

## Goal-setting, Collectivism, Task Orientation and Performance: predictors and mediators

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### Abstract:

The Goal-setting theory has been widely investigated in research literature, but its association and mediation with psychological Collectivism and Task Orientation at Performance level has remained unexplored. This study discusses the importance of the association and mediation of psychological Collectivism and Task Orientation with Goal-setting on Performance. These measures were applied to handball teams from Angola, Brazil and Portugal. Our findings indicate that “Preference” and “Goal Priority” from psychological Collectivism in association with Goal-setting would contribute to higher Performance. We also supported the importance of Task Orientation to Performance. However, the specific mediation effect of psychological Collectivism in Goal-setting was not found and a non-significant mediation effect of Task Orientation was found. This study highlights the contribution of psychological Collectivism and Task Orientation for Goal-setting achievement. Further, the mediation of Collectivism or Task Orientation by itself in Goal-setting doesn't improve outcomes. Our theoretical contribution will generate new lines of research in the field.

**Key words:** Goal-setting, Task orientation, Collectivism, Performance, Mediators.

### Introduction

Popularity of the goal-setting concept is related to the aspiration of achieving individual or teamwork efficiency, it is also one of the most common and effective strategies used to increase physical performance (Swann et al., 2019). According to Itzhakov and Latham (2018) performance is particularly dependent on the quality of the interaction among individuals, especially with regard to exchanging tasks, information, motivation and emotional relations.

This interaction quality among individuals can lead to psychological Collectivism, and some literature mention its importance in the workplace (Arraya, Pellissier & Preto, 2015; Jackson, Colquitt, Wesson, & Zapata-Phelan, 2006), because (a) the sense of collectivism is a permanent and central orientation toward a person-group relationship where she/he accommodates and feels comfortable (Morris and Leung, 2000) and (b) from a practical point of view, the level to which individuals are collectivist in the workplace could have repercussions for overall outcomes (Francesco & Chen, 2004; McEwan et al., 2016).

Following Itzhakov and Latham (2018), a goal should be specific to the collaborator's task and there it's a significant correlation between people's task orientation and goal-setting (Arraya et al., 2015), thus a task orientated collaborator with well-specified and challenging goals will raise his/her performance.

The academic and practical importance of Goal-setting made the research about it to increase considerably in the past years. However, to date there have been no studies which have examined the impact on Performance when psychological Collectivism and Task Orientation constructs are Goal-setting mediators. Thus, the aim of this paper is: (1) to explore the specific relationship between Goal-setting, Collectivism and Task Orientation to Performance; (2) to explore the association of the three constructs and Performance; (3) to seek to advance understanding of the influence of Collectivism and Task Orientation as mediators between Goal-setting and Performance; finally, (4) the presence of the mediating variables Collectivism and Task Orientation also differentiates this study from previous studies. Figure 1 summarizes the theoretical model.

That goal-setting improves performance is not a novel proposition, and the contribution of the present study lies not only in testing the hypotheses noted above but rather in exploring whether Collectivism and Task Orientation provides a mediation to leverage the goal-setting effect on Performance. We believe these are important but under-explored topics for both practitioners and academia. This paper takes an individual-level perspective to shed light on the importance of the association and mediation of Collectivism and Task Orientation with Goal-setting on Performance.

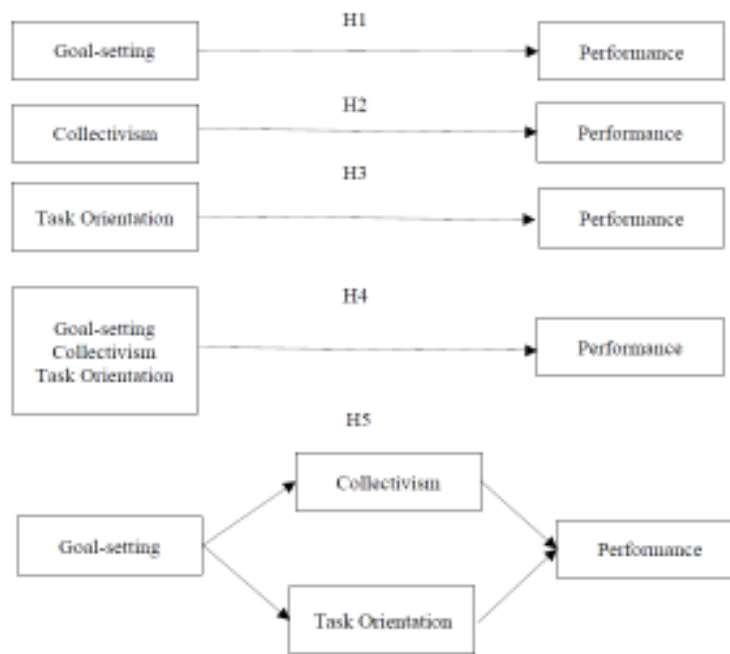


Figure 1. The research hypotheses

**Goal-setting**

Goal-setting is an influential and vigorous theory of work motivation, because when individuals are committed to conscious goals, they focus attention and persist in the pursuit of those objectives, they develop strategies and make use of efforts/strengths to achieve personnel and teamwork goals (Itzhakov & Latham, 2018). Given goal commitment, conscious goals influence choice, effort, and persistence in pursuing an objective until the precise goal is accomplished (Latham, 2007).

Literature about motivation indicates that well-specified goals regulate effort, expenditure and persistence (Bipp & Kleingeld, 2011); focused attention on the task minimizes role ambiguity (Pandey & Wright 2006) and prompts the development and use of effective task strategies or searching for alternative solutions (Bipp & Kleingeld, 2011) for an enhanced performance, even when they are assigned by others (Locke & Latham 2005). These are some advantages that led Locke and Latham (2005) to suggest the Goal-setting theory of motivation, which has its heart on the performance of individuals, teamwork or organizations. It states that successful Goal-setting remains in setting specific individual performance goals of enough difficulty with appropriate feedback relative to the progress of the goals because tasks, with specific, concrete goals worked at a faster rate than the easy or vague “do your best” goals (Kleingeld, van Mierlo, & Arends, 2011; Milkovich, Newman, & Gerhart, 2011). Also, challenging goals keep people working longer at tasks than effortless goals (Linderman, Schroeder, Zaheer, & Choo, 2003; Swann et al., 2019). Goal-setting brings concentration and focus (Arraya et al., 2015), and can motivate individuals and teams, mainly when they receive rewards for achieving the goal(s) (Gardner, 2011).

The Goal-setting theory states the correlation between participation/commitment, specificity and difficulty dimensions (Arraya et al., 2015), and proposes the attractiveness of these factors for increasing individual and/or team performance (Meier & O’Toole, 2006). Therefore, we hypothesize that: Goal-setting influences positively Performance (H1).

**Collectivism**

The primary ingredient of collectivism is the supposition that groups attach and mutually obligate individuals (Shamir, 1990). Jackson et al. (2006) mention that individuals with a collectivism orientation may be influenced by internalized values, such as valuing cooperative norms, preference, reliance and concern. Different studies show that collectivism, as opposed to individualism, is related to superior levels of individual performance on tasks shared among the members of groups (Erez&Somech, 1996), this means that collectivism improves not only at the group level but also at the individual level (Gundlach, Zivnuska, & Stoner, 2006).

The definition of Collectivism adopted herein is from Jackson, Colquitt, Wesson, and Zapata-Phelan (2006); the construct is defined as a positive or negative attitude one holds towards five areas/facets of working with others: Preference for teamwork (Preference); collectivists believe that one person’s responsibility is the responsibility of the entire in-group (Reliance); Their emphasis on social goals and feeling of interdependence makes them to maintain harmony and concern in-group (Concern); Group norms and rules express important aspects of the “we” identity, conformity to group norms (Norm Acceptance); and Putting the goals of the group above personal goals (Goal Priority).

Because collectivism refers to a general propensity toward achievements, this construct may prove its positive relationship with Goal-setting and Performance. Therefore, we hypothesise: Collectivism positively predicts Performance (Hypothesis 2).

#### Task Orientation

The task orientation comes from the goal orientation paradigm which is based on how individuals choose to define success, and they have two general goal orientations they can choose to follow (Nicholls, 1975): a) a task orientation or task involvement with an intrinsic focus on learning new skills and improving performance, normally these individuals compare themselves with their past performance; b) an ability-focused orientation or ego involvement with an extrinsic focus on external rewards, in which individuals compare their performance with those of others (e.g., getting more money than their colleagues). Task Orientation plays an important role in individual/teamwork/organizational change (Gully & Phillips, 2005) and performance appraisal (VandeWalle & Cummings, 1997).

Task-oriented individuals seek to enhance their level of competence or to master a specific task by improving their abilities, expertise and skills (Pieterse, Knippenberg, & Van Dierendonck, 2013). Prior research stated that task-oriented individuals' belief that competence can be developed and it is related to individual and collective positive outcomes (Hendricks & Payne, 2007).

Arraya et al. (2015) stated that task-orientation has a positive correlation with goal-setting dimensions, and Moeller, Theiler, and Wu (2012) stated that when individual/team tasks are linked with goals, it enhances the value of the task and thus increases motivation. Then it is possible to argue that Task-Orientation may play a role in any setting in which goal-setting's influence on performance may be relevant. So, we hypothesize that: Task orientation positively predicts Performance (Hypothesis 3).

Any individual will not work well if the leader or coach will just say "go forth and do good things or the best you can do". He/she needs specific, difficult and shared goals and to get all working toward its achievement. Thus, the underlying assumption is that individuals who show evidence of being task-oriented and have a sense of collectivism in association with goal-setting will influence his/her performance. Therefore, we hypothesise that Goal-setting, Collectivism and Task Orientation in association positively influence Performance (Hypothesis 4).

Goal-setting can be understood as a theory interwoven with mediators and motivation (Latham, 2016) which drive behaviour (action) in specific situations towards consequences at the performance level. Therefore, we hypothesise that Collectivism and Task Orientation mediates the relationship between Goal-setting and Performance (Hypothesis 5).

## **Material & methods**

### **Sample and procedures**

For the purpose of this research, instead of choosing athletes from various sports the option was as to choose players and head coaches from handball teams. Six elite female handball teams from Angola (1), Brazil (1), and Portugal (4), and five elite male handball teams from Angola (1) and Portugal (4) were selected to verify that Collectivism and Task Orientation have influence at Goal-setting and Performance.

A cross-sectional quantitative survey design was employed for the study within the positivist tradition of scholarly inquiry (Pellissier, 2007). A pilot questionnaire was undertaken to ensure that the items were adapted appropriately to the research context, before the administration of the main questionnaire, and analyzed for reliability, construct validity and response completeness.

A study invitation by e-mail was sent to each potential participant that introduced the researchers, described the study purpose and requirements to participate and provided the online survey link. An e-mail reminder was sent after the initial invitation to those who did not respond to the first invitation. The data was collected in October 2018 (players) and June 2019 (head coaches).

A sample of 175 participants (98 female and 66 male players, and 11 male coaches) participated voluntarily in the study (94% response rate), with ages ranging from 18 to 41 years-old ( $M = 22.59$ ,  $SD = 4.15$ ). The average number of years of playing handball was 11.82 ( $SD = 4.66$ ), and the average number of years playing on actual team was 4.31 ( $SD = 3.63$ ). The educational range included secondary school (62%), graduate (27%) and master (5%), and 33% of the players are professionals and 41% students.

### **Measures**

The response scale for all the measures, carefully selected from established instruments, it was a Likert format ranging from 1 to 5 points. The global scores were created for each individual by taking the mean of her/his responses across the items of each dimension. See Table 1 for reliability, composite reliability, and average variance extracted for all measures.

### **Goal-Setting.**

We applied the Goal-setting Questionnaire (GSQ; Locke & Latham, 1984). Of the 22 items, 11 are related to goal participation, 8 to goal difficulty and 3 to goal specificity. The Confirmatory Factor Analysis

(CFA) showed a good fit, attending to  $X^2/df = 1.73$ ,  $NFI = .860$ ,  $CFI = .934$ ,  $TLI = .916$ ,  $SRMR = .067$ , and an acceptable fit considering  $RMSEA = .065$  (90CI .043 to .085).

#### Task Orientation.

The Task and Ego-orientation in Sport Questionnaire (TEOSQ; Duda & Nicholls, 1989) was used to assess whether a player defines success in a sporting perspective as mastery (task-oriented) or outperforming others (ego-oriented, that was not considered in this study). The TEOSQ is a 13-item questionnaire with seven items measuring task-orientation and six items measuring ego-orientation. CFA showed a good fit considering  $X^2/df = 1.82$ ,  $NFI = .831$ ,  $CFI = .914$ ,  $TLI = .894$ ,  $SRMR = .060$ , and an acceptable fit considering  $RMSEA = .068$  (90CI .048 - .088).

#### Collectivism.

We measured Collectivism by the Jackson Psychological Collectivism Measure (JPCM, Jackson et al., 2006). The JPCM is a 15 items instrument which requires participants to think about their present and past working and rate how much they agree or disagree with each item. The JPCM five factor second-order model (five dimensions: Preference, Reliance, Concern, Norm acceptance, Goal priority) was supported by the CFA, showing a good fit,  $NFI = .859$ ,  $CFI = .920$ ,  $TLI = .902$ ,  $SRMR = .058$ , and an acceptable fit considering  $X^2/df = 2.03$  and  $RMSEA = .079$  (90CI .062 - .095).

#### Performance.

The head coach evaluated players performance using the scale developed for this research which have been pre-tested and refined based on the opinions of three experts, to determine the content validity of the scale. Performance is a multidimensional dependent variable (Hackman, 1990) where quantity and quality measures are supposed to be present (Chen & Klimoski, 2003), as such, the head coach is asked to evaluate the players' outcomes over the sports season on two different performance criteria: a) efficiency and b) collectivism. Therefore, performance was assessed via seven items capturing players' efficiency (overall performance) and collectivism. Exploratory factor analysis (EFA) with Varimax rotation was carried out with the aim of exploring the dimensionality of the *Performance Scale*. After excluding some items and according to the eigenvalue  $> 1$ , a unifactorial solution was reached, explaining 80.48% of the total variance (factorial loadings .824).

#### Statistical Procedures

Using IBM SPSS, missing values analysis was performed, and mean substitution was subsequently applied due to the missing completely at random (MCAR). Normality of the variables was evaluated by the univariate and multivariate coefficients of asymmetry (Sk) and kurtosis (Ku) (Doane & Seward, 2011). The distribution of data was considered within the normal range with respect to skewness (sk) and kurtosis (ku) indices,  $|sk| \leq 1.29$  and  $|ku| \leq 1.69$ . A probability of .05 for Type I error was considered for all the analyses. CFA was executed with AMOS (Arbuckle, 2013). Goodness of fit was evaluated by the indices of  $X^2/df$  (acceptable fit  $< 5$ ; good fit  $\leq 2$ ; Arbuckle, 2013), normed of fit index (NFI)  $> .80$ ; Schumacker & Lomax, 2010), comparative fit index (CFI)  $> .90$ ; Bentler, 1990), Tucker-Lewis Index (TLI)  $> .90$ ; Brown, 2015), standardized root mean square residual (SRMR)  $< .08$ ; Brown, 2015), and root mean square error of approximation (RMSEA; acceptable fit  $< .08$ ; Schumacker and Lomax, 2010).

For Performance, as the scale is new, EFA was carried out with the aim of exploring its dimensionality. Principal components analysis was performed (PCA - Principal Component Analysis) with VARIMAX rotation (Kaiser's normalization).

Reliability was calculated by Cronbach (1951) coefficient. Composite reliability (CR good since  $> .70$ ) was evaluated as described in Fornell and Larcker (1981). Convergent validity was evaluated by average variance extracted (AVE). AVE scores should exceed the cut-off value of .40 and, scores above .50 ensure that the explained variance is greater than the residual variance (Diamantopoulos & Siguaw, 2000). Effect sizes of correlations were classified according to Cohen (1988).

The final goal was to create a regression model for predicting dependent variables, based on a set of significant independent variables. Descriptive measures, means, standard deviations and correlations, were in particular calculated to verify the assumption of correlation between dependent and independent variables, necessary condition to select predictors to the prior regression model. A variable that accounts for the relation between the predictor and the criterion is referred to as a mediator (Baron & Kenny, 1986). According to Mackinnon (2000) regression is the most common method for testing mediation.

Multiple linear regression (MLR) model procedure followed a backwards method on cases with more than one independent variable, in which non-significant variables were withdrawn step-by-step, based on a higher  $p$ -value criterion, i.e. the variable that less contributes in each step. The total explained variance was eliminated, and a new model was created. This follows an algorithmic process that stops when all independent variables have a significant contribution ( $p < .05$ ) to explaining the dependent variable. Normal distribution and homogeneity assumptions were checked graphically, whereas the independence assumption was checked by the Durbin-Watson Test. This procedure verified residuals normality (Shapiro-Wilks,  $p > .05$ ) and independence (Durbin-Watson), meaning no evidence for residuals autocorrelation, according to Durbin-Watson critical values

table (Bo-Cheng and Jian-Qing, 1994). Heteroskedasticity, assessed by plotting standardized residuals versus predicted values suggested no signs for patterns, verifying this assumption. Multicollinearity issues were not a problem because tolerance values were all above 0.20 and VIF (varianceinflation factor) values were no higher than 4 (O'Brien, 2007). When analyzing models fit, F-test ( $p < .001$ ) suggested adequate fit adjustment for all models. Then, regression models were checked for outliers, leverage points and influence observations (Cook's distance), according to Bo-Cheng and Jian-Qing (1994). No outliers, leverage points or influence observations were found, so final model was considered to have good adjustment. Explained variance, useful to assess the contribution of the predictors to explain dependent variable (Jaqman & Danuser, 2006), was measured with the adjusted  $R^2$ . Standardized regression coefficient ( $\beta$ ) was employed to compare the effect size of the predictors, inside each MLR.

Common Method Bias.

This research relied on self-reported data from two sources (the players and the head coach), which could increase the risk of a response bias. This study uses two preventative design and statistical procedures to minimize common method bias: a) it follows Harrison, McLaughlin and Coalter (1996) because it uses multiple item constructs instead item level; b) according to Podsakoff, MacKenzie and Podsakoff (2012), the Harman's single-factor test is a good tool to check for this potential problem. The Harman's single-factor test reported a variance of 38%, which was below the maximum threshold of 50%. Because a single-factor solution does not emerge, common method bias is not a serious concern for this study.

Mediation.

SPSS Process 3.4 was used to assess mediation analysis. Mediation analysis was used to check for mediation effect of Collectivism and Task Orientation over the association between Goal-setting (IV) and Performance (DV).

Mediation analysis was performed according the following conditions (MacKinnon, Fairchild & Fritz, 2007): a) the IV must be associated with the DV ; b) the IV must be associated with the mediator (M); c) the mediator (M) must be associated with the DV.; and d) in the presence of the mediator (M) the IV should not be associated with the DV. This condition establishes that the relation between the IV and the DV disappear or weakens when the effect of the mediator M is taken into account.

**Results**

Table 1 shows means ( $M$ ), standard deviations ( $SD$ ), and correlations between variables presented in the hypothesis. Collectivism received the highest score, due to the highest means on Norm, Concern, Preference, and Reliance (lowest score in Goal). For Goal-setting, the higher scores were in Participation and Specificity. Performance was similar in Collectivism and Efficiency's scores. At last, Task Orientation received the lowest scores.

Correlation matrix showed significant positive correlations between almost all variables. Correlations with Performance varied between moderate (.30 to .50 with Task Orientation, Preference, Reliance, and Concern) and high ( $r > .50$  with Participation, Difficulty, Specificity, Norm, and Goal). Specificity was not associated with Preference and with Reliance.

Table 1.

*Composite reliability (CR), average variance extracted (AVE), descriptive statistics, Cronbach's alpha (between brackets), and correlation matrix*

	CR	AVE	M	SD	1	2	3	4	5	6	7	8	9	10
Goal setting														
1 Participation	.79	.39	4.20	0.47	(.80)	.51***	.66***	.35***	.32***	.33***	.40***	.55***	.33***	.69***
2 Difficulty	.73	.40	4.03	0.60		(.72)	.38***	.14	.21**	.18*	.23**	.32***	.24***	.52***
3 Specificity	.72	.46	4.25	0.54			(.64)	.37***	.12	.12	.20**	.40***	.20**	.61***
4 Task orientation	.77	.34	4.21	0.46				(.76)	.30***	.27***	.38***	.37***	.26***	.40***
Collectivism														
5 Preference	.71	.46	4.25	0.69					(.70)	.66***	.53***	.53***	.48***	.49***
6 Reliance	.62	.36	4.11	0.59						(.62)	.56***	.56***	.44***	.41***
7 Concern	.65	.40	4.43	0.45							(.62)	.57***	.49***	.46***
8 Norm acceptance	.79	.56	4.44	0.57								(.79)	.48***	.57***
9 Goal setting	.90	.74	3.83	0.84									(.90)	.53***
10 Performance	-	-	3.79	0.57										(.87)

Notes: \*\*\* Significant at  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$

A MLR model based on backward method was employed for testing each hypothesis. In relation to Hypothesis 1–Goal-setting positively predicts Performance, all variables positively predicted  $R^2_{adj} = 55.3\%$  of performance, being, Participation the most effective predictor ( $\beta = .30$ ).

Preference, Norm Acceptance and Goal Priority were positive predictors of Performance, giving partially support to Hypothesis 2–Collectivism positively predicts Performance. Explained variance scored  $R^2_{adj} = 42.10\%$ , being Norm Acceptance the most significant predictor ( $\beta = .21$ ). Reliance and Concern were excluded from final model ( $p > .05$ ).

The Hypothesis 3–Task orientation positively predicts Performance was supported ( $R^2_{adj} = 16.70\%$ ;  $\beta = .30$ ).

The Hypothesis 4–Goal-setting, Collectivism and Task Orientation in association positively influence Performance; Participation, Difficulty, Specificity, Preference and Goal Priority explain 72.43% of Performance (Task Orientation, Reliance, Concern and Norm Acceptance were excluded from the final model,  $p > .05$ ). Participation and Goal Specificity were the most significant predictors ( $\beta = .19$  for both predictors). Finally, in order to test Hypothesis 5–Collectivism and Task Orientation mediates the relationship between Goal-setting and Performance.

#### Mediation effect of Collectivism:

No mediation effect of Collectivism was found, because were not satisfied conditions c) [ $\beta = -0.16$ ,  $t(173) = -0.93$ ,  $p = .356$ ] and d) [ $\beta = -0.25$ ,  $t(173) = -2.25$ ,  $p = .026$ ]. Goal-setting showed a significant negative association with Performance, maintained in the presence of Collectivism as a mediator [ $F_{(1,173)} = 3.92$ ,  $p = .049$ ,  $R^2 = 0.022$ ,  $\beta = -0.31$ ,  $t(173) = -1.98$ ,  $p = .049$ ]. Goal-setting was found to have a positive significant association with collectivism [ $F_{(1,173)} = 33.77$ ,  $p < .001$ ,  $R^2 = 0.163$ ,  $\beta = 0.61$ ,  $t(173) = 5.81$ ,  $p < .001$ ].

#### Mediation effect of Task Orientation:

A partial mediation effect of Task Orientation was found. The significant effect of Goal-setting was lost in the presence of Task Orientation as a mediator and Task Orientation was not significant in the presence of Goal-setting as an independent variable [ $\beta = -0.27$ ,  $t(173) = -1.64$ ,  $p = .102$ ] [ $\beta = -0.10$ ,  $t(173) = -0.85$ ,  $p = .397$ ]. Goal-setting showed a significant negative association with Performance, reduced to non-significance in the presence of Task Orientation as a mediator [ $F_{(1,172)} = 2.32$ ,  $p = .101$ ,  $R^2 = 0.026$ ,  $\beta = 0.31$ ,  $t(173) = -1.98$ ,  $p = .049$ ]. Goal-setting was found to have a positive significant association with Task Orientation [ $F_{(1,173)} = 16.15$ ,  $p < .001$ ,  $R^2 = 0.085$ ,  $\beta = 0.41$ ,  $t(173) = 4.02$ ,  $p < .001$ ].

## Discussion

In this research, we focused on the prediction, association and mediation between Goal-setting, Collectivism and Task Orientation in individual outcomes/performance. We tested five hypotheses to observe the prediction/influence of these constructs in performance outcomes.

Hypothesis 1 results confirmed that: Goal-setting is positively related to Performance. The dimension “Participation” shows the principal contribution, confirming that goals designed, chosen and evaluated by people are considered as their own goals which make them to perform at higher levels (Koo & Fishbach, 2008); the “Specificity” result confirms that a well-specified objective helps focus attention, reduces role ambiguity, serves as benchmarking, and drives mutual behavior among people (Pandey & Wright, 2006; Wright, Moynihan, & Pandey, 2012). Furthermore, it helps to achieve better performance. The dimension “Difficulty” has a lower contribution; however, this may be related to difficult goals, which produces proportional increase in performance up to a point they are no longer recognized to be realistic. The strong correlations among these three dimensions and the regression model score may signify the importance of the time-setting a goal to take into account the complexity of these three dimensions. In other words, when someone sets a goal he/she should consider the specificity, the difficulty inherent in individual/teamwork development level and above all, involve all members in this process.

Our hypothesis 2 results confirmed that Collectivism is positively related to Performance confirming Bell (2007) findings. However, the results provide only partial support for the influence among the dimensions, because the dimensions “Concern” and “Reliance” had no relevance in this research. The dimension “Norm Acceptance” has the highest contribution. This suggests clearly that norms, when accepted, maintain social order, individual/teamwork conformity actions and individual’s adaptation to group beliefs (Ball, 2001; Noh, Lee, Kim, & Garrison, 2013; Turel & Connelly, 2012). The dimension “Goal Priority” results suggests that these individuals take priority in goals, according to Ramamoorthy, Kulkarni, Gupta, and Flood (2007) goals justifies personal sacrifices on behalf of the outcomes. This attitude is a hallmark of a successful performance (Salas et al., 2005). “Goal priority” is more consistently positively related with performance across time than any other dimensions (Dierdorff et al., 2011), it also represents the sharing of trustworthy execution and leveraging on the power of collaboration to success. “Preference” results confirm that individuals see themselves as an in-group which justifies why cooperation among them influences performance achievement over time. This research supports the notion that at least three of Collectivism’s dimensions relates to individual’s performance, which along with Jackson et al. (2006) and Cotton (2011) have demonstrated the validity of “Norm Acceptance”, “Goal

Priority” and “Preference” for auguring performance. The strong correlations among these dimensions and the regression model may signify that the research population has a propensity to be in-group, to give preference to goals and to sacrifice the individual for the outcome. In other words, this population has psychological characteristics that allow as individual/teamwork to achieve good performances.

Our hypothesis 3 results confirmed that player’s Task Orientation is positively related to Performance. This dimension result suggests that the research population is high in need for achievement that leads to success and make focus its perseverance on the development of skills, abilities, outcomes and because of its orientation normally there are self-motivated and they have a positive relation with job satisfaction (Cellar et al., 2011; Hulleman et al., 2010; Janssen & Van Yperen, 2004; Jones, Davis, & Thomas, 2015; Moeller et al., 2012; Payne et al., 2007; Rogers & Spitzmueller, 2009).

Our hypothesis 4 tested the influence of the three independent constructs in association on Performance. The regression analysis of this hypothesis does not confirm Task Orientation as a contributor, and provides partial support to Collectivism. As indicated by the zero-order correlations, there were strong relations between the constructs’ dimensions to Performance in our sample. However, in a simultaneous test of the influence of all dimensions by means of a regression analysis, those relationships were not evident. Although, our findings suggest that Goal-setting and its dimensions as well as two dimensions from Collectivism (“Preference” and “Goal Priority”) are positively influences Performance.

As mentioned before, our model examined Collectivism as a contributor to Performance alongside Goal-setting and Task Orientation, and found that from its five dimensions, only “Preference” and “Goal Priority” contribute to a better performance. While the absence of dimensions "Concern" and "Reliance" is not surprising, the disappearance of dimension "Norm Acceptance" is astonishing. However, one possible explanation for this maybe that individuals in the "Goal-setting" are implicitly accepting the operating standards as norms.

Overall, our results indicate that “Preference” and “Goal Priority” as collectivism dimensions may reinforce the relationship between Goal-setting and Performance. That is, they may suggest the need for an individual in the moment of setting goals and in the moment of true (work execution) demonstrate his/her preference for work with other people (teamwork) and putting the goals above abstractedness. These individual characteristics are influential psychological factors that can increase goal-setting as a motivational strategy for performance.

Concerning Task Orientation, this result is surprising, because the correlations among Task Orientation and the other two constructs are strong [confirming Arraya et al.’s findings, (2015)]; and our finding of the analytical model on the Task Orientation have been positive. However, previous analytical research of Porter (2005) and Payne et al. (2007) with students and Bunderson and Sutcliffe’s (2003) on business units also reported a non-significant relationship or negative influence with performance.

One explanation for these results might be found in the Goal-setting, Collectivism and Task Orientation literature. Goal-setting theory suggests that individuals who get involved in common goals prioritize task’s performances (Koo & Fishbach, 2008; Ramamoorthy et al, 2007; Rogers & Spitzmueller, 2009), and collectivists tend to exhibit greater task orientation (Zhaet al., 2006). According to these arguments, it is possible to mention that the dimension “Participation” from Goal-setting and the construct Collectivism, the in special dimension “Goal Priority”, implicitly include task orientation.

Finally, our hypothesis 5 tested the mediating influence of Collectivism and Task Orientation between Goal-setting and Performance. The results showed no mediation effect of Collectivism. As noted in our H2 Preference, Norm Acceptance and Goal Priority dimensions of the Collectivism construct have an influence on performance, in turn the Goal-setting construct directly or indirectly incorporates these three dimensions, as such seems logical to us the construct Collectivism does not mediate Goal-setting. Nevertheless, Task Orientation showed to be a partial mediator between Goal-setting and Performance. This result follows the line of thought regarding people with a high-profile task-orientation and ability for the task they increase their effort and persistence until a specific goal is achieved (Latham, Seijts, and Slocum, 2016).

## Conclusions

Our empirical research found that two dimensions (“Preference” and “Goal Priority”) from psychological Collectivism, when combined with Goal-setting, can influence Performance. This provides empirical analysis to help choose individuals with characteristics that are most likely to engage in sports work. Also, it can serve as priceless directives for clubs/teams interested in formulating effective human resources recruiting strategies. We confirmed also the importance of individuals’ Task Orientation to Performance, the dimensions “Participation”, “Specificity” and “Difficulty” from Goal-setting in Performance.

Second, our results suggest and support the predicted influence of Collectivism and Task Orientation by themselves in Performance. In the absence of Goal-setting, these two constructs alone positively influence Performance. In other words, individuals that prioritize “Preference” and “Goal Priority”, dimensions of Collectivism, will get a better performance; just as individuals with Task Orientation will get also a better performance.

Third, the results highlight that all individuals rather than only some that accept goals should be involved in its construction, collaborating in the specificity and difficulty. This implies that managers/coaches/trainers should consider a democratic/involvement strategy during goal-setting process that satisfies individuals. Because, the study evidence suggests that without a holistic involvement of the goal-setting process, individuals or organizations will continue to waste resources to achieve their full potential. Finally, our study constitutes an important contribution to the body of literature that provide insights into the Goal-setting framework, Collectivism and Task Orientation as a motivational strategy and psychological characteristics through which individuals develop their behavior and performance.

#### Limitations and New Research

While this research makes important contributions, there are several limitations that should be noted. The main limitation of this research study is the design. It was designed based on one single industry (sports), one single sport (handball) and because the data were collected at one point in time, it can only reflect that period in time (cross sectional) which makes it difficult to generalize findings into to relate it to other industries and populations. Future research should use longitudinal design and different populations to confirm the direction of causality and examine the effects of psychological collectivism and goal orientation in goal-setting.

The second limitation of this research is the use of professional athletes. However, it is important to note that the constructs utilized in this research are crucial for all kind of athletes. This population choice highlighted the context importance. It is just as well that none sports teams live under competitive pressure context and that are reflected in the strategies (such as Goal-setting), behavior (such as Collectivism) and Performance of the individuals associated with such teams. Future research should consider different contexts.

Third, the findings may be culturally bound. Given teams athletes have a strong collectivist culture, the participants may have been more susceptible to influence by Goal-setting, Collectivism and Task orientation, than those who do individual sports (regardless of whether they need a support team). Additional research is needed to see if our results can be generalized across other sports.

Finally, our choice to use athletes may have subjected this study to unintentional age bias. Because athletes are mostly young individuals and some research suggest that Task Orientation may vary with age (Burley *et al.*, 1999). Future research is needed to cover diverse individuals exhibiting higher levels of sport experience. Despite these limitations, this study provides valuable contributions to our understanding of Goal-setting in Performance by integrating psychological Collectivism and Task Orientation literatures and by increasing the research in psychological Collectivism. While much remains to be learned about the complex relationship between these variables, we hope our work will encourage future investigation in this important area.

**Conflicts of interest** - None.

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