

# DOES CALL CENTERS OPERATORS' INTROJECTED REGULATION IMPACT THEIR SKILL VARIETY AND TASK SIGNIFICANCE? EVIDENCE FROM MOROCCO

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**Abstract.** *Purpose* – The aim of this paper was to empirically examine the impact of work motivation represented by introjected regulation on job satisfaction, which was illustrated by skill variety and task significance. This study was conducted relatedly to Moroccan call center operators, in the post-COVID-19 era in which motivational and satisfactory issues are still strongly faced by managers, mainly due to the operated hybrid working systems.

*Research methodology* – The chosen methodology was a quantitative one, based on the administration of a questionnaire to 158 call center operators, working in various Moroccan districts. The data analysis consisted of an exploratory factor analysis (EFA), followed by a full structural equation modelling (SEM).

*Findings* – The findings display that introjected regulation positively and significantly impacts skill variety, but not task significance, in a way that permitted to partly confirm the conceptual model built upon the central hypothesis, claiming that work motivation positively affects job satisfaction. Indeed, avoiding to experience feelings of shame and guilt in addition to seeking for conformity and approbation in a work context turned out to lead individuals to execute the assigned tasks by implementing their personal configuration of skills and talents in this regard.

*Research limitations* – This study admits methodological limitations as for instance the restricted sample size, and the adopted quantitative approach rather than a qualitative one, or even a mixed approach that could have opened more research tracks to be explored regarding the investigated relationship.

*Practical implications* – This study comes out with appealing practical implications willing to help managers to understand better the causality link between work motivation and job satisfaction. The main implication of this study is the illustration of how introjected regulation can predict and foster skill variety in a professional context, as the correspondent research hypothesis was empirically verified.

*Originality/Value* – Morocco is admittedly one of the poorest targeted populations for International Business and Management studies, hopefully this study can contribute in enriching the pre-existent studies in this regard. Also, work motivation and job satisfaction are usually seen as qualitative variables (using interviews, case studies...), hence a quantitative methodology is not commonly adopted in this perspective.

**Keywords:** causality link, job satisfaction, post-COVID-19, quantitative methodology, work motivation.

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## 1. Introduction

Managing the human capital of an organization represents a huge part of the managing process as a whole in order to guarantee organizational performance (Neumann et al., 2021). No matter how much far technological progress might get, the human aspect of the organization

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shall always remain vital and irreplaceable. This led to understand the importance given to human resources in all its shades and aspects, as the personnel efficiency inevitably induces organizational efficiency and success (Stefurak et al., 2020). This paper focused on two main aspects of HRM (Human Resource Management); namely work motivation and job satisfaction. Frequently confused because of their random using within the organizational literature, these two concepts seem to substantially differ once one looks closer to their meaning and aims (Addison & Brundrett, 2008). The two variables have indeed been proven to be correlated, but not synonyms (Ali & Anwar, 2021). In this perspective, work motivation is related to a goal-directed behavior, while job satisfaction is concerned with the achievement of the latter (Kamdron, 2015). In other words, job satisfaction is the final state resulting of an individual being motivated (Belhaj Soulami & Loulidi, 2023).

At a general level, work motivation is defined as a process governing choices made by persons or lower organisms among alternative forms of voluntary activity (Vroom, 1964). This widespread definition underlines the importance of the choices initially given to the individual, leading him to choose one of the alternatives for one motive or another. Motivation can also be seen as the process that energizes, directs, arouses and sustains the behavior and performance of the employees (Ghimire et al., 2023; Dahal, 2022). Hence, it was assumed at this height that motivation is not solely about adopting a certain behavior, but also about maintaining and preserving it. Whereas the most famous and general definition of job satisfaction is Locke's that notes that it is a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience (Locke, 1976). Although this definition reduces job satisfaction to its emotional component, it is still used to a large extent.

Considerable attention has been paid to the two concepts in the area of organizational and psychological research. Nevertheless, this surely did not prevent from admitting that no matter how far knowledge may get in this particular field, new research gaps shall definitely keep arising, leading to new research tracks due to the dynamic complexity of human psychology (Valléry et al., 2016). The most prominent example for this was surely the unforeseen 2020 COVID-19 pandemic, that unarguably caused a highly life-changing disorder for everyone as a consequence for the lockdown imposed back then (Schade et al., 2021). One of the main affected aspects was thus work; people had to unexpectedly start working from home for an unknown period of time. And now, even after the end of the pandemic, some organizations are back to normal working conditions whereas most firms kept opting for a hybrid working system (face-to-face and distance work). These occurrences undoubtedly displayed the importance of maintaining motivated and satisfied employees to ensure their efficiency and performance – especially those working remotely and consequently the organization's success through the achievement of the pre-set organizational goals (Riyanto et al., 2021). Empirical studies showed that the two constructs are usually considered as multidimensional, with their dimensions differing according to the adopted theoretical position (Giraldo-O'Meara et al., 2014; Morris & Maisto, 2007; Robbins, 2003; Roelen et al., 2008).

The main purpose of this paper was to investigate the impact of work motivation on job satisfaction in the post-COVID-19 regarding Moroccan call centers operators. To the author's best knowledge, no studies have been conducted regarding these variables in the chosen context and for the targeted population. The empirical proceeding consisted of the test of

the formulated hypotheses involving the retained dimensions for each variable, as tangible outcomes of the literature review analysis.

The remainder of this paper is organized into sections; section I will be devoted to the respective theoretical backgrounds for both variables, section II will be discussing the embraced research method, besides the sample and data collect techniques, the chosen measures and the conceptual research model, plus the formulated hypotheses. Section III will be presenting the results obtained from the data analysis, and ultimately section IV will be dedicated to the conclusion drawn from the earlier discussion of results, in addition to presenting the practical implications and future research perspectives for this study.

As for the research implications, the conclusions essentially concerned call centers managers, as relevant to the hierarchical level that's directly in charge of managing call operators on a daily basis. The deductions explained how the latter can help trigger the operators' introjected regulation, which in turn fosters their skill variety and task significance. These implications were covered under the conventional significant and positive impact of work motivation on job satisfaction.

## **2. Literature review**

The purpose of this section was to provide an overall insight of the conceptual framework of both work motivation and job satisfaction. It practically aimed to expose their most common and basic definitions, their main related theoretical positions, in addition to the involved dimensions in the operationalization process. The tangible outputs of the operated literature review were the conceptual research model and its inherent research hypotheses, to be all next tested in the empirical phase of this study.

### **2.1. Work motivation**

Given the importance of work motivation in the field of organizational and psychological research, hundreds of definitions and theories directly relate to this variable. According to Baron (1991), it is one of the most pivotal concerns of modern organizational research. The urge of considering, in a competitive perspective, a one good theory and definition within the numerous ones concerning motivation never turned out to be exclusively advantageous. It is better to assume that a certain behavior can be better understood under the lens of a particular theory rather than another due to the different involved angles and positions (Becker, 1987). It is thereby idealistic for one theory to pretend to be aware of the totality of the aspects of a motivated behavior. Robbins (2003) notes that motivation is the willingness to exert high levels of efforts to reach organizational goals. Whereas Pinder (1998) claims that it is a set of internal and external forces that initiate work-related behavior, and determine its form, direction, intensity and duration. The direction of the behavior stands for the goal to reach, the intensity for how much efforts the person puts on for that, and the duration for how long this person shall keep trying. Summing up what has been previously cited above, it is hence unfeasible to give a consensual and unique definition to the construct of motivation because of the array of theories proposed in this regard, described in the mid-seventies as the jungle of motivational theories (Toulouse & Poupart, 1976). The word jungle clearly

referred to the disorder stated in that field in that era; and since then, dozens of other motivational theories were elaborated. The bright side would definitely be the resulting various visions, making possible to approach work motivation in different ways that involve different dimensions and factors. However, the disadvantage would be the conflictual position of the rival schools about it.

Considered as a baseline for motivational theories, Maslow indicated in the hierarchy of needs theory that motivation is intimately linked to meeting certain needs in a hierarchical order starting by physiological needs, safety needs, love and belonging needs, esteem needs, cognitive needs, aesthetic needs and finally self-actualization ones (Maslow, 1943). The logic here was that a person intuitively starts with meeting basic needs level by level following an ascending line. Nevertheless, this theory was massively reproached to be lacking consistent empirical evidence; as satisfying a certain level need doesn't necessarily activate the willing of satisfying the upcoming one (Korman et al., 1977).

In another vein, McClelland distinguished in his human motivation theory between three complementary needs for achievement-oriented people, with no pre-established hierarchy: the need for Power which denotes the need to control others, influence their behavior and be responsible for them; the need for Affiliation which refers to the desire to establish and maintain satisfying relationships with other people; and the need for Achievement viewed as a behavior which is greatly directed towards competition so as to achieve one's most important work-related aims (McClelland, 1987).

Another well-known motivation theory is that of Adams that was firstly introduced in the mid-sixties. Its basic tenet was that motivation results from the individual feeling fairly-treated regarding others in the same position, by comparing his own inputs at work (in terms of qualifications, experience, invested efforts...), to the perceived outcomes (e.g., pay and fringe benefits, status and working conditions) (Adams, 1965). Perceived equity encourages the person to keep being motivated putting efforts at work, while perceived inequity clearly leads to demotivation (Adams, 1965).

In the light of Vroom's VIE theory, people were considered to measure the worth of the achievement of a certain aim by the probability of obtaining their expected outcomes out of it. The cognitive states used in this regard were the tripartite combination of Valence, Instrumentality and Expectancy, making possible for the individual to choose the best and most profitable objective (Vroom, 1964). The motivational process hence occurs as follows:

$$\text{Motivation} = V \times I \times E, \quad (1)$$

where: Valence is the willing of achieving the objective, Instrumentality refers to the (intrinsic or extrinsic) outcome related to the performance, and finally Expectancy to the fact of practically being able to attain the goal.

In congruence with the two-factor theory of Herzberg, motivation consisted of two forms in this perspective; intrinsic motivation and extrinsic one. Intrinsic motivation stands for self-inherent factors that make the individual behave in a certain way including self-challenge, taking responsibilities, work autonomy... Conversely, extrinsic motivation represents what the person is promised to get behaving in a certain way such as incentives, praise, promotion (Herzberg et al., 1957)... Consequently, the effect of the intrinsic form of motivation was said

to be lasting longer than the extrinsic one, because it simply stems from the personal willing of making efforts to achieve a goal, in opposite to an external fading source.

Furthermore, the emergence of Deci and Ryan's (2000) macro-theory of self-determination notably improved and deepened the quality of motivational research. Also comprising intrinsic and extrinsic motivation, this theory presented extensive motivational forms making possible to understand better (in quality) and more (in quantity) the notion through a multidimensional lens. In addition, it underlined the importance of meeting three human basic needs when interacting with the social environment; people need to experience themselves as self-determined active agents (autonomy) that are able to produce desired outcomes (competence) and connect meaningfully with others (relatedness) (Schade et al., 2021). Self-determination theory can therefore be mapped as a continuum that finds two ends; Amotivation which is the most nonself-determined form of motivation, and intrinsic motivation that represents its most self-determined one. In an ascending degree of self-determination, amotivation simply stands for no motivation, hence low or no regulation. In this case, the person can't perceive the reason for doing a particular task, to finally quit it. Extrinsic motivation occurs when a person behaves in a certain way, thinking it is beneficial in terms of the obtained retributions. The continuum also consists of four other components with different self-determination degrees; external regulation where the individual behaves to get a reward or avoid a punishment (external motives). Introjected regulation directs the behavior of the individual to maintain self-esteem, protect the personal ego and to avoid feeling ashamed or guilty. Identified regulation leads the individual to act because he wants to and thinks it is important whether it provides a feeling of pleasure or not. Integrated regulation triggers a behavior because it is fully congruent with the individual's values and needs. Ending with intrinsic motivation which is considered as the most internal form of motivation, the latter comes from the pure enjoyment one gets from performing a certain task. It is to be noted that controlled motivation gathers extrinsic motivation and introjected one, while autonomous motivation assembles identified motivation, integrated and intrinsic one (Forest & Mageau, 2008). According to Deci and Ryan (2000), the more headed an individual is from amotivation to intrinsic motivation, the more the consequences appear to be emotionally and cognitively positive and vice-versa. In addition, this theory was claimed to have a very good external and internal validity (Vallerand et al., 2008), regarding many various cultural contexts (Gagné et al., 2015). Many other motivational theories are to be brought up in this context, such as the ERG theory of Alderfer, the Hackman and Oldham's (1975) job characteristics model that is in practice interchangeably used by authors for both work motivation and job satisfaction...

At this level, it clearly seemed that the one common thought about this non-exhaustive list of motivational theories, was that the process of motivating individuals in a work context shouldn't be standardized. In fact, what does motivate one person doesn't systematically motivate another one, specifically due to individual differences and traits. Here comes the determining role of managers whose challenge surely remains to make sure to understand every motivational profile they are coping with, so as to provide in a personalized manner what can efficiently and durably motivate each one of them. Motivated individuals are firmly more likely to direct their behaviors towards the expected organizational goals (Shahi et al., 2022).

## 2.2. Job satisfaction

Job satisfaction was seemingly given as much interest as the previous research variable in both psychological and work sociology fields. As a matter of fact, job satisfaction was involved in most research studies in the field of industrial and organizational psychology (Judge & Church, 2000) and of HRM (Human Resource Management) (Kaplan et al., 2009), leading managers to constantly seek for having a highly satisfied staff. Hence, what can genuinely satisfy an individual? No one could obviously come up with a unique answer to this question, as job satisfaction directly concerns personal behaviors and individual attitudes (Judge & Klinger, 2008). As previously mentioned, the most notorious definition of job satisfaction is the one of Locke's, that considered it as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience (Locke, 1976). Another eminent definition of the concept noted that it represents a feeling or an emotional response to a job facet (Smith et al., 1969). These definitions exclusively referred to the emotional aspect of job satisfaction; whereas measuring instruments used in this regard consist more of its cognitive aspect, giving what could be called a methodological dead end (Judge & Klinger, 2008). In another vein, Roussel (1996) declared that job satisfaction depends on the level of congruence between what the individual is after and what he gets from work's different aspects. At this stage, it clearly appeared that the construct comprises many work dimensions and facets; differing with how one deals with its evident complexity. Consequently, no generally accepted definition nor dimensions for this notion could be retained. Nevertheless, some authors did consider job satisfaction as a global concept that didn't need to be composed into dimensions in order to be measured in the first place. It surely couldn't be claimed that one of the two exposed visions turned out to be true and the other false in absolute terms, simply on account of the fact that each one of them presented good evidence to defend the adopted point of view (Giraldo-O'Meara et al., 2014). Global satisfaction and the satisfaction of certain dimensions should consequently be meticulously distinguished. The main concern was that; first an individual expressing a global satisfaction doesn't automatically suppose the satisfaction of all work's aspects. Second, a same work circumstance may satisfy an individual but not another if the expectations of the first were lower than the second (Valléry et al., 2016). In conclusion, job satisfaction is seemingly mainly affected by the individual perceptions and personality characteristics, with no standard treatment possibly leading to the same outcomes.

Whenever talking about job satisfaction, the first theory to be brought up is surely that of Herzberg's, which is widely known for its dual vision of factors leading to satisfaction or dissatisfaction in a work context. The motivator-hygiene theory differentiated between two sets of factors; intrinsic ones leading to satisfaction if fulfilled but not necessarily to dissatisfaction if not, such as the work itself, recognition, responsibility, growth opportunities... and extrinsic factors (commonly said hygiene factors) that appeared to be quite mandatory for individuals without actually systematically satisfying them, such as working conditions, salary, job security, supervision... This theory has been heavily criticized over years by many researchers, claiming that both factors could lead to satisfaction or dissatisfaction depending on the level of the individual expectations regarding the work environment (Gruneberg, 1976).

Hackman and Oldham in their job characteristics model, both supposed that job satisfaction could be split into five factors, namely skill variety referring to whether the task to do calls on many skills or not, task identity standing for the possibility to accomplish a whole identified task or not, task significance which is related to the degree of the impact it has on others, autonomy that implies the freedom given to the individual in accomplishing the assigned tasks, and finally feedback stemming from supervisors (Hackman & Oldham, 1975). This theory gave birth to the Job Diagnostic Survey (JDS), which is popularly used in the measurement of the same notion.

While creating the Job Descriptive Index, Smith et al. (1969) developed the Cornell model that confronted the individual's work contributions to its promised retributions. As a consequence, drawn conclusions consisted of the factuality that dissatisfaction occurs if the two parameters were not at least equivalent and vice-versa. The model has been reproached the exclusive importance given to the economic side of work, leaving behind many other aspects also willing to help understand job satisfaction better.

Moreover, the work adjustment theory founded by Dawis et al. (1968), saw job satisfaction as an outcome of the correspondence between one's personality and the work environment. Two dimensions were then involved at this extent; the work environment and its demands causing the meeting of the individual's needs, and the individual himself with his own skills and needs. The more congruent these dimensions are, the more satisfied the individual shall be about his job.

Locke, in his value-percept theory considered job satisfaction as resulting from the perceived gap between what one initially desired to get from work in terms of the quantity of values, and what he actually obtained, getting into account the determining weighted importance given to the latter. The author indeed argued that the individuals' values would determine what satisfies him... Only the unfulfilled job values that were important to the individual would be dissatisfying (Locke, 1976). The model was said to have ignored many other exogenous factors to the individual as they may as well be decisive in how much one can be satisfied about his overall job experience. All in all, whether the non-exhaustive list of mentioned job satisfaction-related theories consisted of its cognitive aspect, affective one or even another, many others discussed that the level of knowledge currently reached about this variable still allows research innovation to take place, since a serious problem of a generally-accepted definition of it still goes on (Iglesias et al., 2010; Tavani et al., 2019).

### **2.3. Work motivation and job satisfaction**

Both variables, namely work motivation and job satisfaction were intimately linked in the organizational literature, to the extent to be even considered as similar and interchangeable for many authors. This association was firstly and explicitly obvious in Herzberg's motivator-hygiene theory, and indirectly in Vroom's VIE theory. As for the relationship's supposed direction, motivation has always been deemed as the independent variable leading to job satisfaction as a direct consequence. The expectance theory of Porter-Lawler, which was an expansion of Vroom's theory, clearly detailed the process; the causal relationship could be pictured as a cycle that sees personal success as a starting point depending of work motivation, organizational structure, skills... Job satisfaction occurs when that personal success is

achieved, especially when intrinsic and extrinsic outcomes are involved, giving the individual a perpetual willing of succeeding, through being motivated then satisfied once again and so on (Porter et al., 1968). This is exactly how past satisfactions influence futures motivations that also modify and condition future satisfaction (Iglesias Rutishauser, 2011). What actually happened to be complex about the investigated link, is that both constructs are surely not directly observable nor static over time, but only concluded from personal behaviors and reactions in a work context. Indeed, the same individual may be motivated and satisfied for an extended period of time but not for another one, and also about one particular facet of work, but not necessarily all of them.

Incidentally, the analysis of both variables' literature allowed to retain both Self-determination theory and job characteristics model as conceptual frameworks for this study. The first theory led to choosing one dimension for work motivation, namely *introjected regulation*, whereas the second model permitted to represent job satisfaction by two dimensions consisting of *skill variety plus task significance*. Hence, the test of the correspondent central research hypothesis which was:  $H_1$ : *Work motivation positively and significantly impacts job satisfaction*, went through the test of the following sub-hypotheses:

$H_{1,1}$ : *Introjected Regulation will have a positive and significant effect on Skill Variety.*

$H_{1,2}$ : *Introjected Regulation will have a positive and significant effect on Task Significance.*

The resulting conceptual model that resumes all the previously exposed elements involved in the operationalization of this study appears in the Figure 1 as follows:

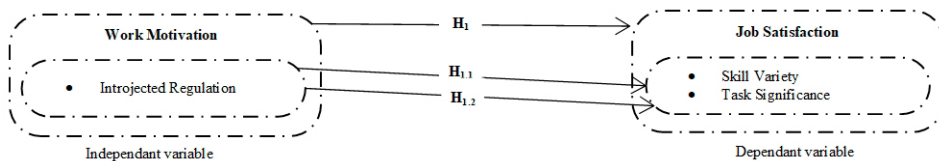


Figure 1. Conceptual model (source: authors' conception)

### 3. Research methodology

#### 3.1. A quantitative approach

This section discusses the adopted research methodology for this paper, which notably determines the quality of the drawn results and conclusions. Starting with the research design and as previously detailed in the Introduction section, the latter consisted of the IMRaD method, which is commonly used in studies relevant to social sciences (Wu, 2011), such as the occurring study. In addition, and since this paper presented exclusively confirmatory purposes consisting of the test of the investigated relationship, a quantitative analysis was consequently adopted, implying a hypothetico-deductive method in this regard. As for the sampling process, it was assured by the method of convenience sampling, since the authors had no access to the sampling frame of the targeted population, making it impossible to opt for a probability sampling procedure. Moreover, convenience sampling is said to be more adequate for researchers targeting unreachable populations such as the one consisting of call



center operators for this study (Thiétart et al., 2014), especially when emphasizing that the formal diffusion of the research survey within the concerned call centers was not an option at all, due to the sensibility of the studied variables. Indeed, call center managers and supervisors openly refused to cooperate in this direction, probably for fear that the results may come up with observable stated of demotivation and dissatisfaction amongst the collaborators.

The research survey was conducted to the target audience through the means of E-mail and social media, and also face-to-face option. The choice of calling a survey in this regard is justified by its related low-cost, and its quick, practical and efficient aspects (Razak et al., 2020). The targeted population happened to be an appealing aim to investigate the examined relationship for three reasons. On the one hand, the realm of call centers, as directly relevant to the industry of Information Technology (IT) is surely a very promising domain in Morocco, as a developing country, with an evident paucity of conducted studies concerning this target in the field of Management in the same context. On the other hand, naming call operators as a unique target amongst the broad hierarchy of call centers is explained by their vital position within the organization chart, as directly in charge of generating revenues, therefore assuring value creation strictly said. Third, in the post COVID-19 era in which this study was situated, call centers still opt for a hybrid form of work (joining physical to distance work according to the projects' demands) which is greatly inspired from the pandemic's lockdown. This surely let to admit that within these actual circumstances, the challenge of ensuring high levels of motivation and satisfaction definitely goes on.

## 3.2. Sample

Within this study, around 190 respondents were approached from different districts of Morocco through the previously mentioned various means, and that are working for different Information Technology (IT) and customer relationship (CR) multinational firms. The outcomes ended up with 158 valid and complete responses, a sample size that respected the conventional recommendations of retaining a minimum of 100 respondents for the structural equation modelling (SEM) process, as claimed by (Vautier et al., 2005) and also (Bonnevill-Roussy et al., 2021). Accordingly, the final response rate of 83.16% was globally satisfying in contrast to the resulting non-response rate (16.84%).

## 3.3. Measures and research hypotheses

### 3.3.1. Independent variable

The corresponding items for work motivation derived from the well-known multidimensional work motivation scale (MWMS), as shown in the Appendix. Firstly, and as its name claims, this measure instrument studies the construct of work motivation through an extended multidimensional lens comparatively to the other questionnaires; hence involving various aspects (from personological, material, social... standpoints). Second, the validity of this particular survey is satisfying to a large extent when compared to the other self-determination theory-based surveys, since it presents good correlations with the theory's initial research hypotheses. Indeed, the MWMS was validated in 7 different languages and relatedly to 9 different cultural contexts (Gagné et al., 2015).

### 3.3.2. Dependent variable

As for job satisfaction, the measuring scales, also revealed in the Appendix, were sourced from Hackman and Oldham's Job Diagnostic Survey (JDS), that is also widely used for its good internal consistency for each dimension seen apart (.59 as a minimum and .78 as a maximum) (Giraldo-O'Meara et al., 2014). The founders of this measurement instrument opted for a heterogeneous sample while developing it, which consequently allows it to be used for different professional hierarchy levels and various work domains (Hackman & Oldham, 1975). Moreover, the JDS was the most used satisfaction survey in social sciences in 2013, with an average of 4037 citations in Google Scholar only, not mentioning other research databases (Giraldo-O'Meara et al., 2014).

### 3.4. Statistical tool

Hereafter, the statistical methods used to test the former hypotheses are to be presented. The first part of the section aimed to present a descriptive analysis of the demographic variables (gender, age, qualification level...), and also to make sure of the normal distribution of the sample. The second handled the EFA (Exploratory Factor Analysis) that consisted of assessing the internal consistency and reliability of the measuring scales for both variables using IBM SPSS STATISTICS 26. The third and last part of the section exposed the results of the structural equation modeling (SEM) besides the model fit quality, using IBM AMOS 26 GRAPHICS.

## 4. Results

As previously mentioned, this study related to 158 call centers operators working for notorious international call centers subsidiaries based in various districts of Morocco. As promised to respondents, their personal identities besides their corporates' names were interdentally kept anonymous for the sake of the author's credibility. The descriptive analysis of the sample revealed the following results:

### 4.1. Descriptives

*Respondents' age.* Collected data has been priorly coded as follows: 1 = less than 25 years, 2 = 25–30 years, 3 = 30–35 years, 4 = 35–40 years and finally 5 = 40–45 years. The mean of the respondents' age was 2.20 which approximately matched with 24.2 years, the mode was 2 (25–30yo), and the standard deviation wase of 1.075. The frequency results showed that most of the respondents were between 25 and 30 years old (33.5%), followed by those who are less than 25 (30.4%), those between 30 and 35 (25.9%), the ones between 35 and 40 (5.7%), and finally operators between 40 and 45 (4.4%). At this level, it could be assumed that the respondents were mainly youthful (less than 30 years old), which could be explained by the fact that this position is essentially occupied by students as a part-time job first, and then by young graduates as a first job while looking for a more relevant job to their qualifications and expectations.

*Respondents' qualification level.* The statistics here confirmed what has been previously said about graduates temporarily opting for this particular position. Indeed, the majority of

respondents were highly qualified: 24.1% and 48.7% of them respectively possessed a Master or a Bachelor degree, 25.3% of them had a 2 years college degree, and only 1.3% were high school graduates or had no diploma at all.

*Seniority years.* As for seniority years, data has been coded here as well as follows: 1 = less than 1 year, 2 = 1–3 years, 3 = 3–5 years, 4 = more than 5 years. The results showed a mean of 2.68 years, a mode of 2 (between 1 and 3 years) and a standard deviation of 1.053. It appears that 32.3% of the respondents turned out to be keeping the same function for 1 to 3 years, 29.7% of them were faithful to their situation for more than 5 years, and 23.4% presented from 3 to 5 seniority years. This can whether mean that the collaborators are mainly satisfied with their position not trying to trade it for something else, or that they simply found no more appealing substitutes, especially for the case of the freshly graduates ones. The remaining 14.6% have been occupying the same position for less than 1 year. This fact can be explained for this stratum by being recently hired or not finding another interesting alternative once more.

## 4.2. Normal distribution

The normal distribution of the sample remains a vital criterion to be checked before conducting an exploratory factor analysis (EFA). For this purpose, Skewness and Kurtosis measures have to reveal results respectively inferior to 2 and 3 in terms of absolute values (El Akremi, 2005). For demographic variables, the outputs are displayed in the Table 1.

**Table 1.** Demographic variables' normal distribution (source: SPSS output)

	Age	Qualification level	Seniority Years
Skewness	0.739	-0.047	-0.097
Kurtosis	0.109	-0.529	-1.244

As for the independent variable (introjected regulation) and the dependent ones (skill variety and task significance), the results for each item were as shown in the below Table 2.

**Table 2.** Dependent and independent variables' normal distribution (source: SPSS output)

Items	Skewness	Kurtosis
Introjected Regulation 1	-0.467	-0.767
Introjected Regulation 2	-0.414	-0.860
Introjected Regulation 3	-0.015	-1.154
Introjected Regulation 4	-0.120	-1.093
Skill Variety 1	-0.217	-0.850
Skill Variety 2	-0.112	-0.939
Task Significance 1	0.429	-0.866
Task Significance 2	-0.552	-0.974
Task Significance 3	0.052	-0.668

Consequently, the distribution of the sample could be considered as normal since all Skewness and Kurtosis values happened to be within the acceptable range of values.

### 4.3. The exploratory factor analysis

The aim was here to purify the used measuring scales by ensuring their internal consistency and one-dimensionality, through Cronbach's Alpha, KMO (Kaiser-Meyer-Olkin) measure, Bartlett's Test of Sphericity, besides assessing their reliability and validity in terms of construct reliability (CR) and average variance extracted (AVE) values. Finally, a PCA (principal component analysis) was also performed as a finishing point to the purification process. The results were as appears in the following Table 3.

**Table 3.** Exploratory Factor Analysis (EFA) results (source: SPSS output)

	Initial Number of Items	$\alpha$	$\alpha$ if item deleted	KMO	Bartlett's Test	$\chi^2$	CR	AVE
Introj.Reg.	4	0.947	–	0.814	0.000*	653.563	0.962	0.864
Skill Var.	2	0.864	–	0.500	0.000*	133.988	0.936	0.880
Task Sig.	3	0.384	0.784 if item 2 deleted	0.506	0.000*	85.232	0.661	0.554

Note: \* Significant for  $p < .05$ .

Cronbach's alpha ( $\alpha$ ) is a measure that detects coherence within the different items of a measuring scale. The results showed a very satisfying score for both introjected regulation and skill variety ( $>0.8$ ): respectively 0.947 and 0.864. As for task significance, the initial Cronbach's Alpha was considered as poor (0.384) but considerably goes up to 0.784 if we delete the second item of the scale, which was a satisfying result as well. The KMO measure tests whether the collected data is factorizable or not; a good and acceptable score should be exceeding the lower limit of 0.5. This condition was fulfilled for all dimensions as shown above. Next, to be significant, Bartlett's test of sphericity should be tending towards zero, which was the case for all the dimensions, in addition to the Chi-Square measure ( $\chi^2$ ) that was also important everywhere. As for the CR and AVE values, the measuring scales scored largely greater values than the acceptable minimum of respectively 0.7 and 0.5, except for the dimension of *task significance* which displayed pretty low scores for both indicators. The previous statement happened to be congruent with what has been formerly exposed about this exact dimension, and which is to be next confirmed.

### 4.4. The principal component analysis

The principal component analysis (PCA) ended up with the following outcomes as displayed in the Table 4.

The PCA displayed that all measuring scales were one-dimensional with only one component revealed for the three dimensions. The representation quality stands for the proportion of the explained variance by each item of each scale. Practically, all the items presenting an extraction less than 0.4 are to be deleted for better significant results. This allowed to keep all the items for the three dimensions, but the second one relating to task significance due to its negative proportion of explained variance ( $-0.190$ ) and extraction 0.036 which was way less than 0.4. These results perfectly matched with the ones coming from the previous step of

**Table 4.** The principal components analysis (PCA) results (source: SPSS output)

Items	Components	Representation Quality		% of variance	Retained items
	1	Initial	Extraction		
INT.REG 1	0.911	1.000	0.829	86.396	1,2,3,4
INT.REG 2	0.944	1.000	0.892	7.745	
INT.REG 3	0.925	1.000	0.856	3.303	
INT.REG 4	0.937	1.000	0.879	2.829	
SKILL.V 1	0.938	1.000	0.880	87.998	1,2
SKILL.V 2	0.938	1.000	0.880	12.002	
TASK.SIG 1	0.901	1.000	0.811	55.402	1,3
TASK.SIG 2	-0.190	1.000	0.036	32.848	
TASK.SIG 3	0.903	1.000	0.815	11.750	

the purification. The final retained items were though: *items 1,2,3,4 for introjected regulation, items 1,2 for skill variety and solely items 1,3 for task significance.*

#### 4.5. The full structural model testing: A globally good fit

This analysis level aimed to test the conceptual model as a whole through the method of structural equation modeling (SEM), besides to test the research hypotheses one by one, also allowing to make a global judgment about the quality of the model fit. Hence and based on the model's calculated estimates, the global results of the structural model's tests appeared as exposed in the Table 5 below.

**Table 5.** The structural equation modeling (SEM) results (source: AMOS output)

Hypothesized Relationships	Standardized Estimates (t-value)	p-value	Final Decision
H <sub>1,1</sub> : Introjected Regulation → Skill Variety	0.532 (6.135)	***	Supported
H <sub>1,2</sub> : Introjected Regulation → Task Sig.	0.479 (5.767)	***	Not Supported
Global Model Indices: $\chi^2 = 80.444$ , $df = 19$ , $p$ level= ***			
Model Fit Indices: $CMIN/df = 4.234$ ; $GFI = 0.886$ ; $AGFI = 0.785$ ; $TLI = 0.905$ ; $CFI = 0.936$ ; $RMSEA = 0.144$ ; $SRMR = 0.0579$			

Note: \*\*\* Significant for  $p < 0.05$ .

The squared multiple correlation was 0.28 for skill variety and 0.23 for task significance, meaning that 28% and 23% of respectively both dimensions' variance was explained by the exogenous variable of introjected regulation. The research model turned out to be globally significant with a p-value of 0.000 and a good  $\chi^2$  score of 80.444.

According to Hair et al. (2019), a model can be considered as a good fit with the data if the value of  $CMIN/df$  is  $< 5$ , the  $GFI$ ,  $AGFI$ ,  $TLI$  and  $CFI$  values are  $> 0.9$ . In addition to that, the  $RMSEA$  value should be below 0.08 and the  $SRMR$  value below 0.05. Hence, the research model was globally of a good fit with the collected data, since all the indicators highly approached the conventional values, taking into account the exceptions of the  $AGFI$  and

RMSEA values which didn't exactly match the good scores but with no huge deviations to be of a significant impact on the drawn results. Consequently, the conceptual model relying upon the central research hypothesis  $H_1$ : *Work Motivation positively and significantly impacts Job Satisfaction* can be considered as a globally of a good fit with the empirical data to a satisfying extent.

As for the sub-hypothesis,  $H_{1.1}$ : *Introjected Regulation positively and significantly impacts Skill Variety* was supported with an acceptable standardized estimate of 0.532, a significant t-value  $> 1.96$  (6.135) and a significant p-value  $< 0.05$  (0.000). As for the second sub-hypothesis  $H_{1.2}$ : *Introjected Regulation positively and significantly impacts Task Significance*, and for precision purposes, was not to supported even with its 0.479 standardized estimate which was close enough to 0.5, its significant t-value of 5.767 and its significant p-value (0.000). The conclusion here was that work motivation positively predicts call operators' skill variety but didn't positively impact their task significance. In a nutshell, the central hypothesis research  $H_1$ : *Work Motivation positively and significantly impacts Job Satisfaction* has been partly supported through one sub-hypothesis which is  $H_{1.1}$ .

## 5. Discussion

As firstly pointed, the significance of the impact of work motivation on job satisfaction was surely not a recent discovery in the field of HRM. What was appealing is the different possible significant interactions between the variables' dimensions, regarding different targets and populations. Indeed, the empirical findings of this study that claimed the positive and significant impact of work motivation on job satisfaction happened to be congruent with many previous authors' findings such as: (Ali & Anwar, 2021; Nabahani & Riyanto, 2020; Ratnasari et al., 2019; Nurdiansyah et al., 2020; Riyanto et al., 2021; Syamsir, 2020). Moreover, while operating a bidirectional analysis regarding the same relationship, Belhaj Soulami and Loulidi (2023) even spotted an appealing positive impact of job satisfaction on work motivation. This undoubtedly underlines the strength and genuineness of the link between both constructs.

As a matter of fact, the previously exposed empirical results confirmed that introjected regulation had a positive and significant impact on skill variety for call centers operator. The equation is as simple as this; the introjected regulation, raising from a somewhat external source, motivates the individual to behave in a particular way to avoid experiencing shame, guilt and hence to protect the personal ego, enhancing as a result the importance and urge of getting the assigned task(s) fully and correctly done. The logical consequence would obviously be the mobilization of all the individual's possessed skills and expertise while performing in the workplace, accordingly inducing a state of approbation and consent from the supervisors. What seemed to be appealing at this point, was that a regular approbation emerging from a likewise regular good performance is very likely to trigger more inner and durable levels of motivation as for instance identification, integration, or ideally intrinsic motivation. This assumption may be a positive starting point to maintain the same level of performance at least, if not doing better the next time. Even if the impact of introjected regulation on task significance was – narrowly ( $R^2 = .48$ ) – not empirically supported, the relationship can be as a matter of course practically assumed. Work motivation is said to be contagious; once

one gets to state that his colleague is doing well and getting constant positive consent, this can't but help set off a positive motivating will to do well in order to get the same praising results. If what and how one does at work positively and significantly impacts others, the task significance is then fulfilled and guaranteed at this point.

## 6. Conclusions

This study initially aimed to assess the impact of work motivation on job satisfaction from the respective perspective of Deci and Ryan's theory of self-determination, and Hackman and Oldham's (1975) job characteristics model. The empirical findings indeed supported the positive and significant link between both variables, as famously supposed in the organizational literature. Hence, this research made a sizeable theoretical contribution in terms of the validation of the investigated theoretical relationship in the Moroccan context in which this study was conducted; and that is considered as generally poorly targeted in International Business and HRM research as a whole (Al Tayyar, 2014). This led to question whether this relationship would still be significant if other dimensions of both models were involved, or other populations were targeted, or simply through the lens of the various other theories previously mentioned. Furthermore, the non-exhaustivity of the theoretical background in terms of the sum of existing theories dealing with the two variables is also to be openly acknowledged.

As introjected regulation comes from an external source, the practical implication here for managers was to constantly inculcate and support the idea that work is important for collaborators themselves before being so for the company, especially in terms of personal accomplishment and development, not merely in the perspective of avoiding feeling guilty and ashamed. It is also mandatory for them to help gradually stimulate higher levels of motivational aspects, within a non-standardized treatment for each collaborator, depending on each one's position relatedly to the ascending scale of motivational states and self-determination degrees. To contextualize, this analysis was well suited and easily applicable to the call centers business, as rivalry between collaborators is commonly dominant in this particular field, always seeking to be the top-rated seller of the day. The fact that a poor performance is not generally well endorsed within the team, as each one's results are publicly reported, the introjected regulation of collaborators is then favorably and actively vitalized. On the other hand, since feedback is a routine process – generally on a daily basis or even more frequently –, and as one's good results positively impact and encourage others to do well, task significance gets appreciably important. Also, when a call operator does well at the end of the day and makes the most profitable sales performance, he definitely shares the good vibes with his colleagues and motivates them to do as much good if not even better. On a more general level, maintaining motivated and satisfied collaborators appears to be mandatory, simply because the sum of individual good performances leads to a well global organizational performance which is directly linked to the company's survival and global efficiency.

This study naturally presents some limitations to be explicitly admitted, and that are at the same time future research perspectives willing to enrich and plug its gaps. First, the operated choice of a quantitative analysis rather than a qualitative one or a mixed approach between the two of them limited the final conclusions and implications, probably leaving behind some

other important perspectives and tracks to be explored. Second, a more important sample size or a different targeted sample could have probably allowed more space to analyze the relationship between the investigated variables, and maybe even support the first sub-hypothesis ( $H_{1.2}$ : *Introjected Regulation positively and significantly impacts Task Significance*). Third, settling only for a certain number of dimensions to be involved in the conducted study led to missing out on other possible significant relationships, that could help identify more and better the nature of the relationship between work motivation and job satisfaction. And lastly, another limitation to acknowledge was the respondents' declarative bias, that could markedly distort the truth about how things are genuinely done and hence impact the validity of the obtained statistical results and their implications.

To summarize, this study initially aspired to investigate the effect of introjected regulation on skill variety and task significance relatedly to call center operators through two main variables; respectively work motivation and job satisfaction. It was clearly stated that the nature of these variables can lead to a probable confusion between them, as they are intimately correlated; it is indeed unlikely to state in practice a motivated but unsatisfied collaborator, or vice-versa. It is thus primordial at this point to clearly distinguish between the cause and the result; making of work motivation a strong predictor of job satisfaction in work environment. The urgent need to personalize the process of motivating each collaborator depending on his personal needs and aspirations is to be pointed to once more, in order to make him favorably act regarding the pre-set organizational goals. What should also be kept in mind is that the achievement of objectives at a personal level in a work context surely encourages collaborators to get more involved in the achievement of the organizational aims at a more global level.

## Author contributions

MBS was responsible for the conceptualization of the study, the research methodology and design, the data collection and analysis, in addition to the writing of the original draft. SL was responsible of the supervision, the validation and the review & editing of the manuscript.

## Disclosure statement

The authors declare that no competing financial, professional, or personal interests that relate to the research described in this paper were reported.

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## APPENDIX

**Table A1.** Work motivation and job satisfaction measures

<i>The Multidimensional Work Motivation Scale (MWMS)</i> (Gagné et al., 2015) <i>Measured on a seven-point Likert scale (1 = 'Not at all' to 7 = 'Completely')</i>	
Introjected Regulation	I put/would put efforts in my job... INTRO.REG 1: Because I have to prove to myself that I can. INTRO.REG 2: Because it makes me feel proud of myself. INTRO.REG 3: Because otherwise I will feel ashamed of myself. INTRO.REG 4: Because otherwise I will feel bad about myself.
<i>The Job Diagnostic Survey (JDS)</i> (Hackman & Oldham, 1975) <i>Measured on a five-point Likert scale (1 = 'Very no descriptive' to 5 = 'Very descriptive')</i>	
Skill Variety	SKILL.VAR 1: I have a chance to do a number of different tasks, using a wide variety of different skills and talents. SKILL.VAR 2: I get to use a number of complex skills on this job.
Task Significance	TASK.SIG 1: What I do affects the well-being of other people in very important ways. TASK.SIG 2: What I do is of little consequence to anyone else. TASK.SIG 3: Many people are affected by the job I do.