positive feedbacks on their performance (Miao et al., 2016).

Some studies show that job satisfaction and EI, defined as the ability to recognize, assess, interpret, and regulate emotions, including the ability to understand emotional information and manage it, can facilitate thinking and promote well-being (Mayer & Salovey, 1997; Tudor, 2017). There is evidence of consistent and positive relationships between EI and job satisfaction, in both extrinsic and intrinsic dimensions (Ai-Hamami et al., 2015).

EI is a type of personal, social and emotional resource, which an individual has or develops, in order to fit in and deal with interaction demands of the work environment. Workplaces with a higher social demand make this type of resource more necessary, and, if well used, satisfaction is a positive consequence (Goroshit & Hen, 2012; Mayer & Salovey, 1997; Tudor, 2017). Therefore, it justifies testing if emotional intelligence is positively associated with intrinsic job satisfaction.

Empirical evidence has shown the importance of emotional intelligence for environments that require frequent interpersonal relationships, such as in the areas of health and education (Ghoreishi et al., 2014). Tudor's study

(2017) with university professors and students showed that the higher their EI, the higher the indexes of intrinsic satisfaction with the job (for professors) and with the learning environment (for students). According to the author, emotionally intelligent people are able to use their emotional skills to change how to process information, improving their assessment and enabling decision-making consistent with their needs. Tagoe and Quarshie (2017) also observed similar results.

Kassim et al. (2016) carried out a study with lecturers, concluding that EI is positively associated with intrinsic job satisfaction and engagement. Farh et al. (2012) showed that EI favors teamwork performance when interpersonal interaction demands are high. In these cases, EI helps to solve problems and improve performance, which suggests that work environments with a high demand for interpersonal interaction also require a high capacity of emotional management (Kumar, 2018). This justifies the hypothesis that EI would be more strongly associated with professional groups with higher emotional and interpersonal demands.

INTRINSIC JOB SATISFACTION AND CONGRUENCE IN THE RIASEC MODEL

Holland's (1997) *theory of vocational personalities and work environments* is useful to characterize people at workplaces, through six types of workers and work environments realistic, investigative, artistic, social, entrepreneur, and conventional (RIASEC). The RIASEC theoretical model rests on the assumption that the choice of an occupation is an expression of individual personality; therefore, people prefer work environments whose activities align with their individual interests. Satisfaction, stability, and work achievement depend on the congruence (fit) between the individual's personality (interests) and the work environment. The six groups of occupational environments and interests described in the RIASEC model have adjacent and distant areas, delimiting similarities and differences between them (see Figure 1) (Nye & Rounds, 2019; Woods et al., 2020). We briefly describe the six types of person/environment below:

The realistic type of worker (R) prefers explicit, arranged and systematic handling of things, tools, machines, and/or animals. Their behavioral trends lead them to achieve sensorial, motor and mechanical skills. Investigative workers (I) are interested in activities of data observation, research, and analysis, related to physical, biological, and cultural phenomena. The goal is

to understand and control these phenomena. Artistic workers (A) prefer ambiguous and non-systematic activities, with a high degree of autonomy. These activities regard the manipulation of physical and verbal materials involving drawing, writing, and music, in order to create forms of expression and new products. Workers of the social type (S) prefer activities related to interpersonal management, teamwork, training and development, management of people, health, and education. Entrepreneur workers (E) prefer activities that involve negotiating with others to achieve individual or collective goals. They have interests in economic areas and a tendency to professions that involve leadership, management, persuasion, and formation of work teams. Finally, the conventional workers (C) prefer activities that involve the systematic use of data and orderly procedures. Their preferences lead them to professions that involve finance, economics, administrative routines, trade, and data analysis.

According to Holland (1997), the fit between individual interests and the work environment's demands has a positive impact on organizational results, such as job satisfaction, performance, commitment, and career endurance. Holland (1997) called this fit person-environment congruence (henceforth, congruence). Congruence is the result of the worker's preferences and decisions to carry out activities of their interest in a work environment that, at the same time, values and rewards these activities. These preferences would arise from personal attributes, socialization environments, and the individual's life story, with successes and failures that become stable over time, resulting in the search for environments whose demands their repertoire can meet.

When workers are in a promising environment for developing their potential, meaning that there is congruence, their intrinsic job satisfaction increases, as they feel more fulfilled with the activities they do (Hoff et al., 2020). Thus, workers whose interests are compatible with the environment's demands are more adapted and likely to remain at work, feel more satisfied, and exhibit pro-social behaviors (Holland, 1997; Ishitani, 2010). Congruence suggests a fit between professional's preferences, as they use their resources to achieve the best result, and the workplace, which is susceptible to more general, contextual and social changes (change of leadership, lack of support, organizational climate etc.).

Stating that the person-work relationship is congruent means that the conditions for the development of activities at the workplace in that period are favorable to that person. The professional will actively seek to negotiate with the environment means of keeping this favorable condition, and the

intrinsic satisfaction is an indicator of this negotiation's success (Ishitani, 2010; Nye & Rounds, 2019). Based on these arguments, we defend the hypothesis that congruence can positively contribute to increasing intrinsic job satisfaction indicators.

METHOD

Study participants

The non-random sample included 486 individuals from different professional segments. We collected data from a public higher education institution, with undergraduate and graduate students from professional or *stricto sensu* programs, professors, and technicians from different areas. Participants could access the link to complete the electronic questionnaire after agreeing with the Informed Consent Form (ICF). We only considered data from students who had been employed for at least one year. This criterion was defined based on the assumption that the intrinsic factors associated with work just depend on the satisfaction achieved from doing the activity, without a direct relationship with other criteria (Locke & Schattke, 2019). Of the total number of participants, 48.8% ($n = 237$) were men and 51.2% ($n = 249$), women. The ages ranged from 18 to 68 years old ($M = 32.4$; $Md = 30.0$; $Mo = 28.0$; $SD = 7.9$). As for the educational level, 45.3% had a postgraduate degree, 42.2% had a higher education degree, and 12.6% had incomplete higher education. The working time mean was 5.3 years (minimum = 1.0; maximum = 40.0; $Md = 3.0$; $Mo = 2.0$; $SD = 6.0$).

Research instruments

In the current study, the following instruments were used:

- *Vocational Interests Scales – VIS* (Teixeira et al., 2008): Developed according to the RIASEC model (Holland, 1997), the version that we used had six dimensions, each corresponding to a vocational profile, and 48 items, eight for each of the dimensions. The items were descriptions of activities that participants should evaluate, according to how attractive they found them, regardless of their skills. The sum of the scores for each dimension indicated the types of predominant interests of workers. The internal consistency indexes (Cronbach's alpha) of the dimensions

attained in this study were R (.64), I (.77), A (.81), S (.82), E (.68), and C (.74). The principal axis factoring (PAF) using oblimin rotation showed the adequacy of the scale items to the six-factor model, explaining 49.20% of the total variance.

- *Occupational Classification Inventory – OCI*: Version developed and validated by Brito and Magalhães (2017), based on the original inventory OCI. The original OCI has 48 items, distributed through the six RIASEC dimensions, with eight items per dimension. As informed in the original study, internal consistency (Cronbach's alpha) achieved for each of the scales was R (.85), I (.88), A (.79), S (.86), E (.80), and C (.79). The six factors explained 47% of the total variance.
- *Intrinsic Satisfaction*: Developed and validated by Brito and Magalhães (2018). The version used is unidimensional and has ten items, which regard satisfaction with aspects of the task or work. Answers were given on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). The sum of the scores indicates how much the individual is satisfied with the activities they do at work. We conducted a PAF of the scale to test its unidimensionality, and the single factor solution explained 52.87% of the total variance, with an internal consistency index (Cronbach's alpha) of 0.90.
- *Profile of Emotional Competence (PEC) scale*: The instrument was adapted and validated by Gondim et al. (s.d.) from a study by Brasseur et al. (2013), who developed the scale based on Mayer and Salovey's (1997) EI model. With 35 items distributed into four dimensions: intrapersonal functional (seven items), intrapersonal dysfunctional (ten), interpersonal functional (nine), and interpersonal dysfunctional (nine). The scale assesses adaptability (functionality) and inadequacy (dysfunctionality) in managing emotions, under intrapersonal and interpersonal focuses.

There were some limitations in using this measure. Data indicated that the participants did not distinguish intrapersonal from interpersonal strategies and only evaluated the functional or dysfunctional use of their emotions. This led to the exclusion of six items. We divided the remaining 29 into two dimensions (functional, 15 items; and dysfunctional, 14 items). The PAF with Varimax rotation (to better demarcate functional or dysfunctional dimensions) showed a two-factor solution, explaining 28.40% of the total variance. The internal consistency indexes for the two dimensions were 0.82 (functional) and 0.80 (dysfunctional). Although the factor solution

found in the Brazilian sample was different from the instrument developed by Brasseur et al. (2013), our solution has psychometric properties that enable the creation of the variable “functional emotional intelligence” for testing the prediction and moderation model. Functional emotional intelligence is an indicator of how frequent the worker uses strategies to deal with emotions in an adaptive way.

Data analysis procedure

Database inspection and analysis of assumptions

Initially, the sample had 565 participants. After inspection and identification of missing cases, we excluded 25. Then, we detected univariate outliers by analyzing the boxplot and z-scores and excluded 40 cases that presented more than three extreme answers. We also disregarded 14 multivariate outliers, detected by calculating the Mahalanobis distance. In total, 486 valid cases remained. The exclusion of outliers followed experts’ recommendations (Judd et al., 2009) to ensure non-violation of the assumption of normal distribution of residuals.

We explored the database by using the Kolmogorov-Smirnov and Shapiro-Wilk tests to check the assumptions of normality whose significance in both tests was less than $p < 0.05$, thus indicating no violation of that assumption. Levene’s test, to assess the homogeneity of constructs’ variances, showed a significant result ($p < .001$), indicating that variances are not homogeneous. For these cases, Pino (2014) recommends some procedures: 1. use of robust methods, that is, estimators that are not sensitive to detachments from normality; 2. non-parametric methods that do not have normality assumptions; and 3. the transformation of variables, in which the use of logarithms is pretty common.

For this study, we used non-parametric estimators, namely Spearman’s correlation to investigate the association between variables, the Mann-Whitney test to compare independent groups, and the quantile regression – non-parametric statistics that use the median instead of the mean and is robust for handling outliers. Statistics allow exploring the underlying relationship between the response variable and the covariables in a more flexible way, without meeting all the assumptions required by parametric linear regression (Huang et al., 2017).

For assessing EI, we only considered the PEC’s functional dimension, which corresponds to the use of emotions in a functional (adaptive) way, at

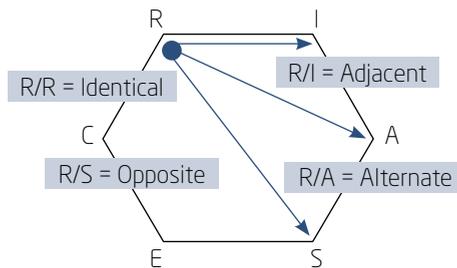
the intrapersonal (personal emotional management) and interpersonal (emotional management of the other) levels. This means that the person can identify, recognize and regulate their emotions and assist other people's emotional processes.

Basis for calculating the congruence score

To assess congruence, it is necessary to analyze the two measures based on the RIASEC model. VIS, measures of vocational interests, specify the predominant interests of professionals, from the six dimensions of the RIASEC model, while OCI, measure of occupational environments, evaluates the occupational activities most performed by professionals, classified according to the RIASEC model. We verified how similar their interests are to the activities performed in the work environment to find out if there is congruence. To achieve this score, we did some procedures in three stages, described in Figure 1:

Figure 1

Realistic type: identical, adjacent, alternate, and opposite pairs



Source: Elaborated by the authors.

Example of Holland's (1997) hexagonal model.

Using Figure 1 as a reference of the RIASEC model, in the first stage, the three highest scores for professional interests and for the occupational environment were converted into the respective letters of each dimension of the RIASEC model. Then, a sequence with RIA as interests indicates that activities classified as realistic are the individual's predominant interest, while IA (investigative, artistic) are secondary interests. The same RIA sequence for occupational environment indicates that activities classified as realistic are the most frequently done at work, while the IA sequence represents activities associated with the first, but less often performed.

In the second stage, we created three new numerical variables resulting from the paired comparison between the hierarchies of interests and environments achieved in the previous stage. When the pair has the same letter for interest and environment (identical pairs), the assigned value is 3, representing the strongest fit. When interest and environment are different, but close (interest R and environment I or C), the congruence value is 2 (adjacent pairs). When interest and environment are different and more distant (alternate pairs), the assigned congruence value is 1 (interest R and environment E or A). Finally, when interest and environment are opposites (opposite pairs), they are theoretically incongruent; therefore, the assigned value is 0 (interest R and environment S). Figure 1 shows the identical, adjacent, alternate and opposite pairs of the realistic type in the RIASEC model. The same principle was applied to the other types.

In the third stage, we used an algorithm to get the overall congruence score of the participant, using the three numerical variables created in the previous stage. In this study, we used the C-index, one of the most used algorithms for calculating congruence (Brito & Magalhães, 2017). The algorithm has the formula $C = 3(x_1) + 2(x_2) + 1(x_3)$, in which “C” stands for congruence and “x” represents the congruence value of each respective interest/environment pair (values achieved in the previous step). The C-index produces a score ranging from 0 (minimum congruence) to 18 points (maximum congruence).

Creation of the groups People and things

We divided the sample into two groups, according to the type of work and following the RIASEC typology (Prediger & Swaney, 2004). The first group, named People, comprised participants who constantly deal with people at the workplace, as in the areas of health, education, and sales (social, entrepreneur, artistic); the second group was named Things and comprised those workers who deal mostly with machines, animals, things, theories and abstract models, reports, and data (realistic, investigative, conventional) (Prediger & Swaney, 2004).

Association between measures

We conducted Spearman’s correlation analyses between congruence, intrinsic satisfaction, and EI. As criteria for interpreting the coefficients’ magnitude, we adopted those recommended by Dancey and Reidy (2005):

$r = .10$ to $.30$ (weak); $r = .40$ to $.60$ (moderate); and $r = .70$ to 1 (strong). Then, we carried out the Mann-Whitney test to compare the results of the People and Things groups, regarding the study variables.

The last analysis procedure was the regression test, to check both the prediction of the variables congruence and EI on the dependent variable intrinsic satisfaction, as well as congruence's moderation in the two groups, People and Things, on the relationships between EI and intrinsic job satisfaction. To do this, we used the Stata software.

RESULTS

Table 1 presents the general descriptive data and Spearman's correlation coefficients between intrinsic satisfaction, emotional intelligence, and congruence, of the total group of participating workers. Intrinsic job satisfaction has moderate associations with emotional intelligence ($r = 0.49$; $p < 0.001$), and weak associations with congruence ($r = 0.25$; $p < 0.001$). Emotional intelligence has weak associations with congruence ($r = 0.09$; $p = 0.039$).

Table 1

Descriptive statistics and Spearman's correlation coefficients between intrinsic satisfaction, emotional intelligence, and congruence (N = 486)

Variables	Md (IQR)	1	2	3
1. Intrinsic satisfaction	3.69 (0.80)	1		
2. Emotional intelligence	3.53 (0.74)	.49**	1	
3. Congruence	12.00 (6.00)	.25**	.09*	1

Source: Elaborated by the authors.

* $p < .05$; ** $p < .01$; MD = median; IQR = interquartile range.

Table 2 shows the comparison of the study variables in the two professional groups, People and Things. The Mann-Whitney test indicates that workers in the People group had scores with significant differences for intrinsic satisfaction, $U = 16.080$, $p < .001$; EI, $U = 19.984$, $p < 0.001$; and congruence, $U = 19.614$, $p < .001$, compared to the participants of the Things group.

To estimate the effect's size, we used the common-language effect size statistic (TDE-LC) (Espírito-Santo & Daniel, 2015). The size found shows a

greater impact on the People group, compared to the Things group. This is valid for all variables: intrinsic satisfaction (TDE-LC = 0.31), EI (TDE-LC = 0.39), and congruence (TDE-LC = 0.38). Thus, when compared to the Things group, the probability of professionals in the People group getting higher scores is 31% (IS), 39% (EI), and 38% (C).

Table 2
Mann-Whitney's rank difference test between the groups People and Things

Variables	People		Things		U	p	TDE-LC
	(n = 330)		(n = 156)				
	Md(IQR)	Ranks	Md(IQR)	Ranks			
1. Intrinsic satisfaction	3.80 (0.72)	262.06	3.40 (1.10)	204.23	16080	< .001	0.31
2. Emotional intelligence	3.67 (0.60)	272.77	3.27 (0.85)	181.58	19984	< .001	0.39
3. Congruence	12.00 (6.0)	260.94	11.00 (6.0)	206.61	19614	< .001	0.38

Source: Elaborated by the authors.

Md = median; IQR = interquartile range; U = Mann-Whitney.

Table 3 shows the results of Spearman's correlations for each professional group. In the People group, intrinsic satisfaction has moderate associations with EI ($r = .46$; $p < .001$) and weak associations with congruence ($r = .23$; $p < .001$). Still in this group, EI has weak and positive associations with congruence ($r = .12$; $p = .029$). In the Things group, intrinsic satisfaction shows moderate associations with EI ($r = .39$; $p < .001$) and congruence ($r = .19$; $p = .014$). EI was not associated with congruence ($r = -.14$; $p = .085$).

Tables 4 and 5 show the results of the quantile (median) regression analyses of EI and congruence, which we conducted to test their prediction on intrinsic job satisfaction. We also included the effect of interaction between congruence and EI on intrinsic job satisfaction. Tests were carried out in the two groups separately. We tested data for the 0.50 quantile (median) as an alternative to using the means.

Table 3

Descriptive statistics and Spearman’s correlation coefficients of intrinsic satisfaction, emotional intelligence, and congruence for the groups People and Things

Variables	People (n = 330)				Things (n = 156)			
	Md(IQR)	1	2	3	Md(IQR)	1	2	3
	1. Intrinsic satisfaction	3.80 (0.72)	1			3.40 (1.10)	1	
2. Emotional intelligence	3.67 (0.60)	0.46**	1		3.27 (0.85)	0.39**	1	
3. Congruence	12.00 (6.0)	0.23**	.12*	1	11.00 (6.0)	0.19**	-0.14	1

Source: Elaborated by the authors.

* p < .05; **p < .01; Md = median; IQR = interquartile range.

Table 4

Estimates of quantile regression (Q50) for the People group (n = 330)

Variables	Estimates				
	Coeff.	SD error	t	95% CI	p
Congruence	0.02	0.01	3.11	0.01-0.04	0.002
Emotional intelligence	0.78	0.06	12.09	0.65-0.91	< 0.001
Interaction: C versus EI	-0.03	0.02	-1.91	-0.08-0.01	0.057

Source: Elaborated by the authors.

Coeff. = regression coefficient; CI 95%: 95% confidence interval.

In the People group (Table 4), congruence (0.02; p < .001) and EI are associated with intrinsic satisfaction (0.78; p < .001), but there is no interaction effect between congruence and EI (-0.03; p = .057). In the Things group (Table 5), congruence (0.03; p = 0.04) and EI are associated with intrinsic satisfaction (0.75; p < .001), also without a moderating effect (-0.04; p = .152).

Table 5*Estimates of quantile regression (Q50) for the Things group (n = 156)*

Variables	Estimates				
	Coeff.	SD error	t	95% CI	p
Congruence	0.03	0.01	2.07	0.00-0.07	.041
Emotional intelligence	0.75	0.11	7.11	0.54-0.96	<.001
Interaction: C versus EI	-0.04	0.03	-1.44	-0.10-0.01	.152

Source: Elaborated by the authors.

Coeff = regression coefficient; CI 95%: 95% confidence interval.

DISCUSSION

The results of the general sample are the first element to consider, without separating the groups. Evidence suggests that highly emotionally intelligent people have a moderate chance of being equally satisfied with the professional activities they do at their workplace. This finding is in line with studies that mention the importance of emotional skills in job performance (Kassim et al., 2016).

EI refers to a stable personal characteristic concerning the way individuals deal with their emotional processes in daily life. People with higher EI scores are more able to handle stressful and conflicting situations that involve other people, by recognizing and regulating their emotions and using their knowledge to activate and regulate others' processes, with more chances to achieve intrinsic job satisfaction (Ai-Hamami et al., 2015; Suleman et al., 2020; Daryanto, 2014; Ghoreishi et al., 2014; Tudor, 2017).

The second aspect refers to the role of congruence. In our study, this variable was positively associated with intrinsic job satisfaction, but with low intensity. Low correlations between congruence and extrinsic and intrinsic job satisfaction are already present in the literature (Brito & Magalhães, 2018; Daryanto, 2014). This result suggests that we cannot affirm that a congruent worker has more chances of being pleased with his job than an incongruous worker. We must be careful in defending that congruence is relevant for job satisfaction, since other variables may interfere. Pritchard and Peters (1974) observed that the belief in duty related to work could predict the intrinsic dimension of satisfaction, while Randolph (2005) showed that the alignment with personal values and the possibility of personal growth are predictors of intrinsic satisfaction.

The third element to highlight regards the differences in associating EI and intrinsic job satisfaction in both groups. The initial hypothesis was that in the People group these relationships would be stronger. However, despite differences that favor the People group, the figures are small. Thus, the results of this study do not follow others on the stronger relationship between these variables (Ai-Hamami et al., 2015; Khan et al., 2016). For Ghoreishi et al. (2014) and Tudor (2017), in situations of higher interpersonal demand, professionals more emotionally intelligent tend to express greater satisfaction with their work. Yet, what the results of our study seem to indicate is that, even in environments where operational and technical demands prevail, as is the case of the Things group, emotional skills also turn into useful resources to handle requirements of the workplace, resulting in effects on intrinsic satisfaction similar to those found in the People group.

The fourth aspect that deserves discussion refers to the non-confirmation of congruence as a moderator in the relationship between the variables EI and intrinsic job satisfaction. Two results pointed in this direction. The first stems from the weak correlations between EI and congruence in both groups. In the Things group, the association was not significant, showing that congruence does not help to explain the effects of EI on intrinsic job satisfaction in those operational and technical working groups, with few interaction demands.

The second result that led to the non-confirmation of congruence as a moderator stems from the regression analysis. Although the congruence coefficient was significant, indicating that the addition of this variable changes the value of the intrinsic satisfaction prediction equation, congruence's contribution is negligible, since this variable can assume values between 0 and 18 points, through the C-Index algorithm (Brito & Magalhães, 2018). Therefore, it is unlikely that in other quartiles this relationship would differ from the observed result. Contrary to the hypothesis, we could easily remove congruence from the equation in an alternative model, without changing the values of intrinsic job satisfaction.

When considering the current results and those by Brito e Magalhães (2018), who investigated the problem of low association of congruence with intrinsic satisfaction by using several algorithms, and by Daryanto (2014), who identified a similar problem in his study, we need to ask if Holland's (1997) congruence would, in fact, be a predictor of intrinsic job satisfaction. Despite the logical aspect and previous evidence presented by the author, most recent results seem to point in another direction. New studies are important to test this hypothesis.

Table 6 presents a summary of the results of the hypotheses tests, highlighting the evidence found.

Table 6
Hypotheses and results found

Hypothesis	Description	Results	Situation
H1	Emotional intelligence is positively associated with intrinsic job satisfaction.	Positive and significant associations for both People and Things groups. The scores of the People group were a little bit higher.	Confirmed
H2	Congruence is positively associated with intrinsic job satisfaction.	Positive and significant associations, although weak for both groups (People and Things), between congruence and intrinsic satisfaction.	Partially confirmed
H3	Groups with higher emotional and interpersonal demands show higher scores in emotional intelligence.	Workers in the People group got higher scores in emotional intelligence compared to the Things group.	Confirmed
H4	Congruence moderates the association between emotional intelligence and intrinsic job satisfaction in professional groups with higher emotional demands.	Congruence did not moderate the interaction between emotional intelligence and intrinsic satisfaction in the two groups.	Refuted

Source: Elaborated by the authors.

CONCLUSION

There is an association between emotional skills and intrinsic job satisfaction. Knowing how to handle emotions contributes to increasing the feelings favorable to task execution, regardless of the types of work environments. Thus, the person-environment fit, that is, the convergence between interests and distinct occupational environments (both groups) was not important to strengthen or weaken the relationships between EI and intrinsic job satisfaction. From the standpoint of management practice, we conclude that recruiting more emotionally skilled people or investing in emotional skills' training for newly hired workers may enhance the ability to contribute to a harmonious work environment, after noticing their work as more satisfactory.

Therefore, and considering our results, it is promising to investigate the effect of emotional skills on the quality of group interactions and the formation of intra-organizational social networks. Abilities to deal with co-workers involving emotional aspects can not only affect intrinsic satisfaction, but also improve interaction within and outside work groups.

Another relevant conclusion is that congruence did not act as a moderating variable in the relationship between EI and intrinsic job satisfaction. Probably, other variables would be more important to affect this relationship, but were not captured in this study. This also signals that the emotional climate and the support offered to workers at the workplace can facilitate their adaptation to these work environments, even if they are not congruent with their occupational interests. Studies on material and social supports, the quality of group relationships, and the psychological climate are promising relevant elements to explore in the future.

LIMITATIONS AND FUTURE RESEARCH

We emphasize the need for additional studies to verify whether the observed results would be the same in new samples. The numerical imbalance between People and Things groups is a limitation to overcome. The RIASEC model can be used to classify professionals in groups, based on their profile of interests and activities performed at the workplace. Therefore, it offers potential theoretical and practical contributions to professionals interested in the topic of person-environment fit. However, we recommend, based on the present study, that person-environment fit (congruence) be investigated together with other constructs, in order to expand RIASEC model's applicability and support decisions in the field of people management.

The behavior of the EI measure used in this study disclosed some fragilities, which calls for improvements to better operationalize the concept regarding its dimensions (emotional awareness, emotional understanding, emotional use, emotional regulation). To circumvent such weaknesses and allow us to test the model in this study, we created the EI variable only with items related to the use of adaptive or functional strategies to deal with emotions. Important dimensions of EI may have been underrepresented in the two models, of prediction and moderation.

The cross-sectional design relied on Spearman's correlation calculation and was insufficient to infer the predictive power of EI and the role of congruence in explaining intrinsic satisfaction. Future studies may find

alternatives to overcome these limitations and advance in the understanding of the relationships between these constructs.

REFERENCES

- Ai-Hamami, N. M., Hashim, M. T., Songip, A. R., & Al-Saeed, A. H. (2015). The effects of emotional intelligence on job satisfaction. *Information and Knowledge Management*, 5(6), 363–368. <https://doi.org/10.1016/j.sbspro.2012.09.1012>
- Brasseur, S., Grégoire, J., Bourdu, R., & Mikolajczak, M. (2013). The profile of emotional competence (PEC): Development and validation of a self-reported measure that fits dimensions of emotional competence theory. *PLoS ONE*, 8(1), 1–8. <https://doi.org/10.1371/journal.pone.0062635>
- Brito, F. de S., & Magalhães, M. de O. (2017). Avaliação de ambientes ocupacionais: Construção do Inventário de Classificação Ocupacional. *Revista Brasileira de Orientação Profissional*, 18(1), 93–104. <http://dx.doi.org/10.26707/1984-7270/2017v18n1p93>
- Brito, F. S., & Magalhães, M. de O. (2018). Moderadores da relação entre congruência pessoa-ambiente e satisfação intrínseca no trabalho. *Psico-USF*, 24(2), 219–231. <https://doi.org/10.1590/1413-82712019240201>
- Dancey, C., & Reidy, J. (2006). *Estatística sem matemática para psicologia: Usando SPSS para Windows*. Artmed.
- Daryanto, E. (2014). Individual characteristics, job characteristics, and career development: A study on vocational school teacher's satisfaction in Indonesia. *American Journal of Educational Research*, 2(8), 698–702. <https://doi.org/10.12691/education-2-8-20>
- Davidescu, A. A., Apostu, S., Paul, A., & Casuneanu, I. (2020). Work flexibility, job satisfaction, and job performance among Romanian employees. Implications for sustainable human resource management. *Sustainability*, 12(15), 1–53. <http://doi.org/10.3390/su12156086>
- Dust, S., Rode, J., Arthaud-Day, M., Howes, S., Ramaswami, A. (2018). Managing the self-esteem, employment gaps, and employment quality process: The role of facilitation- and understanding-based emotional intelligence. *Journal of Organizational Behavior*, 39(5), 680–693. <https://doi.org/10.1002/job.2265>
- Dziuba, S. T., Ingaldi, M., & Zhuravskaya, M. (2020). Employees' job satisfaction and their work performance as elements influencing work safety. *Safety Management: Human and System*, 2(1), 18–25. <https://doi.org/10.2478/czoto-2020-0003>



- Espírito-Santo, H., & Daniel, F. (2015). Calcular e apresentar tamanhos do efeito em trabalhos científicos (1): As limitações do $p < 0,05$ na análise de diferenças de médias de dois grupos. *Revista Portuguesa de Investigação Comportamental e Social*, 1(1), 3–16. <http://repositorio.ismt.pt/jspui/handle/123456789/429>
- Farh, C. I., Seo, M., & Tesluk, P. E. (2012). Emotional intelligence, teamwork effectiveness, and job performance: The moderating role of job context. *Journal of Applied Psychology*, 97(4), 890–900. <https://doi.org/10.1037/a0027377>
- Ghoreishi, F. S., Zahirrondine, A. R., Assarian, F., Moosavi, S. G. A., & Mehrizi, M. Z. Z. (2014). Evaluation of emotional intelligence and job satisfaction in employees of Kashan hospitals. *Nursing and Midwifery Studies*, 3(1), 1–6. <https://doi.org/10.17795/nmsjournal11977>
- Gondim, S. M. G., Techio, E. M., Simões, A. C. A., Silva, L. B., & Sánchez-Molano, S. A. (s.d). Perfil de Competências Emocionais (PEC): Evidências de validação da estrutura da medida em amostras brasileiras e sua relação com o bem-estar. <https://docero.com.br/doc/neseves>
- Goroshit, M., & Hen, M. (2012). Emotional intelligence: A stable change? *International Journal of Teaching and Learning in Higher Education*, 24(1), 31–42. <https://eric.ed.gov/?id=EJ977180>
- Hassan, A. I., & Romle, A. R. (2015). Intrinsic factors of job satisfaction among lecturers of Bauchi State Univeristy Gadau, Nigeria. *International Journal of Administration and Governance*, 1(4), 87–91. <http://repo.uum.edu.my/14309>
- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work*. John Wiley.
- Hoff, K. A., Song, Q. C., Wee, C. J. M., Phan, W. M. J., & Rounds, J. (2020). Interest fit and job satisfaction: A systematic review and meta-analysis. *Journal of Vocational Behavior*, 123(1), 1–55. <https://doi.org/10.1016/j.jvb.2020.103503>
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Psychological Assessment Resources.
- Huang, Q., Zhang, H., Chen, J., & He, M. (2017). Quantile regression models and their applications: A review. *Journal of Biometrics & Biostatistics*, 8(3), 1–6. <http://doi.org/10.4172/2155-6180.1000354>
- Ishitani, T. T. (2010). Exploring the effects of congruence and Holland's personality codes on job satisfaction: An application of hierarchical linear modeling techniques. *Journal of Vocational Behavior*, 76(1), 16–24. <http://dx.doi.org/10.1016/j.jvb.2009.06.014>



- Judd, C. M., McClelland, G. H., & Ryan, C. S. (2009). *Data analysis: A model comparison approach* (2nd ed.). Routledge.
- Kassim, S. I., Bambale, A. J., & Jakada, B. A. (2016). Emotional intelligence and job satisfaction among lecturers of universities in Kano state: Empirical evidence. *Journal of Education and Practice*, 7(10), 53–59. <https://eric.ed.gov/?id=EJ1099468> <https://www.semanticscholar.org/paper/Emotional-Intelligence-and-Job-Satisfaction-among-Kassim-Bambale/d6628c2f800baa0353a313983ce3e80388c7f050>
- Khan, A., Masrek, M. N., & Nadzar, F. M. (2016). Emotional intelligence and job satisfaction of academic librarians: An assessment of the relationship. *Journal of Librarianship and Information Science*, 49(2), 199–210. <https://doi.org/10.1177/0961000616650733>
- Kumar, V. (2018). Impact of emotional intelligence and gender on job satisfaction: An empirical study amongst the employees of HDFC banks in Chandigarh tricity, India. *National Journal of Innovation and Economic Development*, 4(2), 24–31. <https://doi.org/10.18775/ijied.1849-7551-7020.2015.42.2002>
- Locke, E. A., & Schattke, K. (2019). Intrinsic and extrinsic motivation: Time for expansion and clarification. *Motivation Science*, 5(4), 277–290. <https://doi.org/10.1037/mot0000116>
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Implications for educator*. Basic Books.
- Miao, C., Humphrey, R. H., & Qian, S. (2016). Leader emotional intelligence and subordinate job satisfaction: A meta-analysis of main, mediator, and moderator effects. *Personality and Individual Differences*, 102(1), 13–24. <https://doi.org/10.1016/j.paid.2016.06.056>
- Nye, D., & Rounds, J. (2019). *Vocational interests in the workplace: Rethinking behavior at work*. Routledge. <https://doi.org/10.4324/9781315678924>.
- Pervaiz, S., Ali, A., & Asif, M. (2019). Emotional intelligence, emotional labor strategies and satisfaction of secondary teachers in Pakistan. *International Journal of Educational Management*, 33(4), 721–733. <https://doi.org/10.1108/IJEM-12-2017-0350>
- Pino, F. A. (2014). A questão da não normalidade: Uma revisão. *Rev. de Economia Agrícola*, 61(2), 17–33. <http://www.iea.sp.gov.br/ftpiea/publicar/rea2014-2/rea2-22014.pdf>



- Prediger, D. J., & Swaney, K. B. (2004). Work task dimensions underlying the world of work: Research results for diverse occupational databases. *Journal of Career Assessment*, 12(4), 440–459. <https://doi.org/10.1177/1069072704267737>
- Pritchard, R. D., & Peters, L. H. (1974). Job duties and job interests as predictors of intrinsic and extrinsic satisfaction. *Organizational Behavior and Human Performance*, 12(3), 315–330. [https://doi.org/10.1016/0030-5073\(74\)90054-3](https://doi.org/10.1016/0030-5073(74)90054-3)
- Randolph, D. S. (2005). Predicting the effect of extrinsic and intrinsic job satisfaction factors on recruitment and retention of rehabilitation professionals. *Journal of Healthcare Management*, 50(1), 49–60. <http://doi.org/10.1097/00115514-200501000-00011>
- Rueda, F. J., Santos, A. A., & Lima, R. C. (2012). Relação entre satisfação no trabalho e clima organizacional: Um estudo com trabalhadores. *Boletim de Psicologia*, 62(137), 129–140. http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S0006-59432012000200003&lng=pt&tlng=pt
- Suleman, Q., Syed, M. A., Mahmood, Z., & Hussain, I. (2020). Correlating emotional intelligence with job satisfaction: Evidence from a cross-sectional study among Secondary School Heads in Khyber Pakhtunkhwa, Pakistan. *Frontiers in Psychology*, 11(240), 1–14. <https://doi.org/10.3389/fpsyg.2020.00240>
- Tagoe, T., & Quarshie, E. M. (2017). The relationship between emotional intelligence and job satisfaction among nurses in Accra. *NursingOpen*, 4(2), 84–89. <https://doi.org/10.1002/nop2.70>
- Teixeira, M. A. P., Castro, G. D., & Cavalheiro, C. V. (2008). Escalas de Interesses Vocacionais (EIV): Construção, validade fatorial e consistência interna. *Psicologia em Estudo*, 13(1), 179–186. <https://doi.org/10.1590/S1413-73722008000100021>
- Tudor, M. (2017). Emotional intelligence and job satisfaction: How do they work together? *International Management Conference, Faculty of Management, Academy of Economic Studies*, 11(1), 756–765. <https://ideas.repec.org/a/rom/mancon/v11y2017i1p756-765.html>
- Woods, S. A., Edmonds, G. W., Hampson, S. E., & Lievens, F. (2020). How our work influences who we are: Testing a theory of vocational and personality development over fifty years. *Journal of Research in Personality*, 85(1), 1–40. <https://doi.org/10.1016/j.jrp.2020.103930>

EDITORIAL BOARD

Editor-in-chief
Gilberto Perez

Associated editor
Vera Lúcia Cançado Lima

Technical support
Vitória Batista Santos Silva

EDITORIAL PRODUCTION

Publishing coordination
Jéssica Dametta

Language editor
Paula Di Sessa Vavlis

Layout designer
Emap

Graphic designer
Libro