

“Moroccan call centers operators’ work motivation and job satisfaction: An empirical and bidirectional analysis”

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MOROCCAN CALL CENTERS OPERATORS' WORK MOTIVATION AND JOB SATISFACTION: AN EMPIRICAL AND BIDIRECTIONAL ANALYSIS

Abstract

As a common part-time and full-time position in the Moroccan context, call center operators are directly associated with value creation. They hold great potential and future due to their relevance to the information technology industry, especially in Morocco, as a developing country. Thus, managers unsurprisingly strive to maintain highly motivated and satisfied call center operators. This paper aims to examine the ever-trending link between work motivation and job satisfaction in both possible directions of the cause-effect pattern, each variable being alternately the dependent one at a time. A survey was conducted using a quantitative approach and convenience sampling among 137 Moroccan call center operators from local districts. The research model analysis was based on an exploratory factor analysis and a full structural equation modeling. The empirical findings displayed positive and significant links within the reversed logic of the relationship (M2: satisfaction → motivation) for a good number of sub-hypotheses ($R^2 = -0.78$, $R^2 = 0.85$, $R^2 = 0.81$, $R^2 = 0.66$ for $p < 0.05$), whereas the model M1 consisting of the traditional path motivation → satisfaction could not be empirically supported ($R^2 < 0.5$, $p < 0.05$). Work motivation is recognized to have a significant effect on job satisfaction in the human resource literature; however, the outcomes spotted a novel significant impact within the reversed logic of the relationship. Managers should consequently be aware of the evident complementarity between work motivation and job satisfaction since each appears to enhance the other.

Keywords

work motivation, job satisfaction, quantitative approach, Moroccan call operators, reversed logic, traditional path, complementarity

JEL Classification

D23, M12

INTRODUCTION

The recognized volatility of the business environment obliges constant reactivity for organizations to get through imposed constraints. One of the all-time challenges facing firms is carrying out suitable human resource management (HRM) policies to ensure the continuous engagement and performance of collaborators. Accordingly, managers strive to achieve organizational success through the success of the human capital and potential of the firm (Stefurak et al., 2020). Practically, this mission consists of obtaining and maintaining highly talented, qualified, motivated, and committed collaborators, as it is widely assumed that an organization's achievements are synonymously those of its employees (Riyanto et al., 2021).

In a post-COVID-19 era, life in general and working life in particular are considered back on track. The 2020 pandemic notably affected all the shades of life after the lockdown (Schade et al., 2021). Working conditions are hence still strongly stirred, as a hybrid working system



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initially inspired by the pandemic is now being adopted involving both physical and teleworking options. Within these circumstances, it is mandatory to accentuate the interest given to the motivation and satisfaction of call operators as a vital component of the call center's hierarchical structure, especially those working remotely, to guarantee their efficiency and performance. The attractiveness of the Moroccan context is also to be reminded of at this point as a generally poorly targeted population for business and management studies.

1. LITERATURE REVIEW

The supposed significant effect of work motivation on job satisfaction is no new finding in organizational behavior. Hence, many definitions have been granted for both constructs as they can be considered from various angles and joined to several theoretical positions, to the extent of considering what was described as a 'jungle' of theories and definitions. Work motivation is famously seen as "a process governing choices made by persons or lower organisms among alternative forms of voluntary activity" (Vroom, 1964). Locke (1976) reputedly indicates that job satisfaction is "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience."

Through the lens of Maslow's needs theory, McClelland's theory, or Vroom's VIE theory, work motivation has been widely examined to develop a skeleton key that shall efficiently predict and motivate collaborators on all shots. It appears unpropitious to discuss that one theory turns out to be the best to the detriment of its competitors, as each one presents interesting benefits but also acknowledged drawbacks. A particular motivated behavior can be best explained by one particular theory rather than another competing one. The theoretical stance of this study is Deci and Ryan's self-determination theory, chosen to pin down the renowned work motivation construct.

Whenever job satisfaction is adverted, many related theories are systematically brought up, such as the two-factor theory of Herzberg and Locke's value-percept theory. From a conceptual point of view, it is highly recommended to distinguish between global job satisfaction and the satisfaction of its inherent dimensions, as the latter does not necessarily lead to the former (Roelen et al., 2008). It is indeed possible for an individual to be globally satisfied about his work but still make a fuss about one aspect or another and vice-versa.

Whether referring to the cognitive aspect of the variable, its conative or affective one, it should not be expected to obtain the same results regarding satisfaction levels using different measurement scales and different time points (Iglesias et al., 2010). This paper names Hackman and Oldham's job characteristics model to meticulously dissect this concept, as it brings together many miscellaneous dimensions.

1.1. Work motivation through Deci and Ryan's self-determination theory

Work motivation is unarguably one of the classical variables that were comprehensively studied in the field of organizational research. Baron (1991) declares it as "one of the most pivotal concerns of modern organizational research." This fact is demonstrated by the dozens of theories in this regard. Motivational research is reproached to be often limited by the myopia of choosing to give unshared interest to one aspect of a motivated behavior or another but never the whole pack of what actually makes it.

In this study, the focus is made on Deci and Ryan's macro-theory of self-determination, which is commonly granted for being a revolutionary milestone in the understanding of this broad complex notion. What is exclusive about this one theory is that it tempts to view work motivation through powerfully meaningful dimensions that were clearly neglected elsewhere or simply taken apart. As pointed out by Grabowski et al. (2021), it should be acknowledged that this variable conceals way more significant details in terms of its quality and intensity than already assumed.

What drags attention to this theory is that it explicitly oversteps the classical and mainstream dichotomy of intrinsic and extrinsic motivation. As its name implies, it involves various forms of

motivation based upon the correspondent degree of self-determination. Work motivation is, therefore, better assimilated quantitatively (in terms of dimensions number) and also qualitatively (in terms of intensity). According to Deci and Ryan (1985), this theory goes from the baseline that a directly observed motivated behavior originates from the individual differences in the perceived causality orientations (intern, extern, and impersonal sources), the social functioning, and the personal well-being. Amotivation, extrinsic, and intrinsic motivation are the three main cluster kinds involved, ranging from the most nonself-determined form of motivation to its most self-determined one. In addition, it is mandatory to gratify the three following basic universal needs to arouse the motivation process: autonomy, competence, and social affiliation.

Starting with the left flank of the continuum, amotivation emanates from an impersonal source of motivation and an obvious complete absence of self-regulation. An individual is said to be amotivated when he simply cannot determine the connection between his behavior and its probable consequences. According to Seligman (1975), amotivation generally occurs when an individual is not valuing an activity, does not see himself able to perform it, or does not judge it as directly or indirectly generating the desired outcome(s). In other words, the individual basically cannot see for what purpose he is doing his job, therefore negatively bringing low levels of spent energy and a visible counter-productive disengagement at work.

Moving next to the notorious extrinsic motivation that emerges from an external source, four subtype regulatory styles are implicated in this assumption: external, introjected, identified, and integrated regulation (Deci & Ryan, 2000). The most non-self-determined and noninternalized form of it is the external motivation that considers a behavior as nothing more than a means to achieve an external – relatedly to work itself – objective, such as financial perks or social status. Whenever externally motivated, the individual performs at work solely to obtain the desired external incentives and avoid the eventual punishments. As predicted, the outcomes of the exclusive instrumental nature of external regulation cannot always be positive, as achieving one's external goals (e.g., sal-

ary or status) at some point would not keep motivating him anymore, which can eventually bring an easily observable state of amotivation.

The next three sublevels of regulation (introjection, identification, integration) differ according to the extent of the internal origin of the motivated behavior. Originating from a somewhat external source, introjected regulation is mainly related to the personal ego, inducing the adoption of a certain attitude to maintain or strengthen self-esteem and pride, and also avoid feeling ashamed and guilty. The reasons behind introjection are initially held to be external to the individual himself but then internalized as a sort of inner pressure motivating him toward a given position (Camus et al., 2017). External and introjected regulations are ordinarily labeled as controlled motivation. Shifting toward a somewhat internal source of motivation, identified regulation makes a starting point for an autonomous and self-determined behavior. The individual acts in this optic because he considers it necessary to do so. Lastly, integrated regulation refers to internally assimilated behaviors, as fully congruent with one's values and needs. This explains why integration remains the most efficient form of the three, as it originates from a pure internal source.

It is highly and naturally admitted that the best and most durable reason to act in a particular manner is the pure enjoyment one gets out of it; this is the exact baseline of intrinsic motivation that is the most internal, autonomous, and self-determined form of regulation. Defined as the complete opposite of extrinsic motivation, intrinsic regulation is granted to the desire for self-growth and self-development, causing spontaneous satisfaction and joy through doing one's work activities. Vansteenkiste et al. (2007) bind extrinsic regulation together with negative work outcomes comparatively to intrinsic motivation, and that can be manifested by less satisfaction, less implication, and less vitality in performing one's tasks.

Furthermore, identified, integrated, and intrinsic regulations are commonly gathered under the label of autonomous motivation. Referring to Vallerand (1997), the more headed one is from controlled motivation to the autonomous one, the more the consequences appear to be positive in

terms of affective, attitudinal, and behavioral angles. The importance of fulfilling the three psychological and simultaneous needs is to be once more accentuated at this level, as they explain a great part of how to develop and maintain human motivation. Despite their natural characteristic, these needs are significantly impacted by the situational contexts and the individual's life goals, therefore generating intrinsic or extrinsic motivation.

To sum up about self-determination theory, it can be assumed as a rich and compelling perspective permitting an insightful understanding of what work motivation veritably represents. In contrast to the other rival existent theories, it includes more observable dimensions (Forest & Mageau, 2008). Consequently, the chosen dimensions for work motivation in the empirical phase are amotivation, extrinsic social regulation, extrinsic material regulation, introjected regulation, identified regulation, and intrinsic motivation.

1.2. Job satisfaction through Hackman and Oldham's job characteristics model

Job satisfaction notably fosters global well-being for individuals, as they consume most of their days working (Adams, 2019). Greatly considered in the history of work's positive psychology, this notion occupies a crucial position in defining one's identity, as it has been proven that the divergence of personalities holds up to 45% of its variance. Personality shades are naturally challenging to monitor and to be influenced by managers, but they can still intervene at many levels to trigger this positive attitude about one's job.

Looking closer at the motives of studying job satisfaction, it appears that what concerns higher hierarchical level positions is dissatisfaction, with its negative associated consequences such as turnover, absenteeism, counter-productive behaviors, and severe physical and mental diseases (Nicolas, 2021). Then, its unarguable advantages are to be brought up, first for collaborators but also for organizations on a more global level, specifically in terms of individual and organizational performances.

Usually referred to as the sum of three distinct but interlinked facets, namely cognition, affection,

and conation, job satisfaction involves – or should normally involve – three sub-measures to be better and correctly evaluated. What is problematic about assessing this variable is that it is generally reduced to its affective component, as reminds, for instance, the previously mentioned Locke's definition. This widespread reduction visibly leaves behind an essential share of unexplained variance regarding what can make an individual satisfied or unsatisfied about his job experiences. Castel (2016) explains that cognition stands for the evaluative judgment resulting from the confrontation of what an individual pursues in a work environment and what he practically gets, then comes the positive or negative affective response as a consequence, to finally stimulate an acting intention eager to intensify the perceived satisfaction – or dissatisfaction – as a conative constituent of the process. The latter logical sequence demonstrates that the three dimensions are tightly associated, making it absurd to solely retain one or even two of them in the measurement procedure.

Returning to Hackman and Oldham's (1975, 1976) job characteristics model, high levels of job satisfaction are to be reached by providing the individual with a good range of intrinsic motives. This pure intrinsic character is well justified by the long-lasting and efficient effect of intrinsic motives in unleashing job satisfaction compared to extrinsic ones. The classic example of extrinsic motives is surely salary, which is a decisive factor in predicting work satisfaction, but to a frankly limited extent. In line with this premise, Katzell et al. (1976) declared that pay satisfaction merely explains 5% of the variance of overall job satisfaction. In contrast, intrinsic factors were found to be more correlated to the same construct. Also, a significant .5 correlation score was found between work's intrinsic aspects and job satisfaction. The effect of extrinsic motives is not being denied within this intellection; what is being questioned is rather to which extent it shall keep collaborators satisfied if the intrinsic nature of their job is neglected or unfulfilled.

The job characteristics model splits job satisfaction into five observable dimensions: skill variety, task identity, task significance, autonomy, and feedback (Hackman & Oldham, 1975). Skill variety questions whether the assigned task demands

various skills to get correctly done. Task identity refers to whether the individual is allowed to perform a complete identified task from the beginning to the very end of it. Task significance stands for the impact of the latter on others' well-being or performance. Autonomy illustrates the individual's left freedom margin that gives him space to choose how and when his job should be done. Whereas feedback symbolizes the regularity of the information received from supervisors and the work itself about one's performance. As predicted, the five core job aspects strictly respect the intrinsic nature of the task(s), excluding every other extrinsic shade.

The logic gets complete when one introduces the tripartite combination of growth-need-strength (GNS) as a moderator variable between job satisfaction and work's intrinsic characteristics, also understood as the readiness of individuals to respond to "enriched" jobs. Empirical evidence shows that the relationship described above is emphasized with higher scores of GNS, recording an average correlation of .68 in contrast to only .38 for low GNS levels (Judge & Klinger, 2008). Accordingly, the more the job allows the collaborator to grant his GNS needs, the more his personal goals align with the organizational objectives, and the more satisfied he will be about achieving them.

In the same strain, this theory confirms that the final states of a satisfied collaborator regarding his 'enriched job' involve general satisfaction, internal work motivation, and specific satisfaction aspects (job security, pay, peers and coworkers, or supervision). Hackman and Oldham (1976) claim that guaranteeing work's intrinsic aspects has been proven to develop and maintain job satisfaction through positive reactions. However, it is still suggested that a supplement combination with extrinsic satisfaction would help the process to flourish. In this regard, job satisfaction will be represented by only task identity, as a unique explored dimension for this variable in the hypothesizing part.

In a nutshell, the complexity of work motivation and job satisfaction actually stems from their multidimensional character, which involves an array of directly observable dimensions, making it too perfectionist to seek the genuine fulfill-

ment of the totality of the involved dimensions (Giraldo-O'Meara et al., 2014). This fact justifies the ever-lasting attractiveness of studying the correspondent cause-effect pattern linking both variables, making work motivation a strong predictor of job satisfaction in a work environment. This association is conventionally admitted by many authors as for instance: Ali and Anwar (2021), Iglesias Rutishauser (2011), Mullins (2005), Bélanger (1968), and Syamsir (2020).

As a result, the literature allows us to assume that despite the rich and solid theoretical background of this particular domain, various research tracks and gaps undoubtedly arise once one looks closer into the existent theories along with their eventual blemishes, and that may generate different results with for instance different sampling targets or simply different contexts.

To summarize, the purpose of this study is to examine the impact of work motivation on job satisfaction in the Moroccan context as an appealing sampling target, as mentioned earlier, to confront the results with those of the reversed cause-effect pattern. Consequently, and based on the operated literature review, it is now possible to establish the following research hypotheses. In line with the initial research goals, the first conceptual model M_1 to be tested appears as follows:

H1: Work motivation positively affects job satisfaction.

H1a: Amotivation negatively affects task identity.

H1b: Extrinsic social regulation positively affects task identity.

H1c: Extrinsic material regulation positively affects task identity.

H1d: Introjected regulation positively affects task identity.

H1e: Identified regulation positively affects task identity.

H1f: Intrinsic motivation positively affects task identity.

Second, the reversed logic illustrated by the exact dimensions only with an overturning direction builds the second conceptual model, M2, that relies upon the hypotheses:

H2: Job satisfaction positively affects work motivation.

H2a: Task identity negatively affects amotivation.

H2b: Task identity positively affects extrinsic social regulation.

H2c: Task identity positively affects extrinsic material regulation.

H2d: Task identity positively affects introjected regulation.

H2e: Task identity positively affects identified regulation.

H2f: Task identity positively affects intrinsic regulation.

2. METHOD

In a quantitative proceeding and using the convenience sampling method, a survey was conducted to the targeted population in 2023 through various means (face-to-face, by e-mail, and social media). At first, around 172 operators were reached, and that are working for different information technology (IT) and customer relationship (CR) multinational firms based in several Moroccan districts (Fez, Meknes, Kenitra, Agadir, and Tangier). The outcome was of 137 valid, workable, and complete responses (79.65%), with a resultant 20.35% non-response rate.

This study used a questionnaire as a research tool, borrowing its items from validated and approved measuring scales in the HRM literature. Starting with work motivation, the correspondent items were borrowed from the multidimensional work motivation scale (MWMS) (Gagné et al., 2015). Whereas job satisfaction was operationalized in the empirical phase based on Hackman and Oldham's job diagnostic survey (JDS). This choice is justified by both sources' good validity and in-

ternal consistency (Giraldo-O'Meara et al., 2014), globally ensuring good and exploitable results.

Work motivation measures were based on a seven-point Likert scale (1 = 'Not at all' to 7 = 'Completely'), as claimed in the multidimensional work motivation scale (MWMS). As for the job satisfaction measure, the process also involved a five-point Likert scale (1 = 'Not descriptive' to 5 = 'Very descriptive'), in congruence with Hackman and Oldham's job diagnostic survey (JDS) instructions. Appendix A shows the details about the questionnaire.

The valid collected data were coded, then analyzed under IBM SPSS STATISTICS 26 for the Exploratory Factor Analysis (EFA), then under IBM AMOS 26 for the Structural Equation Modeling (SEM) and the hypotheses test.

3. RESULTS

Starting with descriptive statistics, the target is to obtain a general summary of critical statistical indicators such as the mean, mode, frequencies, and their correspondent rates for a sample size of $n = 137$. Table 1 synthesizes the obtained results using IBM SPSS STATISTICS 26.

Table 1 shows 46% of male respondents, in opposite to 54% of female respondents. Moreover, the sample recorded 29.9% of operators younger than 25 years old (1), 33.6% of operators between 25 and 30 years old (2), 26.3% were between 30 and 35 years old (3), 6.6% of them were affiliated to the range between 35 and 40 years old (4), and finally the remainder of 3.6% were between 40 and 45 years old (5). The mean of the respondents' age was 2.20 (24.2yo), the mode was 2, and the standard deviation was 1.058. In addition, from an educational point of view, 1.5% of the sample consisted of operators with no diploma (1), 0.7% are only high school graduates (2), 24.8% of them have a 2 years college degree (3), 46.7% have a bachelor degree (4), leaving behind 26.3% of master degree operators (5). The qualification level's recorded a score of 3 for both the mean and the mode and a score of 0.776 for its standard deviation. Finally, in terms of tenure, 13.1% of the respondents worked for less than a year (1) for their organization, 32.1%

Table 1. Respondents' demographic data

| Gender | | | f | | | % | | |
|-------------|--------------|------|---------------------|----|------|----------|----|------|
| Male | | | 63 | | | 46 | | |
| Female | | | 74 | | | 54 | | |
| Age | | | Qualification level | | | Tenure | | |
| Item | f | % | Item | f | % | Item | f | % |
| 1 ≥ 25yo | 41 | 29.9 | 1 = No diploma | 2 | 1.5 | 1 ≥ 1y | 18 | 13.1 |
| 2 = 25-30yo | 46 | 33.6 | 2 = HS. graduates | 1 | 0.7 | 2 = 1-3y | 44 | 32.1 |
| 3 = 30-35yo | 36 | 26.3 | 3 = 2 years college | 34 | 24.8 | 3 = 3-5y | 33 | 24.1 |
| 4 = 35-40yo | 9 | 6.6 | 4 = Bachelor | 64 | 46.7 | 4 ≤ 5y | 42 | 30.7 |
| 5 = 40-45yo | 5 | 3.6 | 5 = Master | 36 | 26.3 | – | – | – |
| Mean | 2.20 (24.2y) | | 3 | | | 2.72 | | |
| Mode | 2 | | 3 | | | 2 | | |
| Std. Dev. | 1.058 | | 0.776 | | | 1.041 | | |

of them worked between 1 and 3 years (2), 24.1% between 3 and 5 years (3), and the remaining 30.7% were faithful for their position for over 5 years (4). The corresponding mean was 2.72, the mode was 2, and the standard deviation was 1.041.

The demographic data reveal that the sample is essentially youthful (mode 2), highly qualified (with essentially a bachelor's or master's degree), and predominantly presents between 1 to 3 years of seniority in the same position or even above 5 years. It is now purposeful to explain the evidence that the position of a call center operator represents a very appealing targeted part-time job for students in the Moroccan context, for its generally low-level demands in terms of qualifications and its flexible working hours. In addition, it attracts graduates to apply for a first job while more critical and adapted alternatives are being developed and evaluated elsewhere.

3.1. Exploratory factor analysis

Before operating this analytic step, it is mandatory to check whether the normal distribution of the studied sample is being respected. According to El

Akreml (2005), the normality distribution is guaranteed if Skewness and Kurtosis results are respectively below 2 and 3 in absolute values. Therefore, and based on the SPSS output (Appendix B) regarding these indicators for dependent, independent, and demographic variables, the sample is of a normal distribution, allowing next to conduct an exploratory factor analysis (EFA) without objection.

The global intention of the exploratory factor analysis (EFA) is to examine the internal coherence of the used measuring scale for each variable/dimension through a range of statistical indicators and tests that practically are Cronbach's Alpha, KMO (Kaiser-Meyer-Olkin) measure, Bartlett's Test of Sphericity, and finally, a PCA (Principal Component Analysis) (Table 2).

Beginning with Cronbach's Alpha, which assesses to which extent the different items of a single scale measure the exact same construct, highly satisfied scores were registered for all the dimensions with a lower margin of .776, with no apparent need to delete any item for the seven scales. The KMO value informs about the ability to factorize and clus-

Table 2. Exploratory factor analysis (EFA) results

| Dimensions | Initial Number of Items | α | α if item deleted | KMO | Bartlett's Test | χ^2 |
|-------------------------------|-------------------------|----------|--------------------------|------|-----------------|----------|
| Amotivation | 3 | .911 | – | .726 | .000* | 302.051 |
| Extrinsic Social Regulation | 3 | .890 | – | .736 | .000* | 236.946 |
| Extrinsic Material Regulation | 3 | .879 | – | .742 | .000* | 213.932 |
| Introjected Regulation | 4 | .948 | – | .817 | .000* | 574.508 |
| Identified Regulation | 3 | .932 | – | .707 | .000* | 374.487 |
| Intrinsic Motivation | 3 | .963 | – | .715 | .000* | 513.059 |
| Task Identity | 2 | .818 | – | .500 | .000* | 88.668 |

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

Table 3. Principal components analysis (PCA) results

| Items | Components | Representation Quality | | % of variance | Retained Items |
|---------------------------------|------------|------------------------|------------|---------------|----------------|
| | 1 | Initial | Extraction | | |
| Amotivation 1 | .935 | 1.000 | .874 | 85.143 | |
| Amotivation 2 | .947 | 1.000 | .897 | 10.494 | 1,2,3 |
| Amotivation 3 | .885 | 1.000 | .783 | 4.363 | |
| Extrinsic Social Regulation 1 | .903 | 1.000 | .815 | 82.039 | |
| Extrinsic Social Regulation 2 | .888 | 1.000 | .788 | 10.836 | 1,2,3 |
| Extrinsic Social Regulation 3 | .927 | 1.000 | .859 | 7.124 | |
| Extrinsic Material Regulation 1 | .899 | 1.000 | .808 | 80.584 | |
| Extrinsic Material Regulation 2 | .908 | 1.000 | .824 | 10.677 | 1,2,3 |
| Extrinsic Material Regulation 3 | .886 | 1.000 | .786 | 8.739 | |
| Introjected Regulation 1 | .906 | 1.000 | .821 | 86.608 | |
| Introjected Regulation 2 | .946 | 1.000 | .894 | 7.706 | |
| Introjected Regulation 3 | .922 | 1.000 | .850 | 3.123 | 1,2,3,4 |
| Introjected Regulation 4 | .948 | 1.000 | .900 | 2.554 | |
| Identified Regulation 1 | .969 | 1.000 | .939 | 88.555 | |
| Identified Regulation 2 | .934 | 1.000 | .873 | 8.385 | 1,2,3 |
| Identified Regulation 3 | .919 | 1.000 | .845 | 3.060 | |
| Intrinsic Motivation 1 | .953 | 1.000 | .908 | 93.139 | |
| Intrinsic Motivation 2 | .983 | 1.000 | .967 | 5.187 | 1,2,3 |
| Intrinsic Motivation 3 | .959 | 1.000 | .920 | 1.674 | |
| Task Identity 1 | .921 | 1.000 | .847 | 84.740 | |
| Task Identity 2 | .921 | 1.000 | .847 | 15.260 | 1,2 |

ter the collected data under one or more factor(s). The minimum acceptable value of .5 was largely exceeded for all the dimensions, along with an everywhere significant Bartlett’s test of Sphericity and good high Chi-Square measures (χ^2). Table 3 shows the results of the principal component analysis. The reliability and validity of the constructs in the measurement model are shown in Table 4.

Table 4. Reliability and validity of the constructs

| Dimensions | CR | AVE |
|-------------------------------|------|------|
| Amotivation | .945 | .851 |
| Extrinsic Social Regulation | .932 | .821 |
| Extrinsic Material Regulation | .926 | .806 |
| Introjected Regulation | .963 | .866 |
| Identified Regulation | .959 | .885 |
| Intrinsic Motivation | .976 | .931 |
| Task Identity | .918 | .848 |

Firstly, this step proved the measuring scales to be unidimensional, with only one retained component for each dimension. The outcomes of the PCA also greatly coordinate with those of the purification process anteriorly presented. Indeed, all the items are to be kept as they disclose strictly greater communities than the eliminatory margin of .40, and explain significant shares of the dimension’s variance they reflect.

Table 4 sets that the constructs’ reliability (CR) and average variance explained (AVE) sufficiently exceed the minimum acceptable values of respectively .7 and .5, as reported by Hair et al. (2019), which matches with the previous decision of not deleting any of the initial items for both measuring scales.

3.2. Full structural model testing:

The traditional cause-effect pattern versus the reversed one

Covered by the IBM AMOS 26 tool, this part makes a judgment about the global quality of the adjustment of the built conceptual model, making the testing of the hypotheses one by one possible. In this perspective, two models are assessed to openly oppose their results. The first model, M1, deals with the traditional cause-effect pattern supposing a significant and positive impact of work motivation on job satisfaction (H1) (Table 5). In contrast, the second one, M2, reverses the logic and analyzes the upside-down direction of the same relationship, with motivation being the dependent variable and satisfaction the independent one (H2) (Table 6).

According to Razak et al. (2020), the reference values to be revoked in assessing the good or bad fit of a model with its correspondent data are CMIN/df <5,

Table 5. Structural equation modeling (SEM) results for M_1

| Hypothesis | Structural paths | R ² | p-Value | Final Decision |
|--|---|----------------|---------|----------------|
| H1a | Amotivation → Task Identity | -.36 | .054 | Rejected |
| H1b | Extrinsic Social Regulation → Task Identity | .18 | .236 | Rejected |
| H1c | Extrinsic Material Regulation → Task Identity | .04 | .842 | Rejected |
| H1d | Introjected Regulation → Task Identity | -.13 | .428 | Rejected |
| H1e | Identified Regulation → Task Identity | .12 | .458 | Rejected |
| H1f | Intrinsic Motivation → Task Identity | -.12 | .426 | Rejected |
| <i>Global Model Indices:</i> $\chi^2 = 307.819$, $df = 183$, p level = *** | | | | |
| Model Fit Indices: CMIN/df = 1.682; GFI = .784; AGFI = .728; TLI = .582; CFI = .636; RMSEA = .071; SRMR = .311 | | | | |

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

Table 6. Structural equation modeling (SEM) results for M_2

| Hypothesis | Structural paths | R ² | p-Value | Final Decision |
|---|---|----------------|---------|----------------|
| H2a | Task Identity → Amotivation | -.78 | *** | Accepted |
| H2b | Task Identity → Extrinsic Social Regulation | -.34 | *** | Rejected |
| H2c | Task Identity → Extrinsic Material Regulation | -.50 | *** | Rejected |
| H2d | Task Identity → Introjected Regulation | .85 | *** | Accepted |
| H2e | Task Identity → Identified Regulation | .81 | *** | Accepted |
| H2f | Task Identity → Intrinsic Motivation | .66 | *** | Accepted |
| <i>Global Model Indices:</i> $\chi^2 = 269.689$, $df = 183$, p level = *** | | | | |
| Model Fit Indices: CMIN/df = 1.621; GFI = .792; AGFI = .738; TLI = .619; CFI = .668; RMSEA = .068; SRMR = .1205 | | | | |

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

GFI, AGFI, TLI, and CFI that should be tending towards .9, and finally RMSEA and SRMR that should be below .08 and .05, respectively.

Hence, the statistical significance of the analyzed structural paths of both models in terms of their recorded standard estimates and p-values (Tables 5 and 6) leads to the following results for the conceptual model M_1 .

At a global level, the first model is significant (referring to the significant p-value), with a high χ^2 . The CMIN/df and RMSEA values are correctly equivalent to a good data fit, whereas the other indicators (GFI, AGFI, TLI, CFI, and SRMR) deviate to a different extent from the acceptable scores. More specifically, none of the six hypothesized relationships (H1a, H1b, H1c, H1d, H1e, and H1f) was empirically supported in this context, as all the Standardized Estimates were below the acceptable margin of .5, and the associated p-values happened to be superior to .5.

The second conceptual model, M_2 , generated the following outcomes concerning the same indicators. Four out of six hypothesized paths were empirically confirmed with positive and significant Standard Estimates $>.5$ for H2d, H2e, and H2f, and a nega-

tive significant Estimate for H2a (along with significant p-values). Regarding H2c, the relationship was significant, but in the opposite supposed direction with a negative $R^2 = -.50$. The model fit indices (namely CMIN/df, GFI, AGFI, TLI, CFI, RMSEA, and SRMR) were also increased, approaching more the agreed range of values, which allows assuming that M_2 may be considered as of a good fit with the collected data to a certain extent.

4. DISCUSSION

Model M_1 was fully rejected as H1 (work motivation affects job satisfaction) could not be supported through its sub-hypotheses for the studied population. Globally, what first draws attention is that the reversed logic of the second model sensibly improved the structural equation modeling outputs, especially when it came to corroborating the formulated sub-hypotheses. The study concludes that H2 (job satisfaction positively affects work motivation) was partly supported, which confirms the attractiveness of the model M_2 .

As formerly intended, it is not a new finding that work motivation significantly and positively affects job satisfaction in the HRM and organi-

zational psychology literature. Unluckily, this study could not confirm this relationship regarding the chosen context and target by rejecting the subsequent model M1. However, a brand-new track was assuredly detected in the analysis of the model M2. As can be observed, the reversed pattern surprisingly benefitted from a strong empirical support ($R_2 > .5$) for many sub-hypotheses in a way that frankly questioned whether the traditional direction of the relationship remains valid on all shots.

Task identity was significantly correlated to almost all dimensions reflecting work motivation, except for extrinsic social regulation. Looking closer at this spotted association, it undeniably makes sense to reconsider the meaning of the task identity dimension, referring to the possibility of performing a completely identified task from the beginning to the very end, according to Hackman and Oldham's definition. In a work context, assigning responsibility to an individual relatedly to this aspect remains one of the efficient methods to intrinsically motivate and satisfy him through self-achievement and accomplishment (Nascimento et al., 2021). Being intrinsically satisfied or motivated logically supposes the anterior unlocking of the preceding stages of both constructs' extrinsic and more superficial forms. This statement flawlessly matches with the fact that task identity was positively correlated with intrinsic, identified, and introjected regulation but not with extrinsic social regulation, which is more relevant to the extrinsic form of motivation. Seeking social approval and conformity does not seem attractive when the individual is more absorbed by the intrinsic aspect that makes the identity of the assigned task(s). Regarding extrinsic material regulation, the association was significant ($= .50$) but negative, making the task identity an inhibitor of the prioritization of reducing work to its only financial and material facet.

It appears useful to remind once more at this point that the Moroccan context – as the other underdeveloped countries – remains one of the poorest targeted populations for the validation (quantitative lens) or the construction (qualitative lens) of theories in the domain of HRM particularly or international business on

a more general level (Hean & Garrett, 2001). Consequently, it is hoped that this analysis can modestly contribute to deepening the knowledge about the two constructs, opening the path for other interested scholars to continue exploring the preexistent validated relationship versus the reversed one. The analysis was limited to one dimension standing for job satisfaction (task identity), leaving great space to take into account the other remaining dimensions in validating the association in both directions. Hopefully, if the upside-down logic profits from robust empirical support in many contexts, it may also make the subject of an eventual conventional agreement to be supposed in the future as an evident piece of data.

To stay within the disclosures, the obvious practical implication for managers is the urge to seriously keep in mind that no standardized treatment regarding the motivation and the satisfaction of collaborators shall give efficient outcomes on all shots (Tavani et al., 2019). Hence, giving them a tangible sense of responsibility to perform completed tasks at work is highly recommended, as it has empirically been proven to trigger inner levels of motivation (the intrinsic, identified, and introjected forms, to be more precise).

It has previously been claimed that intrinsic motivation levels are seen as the most efficient and durable aspects, as they positively influence the individual to act because he enjoys what he is doing, not giving much importance to ephemeral extrinsic shade effects. To match the situation with the studied population, it goes without saying that working as a call center operator can quickly get tiring and relevant to a boring routine over time since it demands performing the approximate same tasks on a daily repetitive basis. This highlights the importance of maintaining regular – or ideally increasing – motivation and job satisfaction levels to get the best out of the operators. Managers should also never “get enough” of what they can receive from collaborators in terms of motivational and satisfactory spirits; the more they can get, the better it shall be, bearing in mind that individual efficiency is directly linked to organizational efficiency and productivity (Stefurak et al., 2020).

This study carries some gaps; first of all, the chosen research methodology of a quantitative analysis rather than a qualitative one or even a mixed formula between the two could have announced more and better significant outcomes willing to enrich and deepen the explored tracks in this regard. Then comes the nature of the named population from where the sample was built, which could have been of greater size

or relevant to a different business line to allow a more global and generalizable analysis pace. Not forgetting the restricted selected dimensions to be involved in the empirical phase, leaving behind other interesting paths to be discovered and further examined. All of the previously exposed gaps may represent a starting point to inspire interested scholars to actively pursue the research process in this particular domain.

CONCLUSION

The study intended to review the relationship between work motivation and job satisfaction in both possible directions, each variable being dependent one at a time. The findings unveiled novel and captivating tracks regarding to the reversed path, which is to be next explored to gain more insight into the nature and the complexity of the association, habitually considered in an exclusive one-way direction.

The outcomes presented a rational matching to a satisfying extent with the reality of working as a call center operator in the Moroccan context, which is a highly sensible position to motivational and satisfactory issues and variations for the latest years. Even though the traditional direction of the relationship was not confirmed in the empirical phase, it is definitely not being denied, especially with the strong theoretical and empirical support it profits from in HRM literature and work's positive psychology. Additionally, both variables are unquestionably fundamentals of the relevant domain. The goal is to enhance scientific production and research to enlarge the knowledge base in this field, grounded on solid and reliable developments and processes.

AUTHOR CONTRIBUTIONS

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APPENDIX A

Table A1. Work motivation and job satisfaction measures

| | |
|---|---|
| The Multidimensional Work Motivation Scale (MWMS) (Gagné et al., 2015) | |
| Measured on a seven-point Likert scale (1 = 'Not at all' to 7 = 'Completely') | |
| Why do you or would you put effort into your current job? | |
| Amotivation | AMOT. 1: I do not, because I really feel that I am wasting my time at work AMOT. 2: I do little because I do not think this work is worth putting effort into AMOT. 3: I do not know why I am doing this job; it is pointless work |
| Ext. Soc. Reg. | EXT.SOC.REG 1: To get others' approval (e.g., supervisor, colleagues, family, clients...) EXT.SOC.REG 2: Because others will respect me more (e.g., supervisor, colleagues, family, clients...) EXT. SOC.REG 3: To avoid being criticized by others (e.g., supervisor, colleagues, family, clients...) |
| Ext. Mat. Reg. | EXT.MAT.REG 1: Because others will reward me financially only if I put enough effort into my job (e.g., employer, supervisor ...) EXT.MAT.REG 2: Because others offer me greater job security if I put enough effort into my job (e.g., employer, supervisor ...) EXT.MAT.REG 3: Because I risk losing my job if I do not put enough effort into it |
| Introjected Regulation | 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 |
| Identified Regulation | ID.REG. 1: Because I consider it necessary to put effort into this job ID.REG. 2: Because putting effort into this job aligns with my values ID.REG. 3: Because putting effort into this job has personal significance to me |
| Intrinsic Motivation | INTRIN.MOT. 1: Because I have fun doing my job INTRIN.MOT. 2: Because what I do in my work is exciting INTRIN.MOT. 3: Because the work I do is interesting |
| The Job Diagnostic Survey (JDS) (Hackman & Oldham, 1975) | |
| Measured on a five-point Likert scale (1 = 'Not descriptive' to 5 = 'Very descriptive') | |
| Do you find your job as? | |
| Task Identity | TASK.ID 1: I do a complete task from start to finish. The results of my efforts are clearly visible and identifiable TASK.ID 2: I make insignificant contributions to the final product or service |

APPENDIX B

Table B1. Normality results (SPSS output)

| Items | Skewness | Kurtosis |
|---------------------------------|----------|----------|
| Amotivation 1 | .751 | -.626 |
| Amotivation 2 | .727 | -.689 |
| Amotivation 3 | 1.228 | .575 |
| Extrinsic Social Regulation 1 | -.086 | -1.279 |
| Extrinsic Social Regulation 2 | -.133 | -1.054 |
| Extrinsic Social Regulation 3 | -.288 | -1.089 |
| Extrinsic Material Regulation 1 | -.616 | -.555 |
| Extrinsic Material Regulation 2 | -.528 | -.738 |
| Extrinsic Material Regulation 3 | -.241 | -.932 |
| Introjected Regulation 1 | -.573 | -.583 |
| Introjected Regulation 2 | -.476 | -.753 |
| Introjected Regulation 3 | -.073 | -1.158 |
| Introjected Regulation 4 | -.198 | -1.032 |
| Identified Regulation 1 | -.732 | .305 |
| Identified Regulation 2 | -.693 | .136 |
| Identified Regulation 3 | -.637 | -.331 |
| Intrinsic Motivation 1 | .073 | -1.013 |
| Intrinsic Motivation 2 | .007 | -1.171 |
| Intrinsic Motivation 3 | .086 | -1.269 |
| Feedback 1 | -1.481 | 2.307 |
| Feedback 2 | -1.500 | 2.760 |
| Feedback 3 | -1.413 | 2.901 |
| Feedback 4 | -1.459 | 2.445 |
| Age | .677 | -.004 |
| Qualification Level | -.096 | -.573 |
| Seniority Years | -.135 | -1.221 |