ISCTE 🐼 Business School Instituto Universitário de Lisboa

WHERE ARE TEAM BASED INCENTIVES MORE IMPORTANT? :

A META-ANALYSIS ON THE EFFECT OF INCENTIVES ON TEAM BASED CONTEXTS

Marina Merendeiro Alves

Dissertation submitted as partial requirement for the conferral of

Masters in Human Resources and Organizational Consultancy

Supervisor:

Professor Doutor Henrique Duarte, ISCTE Business School, Department of Human Resources

and Organizational Behavior

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Abstrato

Ao longo dos anos, vários estudos foram conduzidos sobre incentivos individuais. Com o crescente interesse das organizações em investir em equipas, surgiu a importância de investigar tambem os incentivos de equipas. Serão estes realmente eficazes? A resposta é sim, mas onde? Esta metaanálise visa descobrir onde os incentivos de grupos/equipas são mais efetivos: será na sua dinâmica, comportamentos, metas ou resultados? Examinámos possíveis interações entre variáveis que possam ter maior influência nos fatores contextuais, considerando todas as areas (laboratório, acadêmico, organizacional, desportivo). Além disso, consideraram-se que as estruturas existentes nos processos de equipa e na definição de metas possuem maior compreensão dos processos intra e intergrupos. Com base em treze artigos, foram utilizados na analise desses fatores contextuais vinte e três tamanhos de efeitos, relevando que, consequentemente que os incentivos de equipa tiveram mais impacto na dinâmica da equipa (r = 0,34).

Palavras-chave: incentivos financeiros, remuneração de desempenho, recompensas de equipas, equidade em equipa, incentivos de equipa, meta-análise

Abstract

Throughout the years a plethora of studies have been conducted on individual incentives. However, with a growing interest of organizations in investing in teams arose the importance to investigate team based incentives. Are TBI's really effective? The answer is yes, yet where are they most effective? This meta-analysis aims to discover where TBI are more effective, will it be in their team dynamics, behaviors, goal achievement or outcomes? We examine all possible interactions amongst variables which might possess greater influence on the contextual factors as well as consider all settings (laboratory, academic, organizational, sports). Additionally, existent frameworks on team processes and goal setting were considered to have further understanding of intra and inter group processes. Twenty three effect sizes, taken from thirteen articles, were involved in examining these contextual factors, consequently revealing TBI's were more effective in team dynamics (r = 0.34).

Keywords: Financial incentives, pay for performance, team based rewards, team equity, team incentives, meta-analysis

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Introduction

Human beings are the essence of any organization therefore, understanding how to manage these complex individuals has been and will continue to be a challenge. Research on various human resources management policies and practices have been conducted over the years, and an obvious trend of firms adopting the concept of teamwork and pay for performance is recognizable (Serrat, 2009; Hatcher and Ross, 1991; Dematteo *et al.*, 1998; Ledford *et al.*, 1995). The notion of incentives and rewards being crucial to motivate employees not only backtracks to almost half a century (Herzberg, 1968), but continues to be a key element in current studies. In previous meta-analysis studies, researchers have devoted energy mostly to issues regarding individual incentives or simply how incentives effect individuals motivation (Condly *et al.*, 2003; Cerasoli *et al.*, 2014) while team incentives have been overlooked thus, granting a gateway for new meta-analytical research.

Furthermore, after reviewing multiple studies on how team pay for performance effect efficiency, performance, social interactions, production as well as individuals antecedents and incentive receptivity to team based rewards, we concluded some authors defend the use of incentives to motivate and work together, while others believe adding incentives into a group environment will simply create a hostile and competitive atmosphere (Klor *et al.*, 2014; Witter *et al.*, 2011; Dur and Sol, 2010; Kepes *et al.*, 2009; Kirkman and Shapiro 2000). Due to existent literature on individuals' attitudes, behaviors as well as antecedents, and of lacking information about where these incentives had more impact, interest emerged for this present meta-analysis.

The most recent and the first meta-analysis concerning team based financial incentives focuses specifically on reward distribution, group composition, task complexity and others moderating factors, overall the authors concluded the incentive relationship with teams were essentially positive (Garbers and Konradt, 2014). Undoubtedly, team based rewards are used to increase performance as Garbers and Kondrat (2014) proved in their meta-analysis that when team incentives were present, performance increased by 45 percent. However, curiosity on the effect team based rewards would have on other dimensions arose, and posterior research enabled further investigation. Evidently, this gap on team incentives information empowered the idea for this meta-analysis immediately. Subsequently, contexts like teams willingness to get involved, reaching goals, behaviors and actual team outcomes provided an empirical starting point.

Ever since literature on group compensation schemes was introduced, incentives became popular and managers retooled human resources practices which put organizations back on the road to success. Individual incentives have been found to hurt organizational outcomes due to employees preferring to sacrifice the quality in order to achieve the quantity, which triggers reward. Likewise individuals feel reluctant when it comes to providing on the job training to new members and this reflects not only in wasting time utilized to achieve expected outcome as well as higher organizational turnover. Therefore, there is no surprise when firms decided to start shifting towards group pay plans which stimulate novel ideas and problem solving as well as emphasizes team work and flexibility. Although moving from individual to team incentives seems reasonably intelligent for firms, they must keep in mind the compensation system for teams is not as simple as it is for individuals. There are numerous ways to reward teams, acknowledging the importance of employee attraction, retention and performance (Milkovich et al., 2005). Previous meta-analysis discovered "an effect¹ for team-based rewards, which was also higher than for individual financial incentives" (Garbers and Kondrat 2014; p. 119). Differentiating itself from previous investigations, this metaanalysis focuses only on team based reward aspects and the effects incurred. Additionally, a framework of team processes and cooperation will be mentioned as an attempt to further recognize intergroup and intragroup relations when team based rewards are introduced. This meta-analysis takes a substantively different approach and attempts to uncover in which dimension are team based incentives more significant. Researchers have investigated various relationships, theories, experiments on the impact of incentives on individuals and teams, however, they have neglected to expose where these incentives more valuable.

Moreover, the goal of this study is extending on previously known knowledge of team based incentives and performance, simultaneously considering other dimensions which team based rewards have guaranteed effect on. Aware that team based rewards do not simply impact team performance after reading over fifty articles, four dimensions were developed. These dimensions may contribute to organizational consciousness about which incentive schemes are more adequate for their firm. Meta-analyzing thirteen studies, which have adequate statistical information enabled possible further affiliation, solely focusing on, the effects team rewards have on team dynamics

¹¹ The overall effect mentioned is in respect to outcome type, task complexity, gender and setting (Garbers and Kondrat 2014)

(motivation, interaction, target achievement and outcome). Culminating from the popularity of individual incentives throughout these forty years, there is numerous studies on such, however, organizations have been turning to teamwork over the past years consequently, gaining more importance in the academic and professional world (Wright, 2006; Garbers and Konradt, 2014).

Ultimately, this meta-analysis will begin with a thorough clarification of teams and why organizations are relying increasingly on teams. Secondly, a teamwork process framework and cooperation theory will be touched upon, followed by evidence on the role incentives carry in teams and their impact. Next, this review will focus on the team incentives phenomenon which has been expanding interest over the years and lastly, the contextual framework of team based incentives will explain the variable agglutination process followed by respective assumptions. Furthermore, we will then discuss the method approach, how literature search was conducted, the inclusion and exclusion criteria to obtain effect sizes as well as other relevant statistical information. Finally, the next logical step will consist of reviewing our findings and evaluating results, summarizing significant information discovered in this present meta-analysis and proving direction for future research.

Key Concepts and Theoretical Background

Emerging research on organizational pay for performance schemes has provided academics and practitioners with novel and varied insights on team based rewards and their effects. Having adequate payment plans enables organizations to observe where processes need quality improvement and rewarding them accordingly as well as easing future learning development (Luft, 2009).

Teams

Throughout the years many different studies have been conducted on the themes and trends which "groups" and or "teams" poses. For clarity issues the words team and group will be used interchangeably during the course of this dissertation. The several definitions of teams have enabled for various interpretations of how to study this topic. For instance, Kozlowski and Bell (2001: 6) define working teams as "collectives who exist to perform organizationally relevant tasks, share one or more common goals, interact socially, exhibit task interdependencies, maintain and manage boundaries, and are embedded in an organizational context that sets boundaries, constrains the team, and influences exchanges with other units in the broader entity." Furthermore,

Cohen and Bailey, (1997) add on to Guzzo and Dickson (1996) and state teams are composed of two or more people, who acquire some level of interdependence as well as share outcomes and last but not least they are treated as a social entity of the organization. In a study conducted sixteen years ago 67 percent of human resource professionals acknowledged that teams are significantly important in organizations (McClurg, 2001). Recently, a well-known multinational consulting firm, Deloitte, elaborated their Global Human Capital Trends report concluding that 92 percent of individuals ranked "very important/important" the firm's operational design. Individuals refer to the organizational design as the ascension of network teams which Deloitte defines as, building teams to work on specific business projects and challenges by empowering them and encouraging collaboration and innovation (Bersin *et al.*, 2016).

Ultimately there are four types of teams recognized in organizations nowadays; work teams, parallel teams, project teams, and management teams, these categories of teams entirely fall into the broad description of a team (Cohen and Bailey, 1997). Continuing with Cohen and Bailey's reasoning, although working teams are typically reckoned as being managed by supervisors who are the adequate decision makers and leaders, over the past years, due to new academic research, these teams have been given self-managing responsibilities. Parallel teams consist of individuals from different departments which work together to achieve a common goal and report to superiors. Succeeding are project teams which are generally time restricted therefore call for individuals with high expertise and great knowledge to complete the task and finalizing this matter are management teams who have the responsibility of monitoring others hierarchy lower. Assuming these management teams are well constructed and reliable they'll enable the organization to achieve competitive advantage (Cohen & Bailey, 1997).

Over the past years cumulative research and groundwork on team work has concluded teams, more precisely cross functional teams are considered of greater speed. Additionally they are able to solve complex issues due to diverse individuals who come from various backgrounds within the team and not to mention the higher possibility of cross functional teams being more creative as well as couple of other factors (Parker, 2003). When organizations utilize teams the level of individual counterproductive behaviors will reduce due to team members' effort to achieve organizational goals as well as their own given degree of task interdependency. As a result of an expanding curiosity on team work and performance organizational structures have also been placed under scrutiny in the hopes of clarifying that having a straightforward organizational skeletons positively

reflect the individual's productivity and performance (e.g. Ajagbe *et al.*, 2016; Hadi, *et al.*, 2016). Consequently some researchers believe having a de-centralized or flatter organizational structure can improve performance by allowing individuals to take part in decision making actions of the organization. With this in mind, hierarchal organizations are long gone and horizontal organizations are trending thus, cross functional teams are significant due to the fact they're composed by flexible individuals who are prepared to move rapidly and adapt to challenging environments (Parker, 2003). The present meta-analysis scrutinizes empirical studies (Stare 2012; Hertel *et al.*, 2004; Baruch *et al.*, 2004) and experimental studies (Super *et al.*, 2016; Blimpo 2014; Rack *et al.*, 2010; Burgees *et al.*, 2009) which are composed of distinct content however, in general they all investigated team and pay for performance scenarios. Moreover, whether the authors decided to study project teams, student teams, sports teams or even computer mediated teams, all teams' mentioned in the studies consolidate their knowledge, skills, abilities and opinions to achieve targets and consequently receive monetary incentives.

Team process and cooperation

Team effectiveness has been a topic thoroughly studied throughout the years and surely will continue to be a matter of great interest. Team processes are defined in several ways, from being an interaction procedure of communication and conflict among team members and external influences to "patterned relationships" as well as, team members undertaking interdependent tasks which eventually result in reaching a collective goal (Marks *et al.*, 2001), whichever definition considered, team process is crucial when it comes to team effectiveness. Instead of following typical models and theories to build off of, throughout this meta-analysis Marks (2001) taxonomy of team process will be used as a framework to develop this study. The taxonomy of team process dimensions and arranging them into three superordinate tiers, where some take place during a transition phase and others during an action phase. Furthermore, a process diverges in relevance for the duration of the episodes, these which are time-based cycles of goal focused activities, in which teams are actively involved in diverse forms of task work at different phases of execution, henceforth, this is where transition and action phases emerge. The transition phase consists of "*periods of time when teams focus primarily on evaluation and/or planning activities to guide their accomplishment of a*

team goal or objective", while action phases entails a period "*of time when teams are engaged in acts that contribute directly to goal accomplishment (i.e., task work)*"(Marks *et al.*, 2001: 360) Before Marks' coherent classification system for team interaction process, several authors have tried to refine this construct by acknowledging the importance team members competence in team process. Distinct forms of team processes are needed at particular stages during the cyclical transition-action phase thus, variations such as recurrence, duration and standardization of the transition and action phase, are results of impacts of several other variables such as guidance, team goals, environment, knowledge and rules.

Equally important is the third process which has not been mentioned yet, the interpersonal process which occurs throughout the action and transition phases arise from process dimensions of conflict management, motivation and confidence building as well as affect management. Although this last process is more cognitive than others, it is a very important mechanism which occur throughout both, transition and action phases and can simply unite or annihilate teams at any given time. Accurately recognizing the processes individuals adopt in teams to achieve expected outcomes, permit a continuous human resource system update and enables superiors to reward efficient teamwork. Provided that managers are able to detect imperative performance episodes and when their most significant to target fulfillment, managers are capable of embedding rewards competently to encourage superior performance from individuals and groups.

Furthermore, another particularly relevant theory for this meta-analysis is Deutsch's goal interdependence theory of cooperation and communication, which Tjosvold deepened further. Social interaction of groups is dependent on how they perceive their goals how their related to each other. In 1984 Tjosvold states goal interdependence affects interaction among groups as well as, individuals within the groups, these goals can be positively or negatively related, respectively cooperative or competitive goals. Individuals who undergo cooperative vision of achieving goals believe their goal attainment will facilitate others goals, on the contrary, in competitive goal achievement an individuals' ambition makes it difficult for others goal achievement. Deutsch stated competition and cooperation consequences result from expected and actual assistance, communication and influence, task orientation and lastly friendliness and support. Numerous studies have investigated cooperation and competition and their effect on goal achievement, however investigators have not unanimously reached a conclusion. In regards to productivity, some authors defend competition accelerated individuals counteraction, as well as report a prominent

degree of arousal, whereas cooperation is considered to facilitate productivity due to the coordination of tasks within the group and their level of commitment towards each other along with reaching the common goal. Organizational expertise on goal interdependence allows one to understand where most of the individual's energy is being invested to complete tasks consequently promoting social interaction and safeguarding productivity. Team cooperation which "*has been found to strengthen work relationships, morale and especially on complex tasks to promote productivity*" (Tjosvold, 1984: 751) by implementing the cooperation theory to understand the interpersonal relationships is essential especially when teams consist of individuals with unequal power. Furthermore, the author defines power as an individual having the available resources and being able to organize these resources to accomplish the task, keeping in mind power can stimulate either competition or cooperation hence, enduring a distinctive impact which either facilitates coordination or ambitiously seeks control. Ultimately, it is imperative individuals and groups are aware of how they are rewarded which will consequently shape their posture and conduct, determining if they act individually, cooperatively or competitively.

Incentives and Team Process

Recognizing the preeminence of team work and team effectiveness in organizations, which better way to motivate employees than to provide incentives. Throughout this following section individual and team incentive pay trends as well as, several positive and negative outcomes will be addressed. For simplicity matters, the terms rewards and incentives will be used interchangeably throughout this study². We define incentives as any increase in a groups/individuals variable pay whether it is long or short term, what is accounted for is the growth in pay as a result of improved performance.

Organizations have the capability to provide rewards in two approaches, either monetary incentives which consist of increasing pay level and providing bonus' to employees or, non-monetary rewards consisting of a public acknowledgement, promotion or even empowering decision making (Fuster and Meier, 2010). Although years go by, money continues to be indispensable for individuals

² These terms are used interchangeably although there is a difference between incentives which are typically offered in advance to increase performance and rewards which are given after a successful performance (Patten, 1977)

whenever incentives are mentioned, since "money serves as an incentive primarily because it can be exchanged for other desirable outcomes such as goods, services, or privileges" (Peterson and Luthans, 2006: 157)³. As a result of desiring greater efficiency at organizational and individual level, firms provide market leading pay level strategies in the attempt of alluring, preserving and stimulating top performers while ensuring the pay level scheme will not be detrimental for the organizational financial performance (Brown *et al.*, 2003).

Furthermore, the essential objective of incentive schemes implicate the emphasis of employee' motivation and attention (Garbers and Konradt, 2014). Incentives can be based on merit and seen as powerful motivators thus, improving performance and productivity (Aguinis *et al.*, 2013; Buchheit *et al.*, 2012; Bowman, 2010).

Organizational performance is the key interest for managers and executives, however organizations only perform efficiently if individuals feel satisfied, committed as well as cooperative with coworkers. Moreover, this solely occurs if human resources policies and practices are properly aligned with both the organization and the individuals within. In a study conducted by Locke et al., (1981) it was concluded that granting individuals with incentives originated an increase of 30 percent in respect to performance. Indeed, it is more than obvious that where there is incentives there is higher performance. However, cognitive behavior of individuals must be considered, due to possible intristic disintrist and motivation at work, as well as sabotaging cooperation and teamwork under circumstances of interdependent tasks (Gerhart and Fang, 2014). Moreover, in a study Reynolds et al., (2015) executed, they put in practice a multi-stakeholder and contextual approach, which defends that not all counterproductive work behavior (CWB) is negative and not all organizational citizenship behavior (OCB) is positve. Specifically, individuals engage in negative OCB such as work-family conficts, supervisor disaproval, stress, while co-workers participate by increasing tension, and threaten resouces as well as several other asymetrical outcomes, therefore, organizations should recognize when creating a pay scheme, these systems do not affect employees all the same way.

Continuous discussion on human resources practices such as pay ranges and pay levels suggests it is imparitive to understand thouroughly which group pay plans are adequate for respective firms

³ (Komaki *et. al.*, 1996)

thus, enhancing organizational and financial performance. Pay range reseach conducted by Kepes *et al.* (2009) stated wider pay ranges affected employee performance positively however the pay distinction must be substantial enough to differentiate valuable individuals, keeping in mind organizations practicing pay openness are better off not adopting a pay for performance scheme than applying a narrower pay range on employees. In the hope that organizations are able to identify salient stimulant episodes and reward individuals accordingly, positive sorting effects (which occur as a result of the organization providing a pay system which influences the types of people who apply and retain within the organization) will arise which can result from greater effort exerted by individuals (Gerhart *et al.* 2009; Sprinkle 2000). Indeed, Bloom (1999: 33) states "*dispersion in pay distributions appears to have strong implications for individual performance and organizational success, at least in the context of major league baseball.*" hence aknowledging the importance of incentive pay to increase performance in various settings. Although choosing from a range of group pay plans such as gain sharing, linking to individual pay outs, goal achievement can facillitate firms decisions, it could also result in a challenge for organizations consequently the need for continuous learning in compensation plans.

Constant detailed investigations on group-based pay were conducted and continue to originate various discussions about adequate compensation plans for teams, particularly who and how should individuals be rewarded (Garbers and Konradt, 2014). In addition to numerous other factors, some team-based pay causes depend on the individuals performance appraisal ratings usually conducted by superiors, along with relying on perceptive group performance and team effectiveness (Bamberger and Levi, 2009; Gerhart, et al., 2000), others are based on merit which are typically used in inferior positions due to bias conclusions of performance behaviors (Gerhart and Fang, 2014). Countless studies conducted regarding pay for performance, determined team-based rewards have positive effects on team members performance and motivation (Dematteo, et al., 1998; Conroy and Gupta, 2016; Rack et al., 2011). Firms design pay for performance structures, recognizing the different needs of groups and individuals, for instance, in individual pay for performance design, communication and social interaction are less significant issues, moreover when financial incentives are introduced, the social norms to contribute either diminish or disappear (Barkhi, 2005; Janssen and Mendys-Kamphorst, 2004). Following the expectancy theory and the belief individuals are rational human beings looking to maximize their utility, regardless of working individually or in teams "individual performance should be related to the positive *valence of financial incentives*" (Garbers and Konradt, 2014: 105). Indeed, according to the agency theory, individuals will try to cutback effort utilized unless their economic well-being is benefited somehow, overall, these theories (e.g. agency, utility, expectancy etc.) explain how performance becomes a function of pay when incentives are introduced which result in either incentive or sorting effects as spoken previously.

These reward systems are central aspects of human resource management practices notably, in an experiment conducted by Babcock et al., (2011: 867) stated, "...the team incentive scheme was considered to be 26 to 31 percent more cost effective than the individual incentive scheme." Furthermore, in Gerhart and Fang (2014) qualitative research affirm several negative effects of pay for individual performance, some being obvious, for example, pay is not a motivator, and can harm an individual's intrinsic motivation because the individual is more worried about how well the task is being done as opposed to the best way to respectively complete the task. Additionally, some cultures do not consider this pay system adequate, others assume that whenever interdependent work exists, pay for individual performance can harm cooperation and communication amongst co-workers therefore there has been an increasing shift towards pay for group performance over the years. Provided that firms create groups with cross functional members enables fast and flexible adaptation to solving problems and coming up with solutions due to the various backgrounds of individuals as well as increased communication, cohesion and coordination of effort (Barrick et al., 2007; Peterson and Luthans, 2006; Beer and Cannon, 2004). Ultimately, firms want to reward individuals based on what they believe fits into their company culture and pay structures, thus not all processes and episodes are encompassed individually or in group, therefore due to this growing tendency of team work this meta-analysis will depict specifically team pay for performance plans.

Although positive trends of team pay for performance results have been recognized, at times certain psychological aspects tend to be forgotten. It is essential for individuals to feel satisfied with their pay and jobs in order to deposit additional effort despite having positive attitudes towards life (Chiu 2000) for instance, when employees vigorously relate value commitment to performance pay they're improbable to participate in counterproductive behavior (Deckop *et al.*, 1999). Larkin *et al.*, (2012) suggests taking a broader approach and incorporating physiological issues such as social comparison and overconfidence into incentive schemes will reduce sabotage from workers as well as increase effort and ability, which coincides with Babcock *et al.*, (2015) reasoning specifying

whenever incentives are present in teams, peer influences are intensified. Shropshire and Kadlec (2012) added to Boselie *et al.*, $(2005:117)^4$ reasoning and elaborated it further affirming, "*The HR* practice of participation includes empowerment practices and suggestion/grievance schemes; the HR practice of teamwork includes cooperation; the HR practice of information sharing includes communication; the HR practice of staffing includes selection; the HR practice of rewards includes benefits; (....) and the HR practice of performance management includes both performance appraisal and performance pay". Incentives, more specifically team incentives is another influential variable considered in this meta-analysis, particularly, all teams in the selected articles are awarded monetary incentives with the contingency of enhanced performance. Despite individuals continuing to give a socially desired response, Rynes *et al.*, (2004) concluded money continues to be an important motivator.

In an extended search throughout the years for remarkable knowledge on pay for performance, various academics conducted numerous investigations on the effects of variable pay schemes. Although most studies were conducted in different settings, constant factors arose, confirming the possibility of testing the effect of team based rewards on these variables. Furthermore, many studies simply focus on one of these factors and the moderating relationship thus, due to this gap it is important to investigate which element team based rewards have greater weight upon. After careful collection of information, and discovering several factors which incentives influenced, straightaway four variables were created; willingness to get involved, team behavior, goal achievement and outcomes, the following section will provide further description of these variables.

A contextual framework for team based incentives

Willingness to get involved

Although financial incentives continue to be significantly focal in terms of encouraging teams, the presence of an individual's will to get involved is determinant in respect to realizing a respective task. As stated earlier, teams are composed of distinct individuals which altogether work

⁴ (Boselie *et al.*, 2005)

towards a common goal. Moreover, team members must hold the willpower to expend energy which have a direct impact on whether or not they receive financial rewards. As rational individual's, the benefit of exerting effort on the task must overshadow the costs of undertaking the respective task (Bonner and Sprinkle, 2002), which leads us to our first concept, effort. In an experimental study Babcock *et al.*, (2011), indicated the individuals would only receive financial rewards if they completed an effort- intensive task which they defined either studying or exercising

Despite several authors adopting the same variables in their studies, diverse interpretations for these respective variables are common. For instance, in three different studies, motivation is described in various forms. Stare (2012) presumes motivation arrises from either internal needs such as honor, satisfaction or external needs like monetary compensation, consequently, intrinsic and extrinsic motivation affect individuals intention to get involved, similarly, Rack *et al.*, (2010) states instrinstic and extrinsic motivation arrises from the individuals interest in performing the task. Motivation is an outcome of a team interaction process whose team members posses traits such as openness to experince and agreeableness, being attributes that influence ones motivational states triggering task realization (Super *et al.*, 2016). In all, willingness to get involved is constructed by integrating the perspectives of effort exerted by individuals and motivation, mentioned above. Hence, a team member's willingness to get involved depends on shared intergroup and intragroup processes, due to either external needs or simply deciding how much effort is put into group tasks.

Furthermore, while numerous studies conclude financial incentives carry negative affects on motivation and performance, often, financial incentives disrupt teams social harmony and promote counterproductive behavior such as bulliying. Likewise, at times specific pay systems make distinctions across employees and may foster hostile feelings within group members and in some cases incentive reversal occurs (Gupta and Shaw 2014; Samnani and Singh, 2014; Winter, 2009), consequently diminishing teams motivation. Recollecting the interpersonal process dimension consisting of conflict management and affect management, Marks *et al.*, (2001) deliniates these sub groups as controlling the individuals emotions throughout goal achievement, as well as resolving spontaneous divergences within teams respectively. Meanwhile, this metaanalysis focuses on understanding if providing incentives to teams will contribute to their willingness to get involved, hence reaching the following assumption,

Hypothesis 1: Team based rewards have a positive effect on team dynamics.

Team Behavior

Considering pay for performance systems are rapidly increasing over the years, one must understand which embedded contexts have greater influence on team members' effectiveness. Evidence over the past years has shown companies assume decentralizing organizational structures will promote a participatory atmosphere within the company, as well as encouraging communication and commitment of employees to undergo their respective tasks, furthermore, performance pay plays a significant role in regards to increasing decentralization and spreading responsibility to achieve company goals (Chen and Huang, 2007; Rubery, 1995). Moreover, as previously mentioned, the division of tasks enables individuals to perform better, therefore, optimizing productivity consequently due to transparent organizational structures (Ajagbe *et al.*, 2016). Promoting two-way communication and decision making either resulting from face to face, electronic communication as well as several other forms, have made it imparitive for executives to direct attention towards the importance of newcomer socialization into the firms existing teams (Kozlowski and Bell, 2001; Ocker et al., 1998). Kozlowski and Bell (2001: 23) argue that at "...no other point is an employee as malleable and open to guidance as they are during their initial encounter with the organization and their work group". Nevertheless, while some authors defend monetary contingencies anticipate employee cooperation and communication others more recently, argue individuals independece and intirinsic motivation is challenged whenever incentives are added to team performance equation (Balliet et al., 2011; Tjosvold, 1986). Setting aside the various opinions authors have regarding incentives and group communication, it is more than obvious the concern of communication in team settings. Consequently, to illustrate the importance of communication, Forbes published an article disscussing the best practices for effective internal communication, where they gave an example of a firm, Bayer corperation whose tactic consists of aligning strategic priorities with internal communication. For instance, part of this method involves not sending emails which do not have direct impact on company targets therefore employees congregate meaningful information (Iliff, 2016). Nevertheless, cooperation plays an important role in teams since astute and innovative ideas arise considering truthful exchange of information (Barkhi, 2005; Chen and Huang, 2007). Particularly, for Beersma, et al. (2009:136) the indicators of behavioral coordination intail "learning the nature of novel tracks, the team had to coordinate the sequence and timing of their attacks, and then share information about the outcomes of those attacks.". However, cooperation can also result in negative collegue influences and consequently

develop unethical behavior (Treviño *et al.*, 2014). Nevertheless, evidence assures group interaction is crucial for performance yet, managers should keep in mind the possiblitly of asymmetric outcomes in individuals OCB, which can be viewed as unsuitable or hypocritical, resulting in being obstracized by team members (Reynolds *et al.*, 2015).

The second general approach of this meta-analysis is to understand if team based rewards affect team behaviors, these intragroup processes focus on the members behaviors within the group. Although communication is time consuming and considered a motivational effort cost, reality is, in most cases, communication boosts efficiency, knowledge and trust (Kvaløy and Schöttner, 2015; Andersson and Zbirenko, 2014; Beer and Cannon, 2004; Gerhart et al., 1992). Despite the fact firms provide a cooperative human resources policy with expectations of promoting social interactions and participation, at times issues such as social loafing, free riding and social comparison arise thus, requiring organizational intervention (Gerhart and Fang, 2014; Larkin et al., 2012). Therefore, several organizational communication tools have been implemented, to further explore individuals interactions at team level, Griffith and Neely (2009) exploit how the use of the balanced scorecard provides managers with intricate knowledge, particulary about one hallmark which interests us the most for this following section, communication, they describe communication as individuals "who feel they have been made aware of business activities ..." (Griffith and Neely, 2009: 56). Alternatively, communication behavior is influenced by individuals cooperative conduct which influences task orientation, originating because teams receiving incentives consider deliberating more eagerly task relvant issues (Rack et al., 2011). Assuming that team members comprehend rewards depend on numerous concepts namely, combined effot and personal relations, will enable more cohesive organizations (Tjosvold, 1984). Empowering teams with knowledge transfer, grants individuals the available information to explore feasible methods to complete expected tasks, given that they share information within themselves. More specifically, Super et al. (2016) depicts information sharing when groups have assess to relevant and critical information, reinforcing empirical advancements which state, the exchange of information and knowledge among team members improve if shared vison is related to team information processing. Additionally, Cress et al., (2006) and Quigley et al., (2007) both use the terms information exchange and knowledge sharing to designate identical discourse, ultimately illiustrating that individuals within groups should have metaknowledge and share unique strategies with teammates. The only difference of these concepts is Cress *et al.*, (2006) believes that after task completion

individuals should share information via data bases which then become available to other members in the organization. Furthermore, team behavior also results from group members actions, eventually leading to desired performance Knight *et al.*, (2001). Ultimately, whether its individual level characteristics such as assertiveness and agreeableness or simply team level characteristics like cohesion, tactical implementation and team support, team behavior is significant for organizational performance, hence leading us to the following assumption;

Hypothesis 2: Team based rewards have a positive effect on team behavior.

Goal achievement

Alongside the previously mentioned variables predicted to be affected by team based rewards, another moderator was revealed worthy to investigate. Individual's disposition to get involved and team behavior is undoubtedly essential within groups, however, another cognitive psychological concept is mentioned frequently, goal setting. Around forty years ago, Locke et al., studied how goals affect task performance hence, concluding the following; i) goals route individuals attention and actions, ii) propel effort, iii) enduce persistence, and lastely, iv) motivates individuals to establish suitable response procedures. Therefore, "group rewards can be linked to the achievement of work group goals, thereby capitalizing on the motivational benefits of goal setting" (Dematteo et al., 1998: 144)⁵ Furthermore, firms either engage in goal sharing pay plans which have pre-established targets or open goal group pay plan, consisting of threshold where companies establish a minimum essential performance with the aim of individuals doing their best to earn corresponding bonuses (Hollensbe & Guthrie, 2000). Essentially, whether organizations choose one performance plan or another, whether they belong to medical settings or production setting, one thing is certain, a coherent tie between the individual, team and organizational targets must be founded, subsequently enabling overall sharpened performance (Emery, 2004; Witter et al., 2011). As a matter of fact, in some cases, when firms decide to involve employees in goal setting they are less exposed to participate in unethical behavior (Barsky, 2008). On another note, in a research conducted by Locke et al., (1981) fifty one studies supported the fact that when goals are harder to achieve, better performance is established as opposed to when goals are medium or

⁵ From (Lawler III and Cohen, 1992)

easy, due to greater team commitment. In emphasis, Frick *et al.*, (2013) conducted a study on a German steel plant and also concluded that production targets should be concievable so that incentives are reasonably recognized.

Nevertheless, one must also consider an individual's elusive state, for example, the individual's initial happiness, may potentially have significant burden on the emotional impact of accomplishing a goal thus, resulting in positive goal interdependency and enhancing team's collective efficiency (Vijfeijken et al., 2006; Noval, 2016). However, throughout this meta-analysis the focus will exclusively portray how team based incentives affect goal achievements, recognizing these goals are intergroup processes since all groups within the organization have the same information about objectives. As mentioned previously, it is the firms' responsibility to select a goal pay plan and whether or not they are transparent with individuals, for instance, Blimpo (2014) conducted an experiment where three types of intervention groups were established, but all three had one target, reaching a passing grade of 10 out of 20 and achieving a predetermined goal. As spoken previously, it is beneficial for both, teams and organizations having well defined objectives and targets henceforth, Baruch et al., (2004: 249) stated team performance related pay was successful when "...clear objectives and performance measures enable the individual to determine what must be done to produce high performance levels". Griffith and Neely (2009) on the other hand, introduced the balanced scorecard to improve group level performance and reward teams adequately, ensuring the implemented performance- related pay scheme targeted the correct tasks and assuring the respective tasks boost efficiency. Ultimately, the decision to agglutinate these rationales emerges from all three authors outlining the importance of having clear objectives which motivate individuals. Whether it requires introducing a balanced scorecard to focus on key targets or simply revealing the acceptable outcomes, individuals are significantly swayed to achieve goals when objectives and targets are understood and clearly delineated.

Hypothesis 3: Team based rewards have a positive effect on goal achievement.

Outcomes

Backtracking to ancient times and recollecting a prominent ancient Greek philosopher known as Aristotle, he believed money was designed to be means of exchange and "...to reestablish natures own equilibrium of self-sufficiency" (Geva, 1987: 120). Meanwhile, decades have passed and this vision continues to be salient in the minds of human beings, exchanging goods or services and receiving money in return, as long as the benefits of executing work is greater than the costs. Despite decades of empirical research on incentives, authors continue to affirm that companies main objectives of providing incentives is to intensify motivation and successively performance (Garbers and Konradt, 2014; Bonner and Sprinkle, 2002; Dematteo *et al.*, 1998; Hansen, 1997). Along with several other extents, incentives affect employees collective behavior, pay satisfaction and trust in supervisors, which result in a greater contribution towards organizations, in other words, an improvement in outcome. Although various norms are needed for a deeper comprehensive evaluation of outcomes, performance has been the most prevalent throughout emergent studies (Peterson and Luthans, 2006; Williams *et al.*, 2006; St-Onge, 2000). Nonetheless, as seen above, increasing outcomes and performance remains priority in organizations point of view whenever incentives are introduced. Based on this logic one can assume team based rewards affect outcomes more than they affect a team's participative enthusiasm, team behavior and goal achievement, without overlooking the importance of each regarding the role incentives partake on teams. This present meta- analysis agglutinates several contextual variables intertwined at multiple levels, the following section will explain the reasoning behind the fusion.

Implementing teams in organizations has been a growing phenomenon and the team production process is dependent on how individuals interact with their groups as well as how their rewards are affected by others outcomes (Klor et al., 2014). Equally important to the firm's outcomes are dynamic teams who are able to efficiently accomplish tasks, not only by spending less money and having less time, but also firms can engage in a somewhat different approach of a pay for performance scheme known as a balanced scorecard which examines internal measures such as, determining operational efficiency and observing team branch performance (Stare, 2012; Griffith and Neely, 2009). Distinctly, Super et al., (2016) defend superior levels of task performance are a consequence of teams experiencing more time discussing the respective task thus, leading to further sharing of dispersed information, therefore determining where throughout the task additional knowledge, abilities and resources will be needed, hence endorsing reallocation of certain team members to specific task areas (Burgees, et al., 2009). Additionally, Knight et al., (2001) believes team members are able to concentrate their actions on aspects leading to desired performance, they are also able to judge the teams and their own efficacy on relevant responsibilities. Another principal component for this variable would be what Hertel et al., (2004) defines as effectiveness, which takes into account the if the group falls within budget limits and deadlines, if solicited tasks are accomplished and of acceptable quality and lastly, if teams are simply being innovative. Other authors measured performance as a function of distinct factors. For instance, Bloom (1999) weighted the team's performance by their winning percentage and ranking while Rack *et al.*, (2011) evidenced the customer wishes and team technical practicability were a suitable way to measure team performance.

In essence, for the most part firms introduce incentives in team settings usually to optimize outcomes, using individuals' motivation as a mediator, whether they take more time to discuss the team production process and actual task and subsequently deciding to replace individuals in more adequate positions, incentives enable the augmentation of efficient outcomes. Moreover, after carefully researching and understanding how these authors define what was agglutinated as outcomes, the following step was trying to fit outcomes into the team process framework. Due to adopting diverse interpretations of outcomes, discriminating which are intragroup processes made it difficult, therefore, outcomes consist of a combination of intragroup and intergroup characteristics.

Furthermore, organizations play a significant role in establishing norms which provide individuals with knowledge of adequate performance and behavior expected (Hollensbe and Guthrie, 2000). Considering firms want to reduce incentive discrepancy (e.g. equality and equity) the existence of team based rewards as organizational norms can indirectly influence individuals by motivating them contributing to enhanced performance and outcomes (Quigley *et al.*, 2007) which leads to the following assumption;

Hypothesis 4: Team based rewards have a positive effect on outcomes.

Variable	Concept definition	Author		
Team dynamics/ Willingness to get in				
1Effort exerted	Effort intensive task (such as studying or exercising in this case)	Babcock <i>et al.</i> , (2015)		
Motivation	Extrinsic motivation (induced by external needs)	Stare (2012)		
	Openness to experience affects group epistemic motivation	Super et al., (2016)		
	Extrinsic motivation	Rack et al., (2010)		
Team Behavior				
Communication behavior	Task orientation and cooperation	Rack et al., (2010)		
Information exchange	Individuals have some meta-knowledge about the importance of their information for others. They share information via shared database	Cress et al., (2006)		
Knowledge sharing	Unique strategies shared within members, information about general performance and exchanges	Quigley et al., (2007)		
Information sharing	Increase the discovery and sharing of dispersed, critical information	Super <i>et al.</i> , (2016)		
Tactical implementation	Actions that will lead to desired performance	Knight et al., (2001)		
Goal Achievement				
Objectives	Clear objectives and performance measures enable the individual to determine what must be done to produce high performance levels	Baruch <i>et al.</i> , (2004)		
	Balance scorecard was introduced to focus on key performance targets	Griffith & Neely (2009		
Goal achievement	Achieving good grades depending on the average performance of the team	Blimpo (2014)		
Outcomes Efficiency	Overall outcome resulted from reallocation (team allocated	Burgees <i>et al.</i> , (2009)		
Linclency	workers time to the incentivized tasks)	Burgees <i>et ut.</i> , (2007)		
	Spending less money in a shorter time	Stare (2012)		
	Operational efficiency are the internal measures (balanced scorecard)	Griffith & Neely (2009)		
Performance	PFP acts as a motivator both by providing incentives in the form of monetary rewards and by recognizing achievement.	Baruch et al., (2004)		
	Performance was measured depending on 3 expertise areas (customer wishes, efficiency, technical practicability)	Rack et al., (2010)		
	On field performance is measured by winning percentage, fan attendance and teams finishing position	Bloom (1999)		
	Receipt and use of knowledge	Quigley et al., (2007)		
	Teams focus on their actions thus, leading to desired performance	Knight 2001		
Time discussing task	Group performance-based pay condition increases discussion time, leading to greater sharing of dispersed information and higher levels of decision-making quality and task performance.	Super <i>et al.</i> , (2016)		
Effectiveness	Accomplishment of goals, quantity of team results, initiative of the team as indicator of innovation, deadline achievement and adherence to budget limits	Hertel et al., (2004)		

Table 1: Variables used in this meta-analysis

Method

Literature search

With the intention of seeking and collecting an unbiased assortment of studies and aiming to adequately review these studies, an automated search of published studies in a computerized database, ISI Web of Knowledge was conducted. We began by searching in the articles title, abstract or keywords a list of keywords; "financial incentives", "incentives", "pay for performance", "performance related pay", "P4P", "team based rewards" and "team equity" to try to identify all possible literature on incentives. Afterwards by utilizing Boolean statements we were able to narrow the search to uncover specific literature on team incentives. Reaching a significant 108 articles which all contained at least one of these keywords, the first step was to exclude all articles that did not fall into the theme intended for this meta-analysis (this process is visually provided in annex, figure 1). Moreover, I also reviewed an existent meta-analysis to ensure the articles used in their study were also being considered in this study, consequently adding six additional articles. The second phase was to delete those that were duplicated and, or were too ambiguous and therefore reaching 92 studies. The third step consisted in retrieving the studies and reading the their abstracts to decide which ones are relevant and which ones can be discarded, hence discarding 61 studies, based on the fact that most of the contextual variables investigated were individual level cognitive factors (e.g. justice perception, over confidence, pay satisfaction etc.), demographic issues, or hierarchical compensation rather than group level dimensions. After the exclusion, we still reached a considerable number of 31 studies, where 21 of those were empirical and the remaining 11 were experimental studies. Fourthly, from the 31 full text articles assessed for eligibility, we considered excluding studies which didn't have enough statistical information to analyze, as well as those texts pertaining to history of team based rewards functionality instead of the consequences these team based rewards had on group settings. The 13 final articles derive from range various journals such as Emerald, The International Journal of Human Resources Management, The Economic Journal and several others.

Inclusion and Exclusion Criteria

A particularly important feature in a meta-analysis entails delineating thoroughly the variables to be considered in the investigation, because it defines the population and enable one to make conclusions, along with limiting these conclusions. The articles accounted for in this meta-analysis compile 25 years of investigation to present day. Furthermore, this following section discloses all the inclusion and exclusion criteria expressed in this investigation consequently manifesting a high transparency level. Despite the fact it would be interesting to study all the variables which are associated with team based performance pay, the goal of this meta-analysis is entirely devoted to uncovering where team based rewards have a greater effect on group settings. For this study a series of inclusion criteria was designated (i) studies must be experimental or empirical, further studies namely, quasi-experimental and other meta-analysis aren't considered; (ii) studies' title, abstract or keywords must discuss team incentives; (iii) the study only considers financial incentives, nonmonetary incentives and are disregarded instantly; (iv) all activity sectors, such as professional sports, firms, and academic settings were considered (v) the study focuses on teams which are composed of more than two members; and (vi) adequate statistical data was available enabling further computation of effect sizes. As mentioned previously, we decided to exclude all studies which specifically focused on demographic variables (e.g. gender, age, ethnicity etc.), hierarchical compensation (e.g. executive compensation, top management compensation, seniority etc.) and individual level cognitive factors (e.g. justice perception, over confidence, pay satisfaction etc.). Lastly, to systemize this data an organization scheme using Microsoft Excel was created.

Sample and coding

Ultimately, for articles to be enclosed in this meta-analysis, both team incentives and pay for performance needed to be covered, yielding 13 articles. Satisfying the criteria established the following step was determining the studies sample sizes. Some authors reported more than one study results in the same article, these were examined separately resulting in 23 samples and a total of 3,279 individuals emerging from more than 259 groups in various settings being the academic setting the most common, representing 50% of collected articles. Finally, we began to code the studies, and conducted backward searching which can be potentially biased however it is still considered a valuable method, yet these studies were quickly discarded after thorough reading. Discussion amongst coders took place whenever discrepancies occurred. Moreover, when creating the coding scheme, the characteristics decided upon to be covered were sample, measurement, design, source and study characteristics ensuring adequate transparency and replicability. The final set of 13 articles being scrutinized in this meta-analysis fall between the years of 1999 to 2016.

Meta-analytic procedure

The effect size used in this meta-analysis is the correlation coefficient (r), which was calculated by using Borenstein *et al.* (2011) formulas. By computing a uniform effect size across all studies enabled for further consistency analysis as well as determining the strength of the relationship among teams and incentives. To begin our analysis, we first gathered desired statistical information from the final 13 articles and once again used Borenstein *et al.* (2011) calculations to convert data which was not stated in correlations. In total, a number of five studies possessed data which underwent a transformation processes using mean difference (Blimpo 2014; Babcock *et al.*, 2011; Burgees *et al.*, 2009; Quigley *et al.*, 2007; Cress *et al.*, 2006). In the following section, table 2 reports, descriptive information, mean correlation (r) the respective 95% confidence interval, as well as indicators of heterogeneity (T, I²), homogeneity of variance (Q) and its associated p-value. Furthermore, our analysis was built on fixed and random effects models which were chosen depending on their level of variance homogeneity. Lastly, additional analysis on moderators was not conducted, however, in categories which were possible for further investigation, an analysis of subgroups was administered.

Results

The summary findings of this meta-analysis are reported in table 2. Depending on the significance of the studies homogeneity of variance, effect size analysis were concluded utilizing fixed effects model or random effects model which determine if the values of the population parameters are different in respective studies. Furthermore, supporting hypothesis 1, the overall relationship (shown in table 3 in the annex) between team based rewards and team efforts was positive (r = 0.34, k = 5, 95% CI [0.27, 0.41]). With a considerably narrow 95% confidence interval, and not including zero, indicating the results are statistically significant. Additionally, as seen in table 2, effort seems to have greater effect on team dynamics (r = 0.37, k = 2, 95% CI [0.36, 0.39]) than motivation (r = 0.28, k = 3, 95% CI [0.19, 0.38]). Completing a further subgroup analysis, determining one group from enterprise setting and the other from an academic environment, the relationship between team based rewards was stronger in the academic environment than in the enterprise setting (r = 0.38, k = 3, 95% CI [0.36, 0.39], r = 0.28, k = 5, 95% CI [0.19, 0.38] respectively).

Variable	k	Ν	r	95% CI	Q	Р	Т	I^2
				LL UI				
Willingness to get involved								
Effort	2	524	0.37	0.36 0.39	0.03	0.861	0.00	0%
Motivation	3	268	0.28	0.19 0.38	1.24	0.538	0.00	0%
Team Behavior								
Communication	2	138	0.28	0.11 0.45	1.33	0.249	0.06	24.86%
Knowledge sharing	3	268	0.35	0.25 0.46	1.30	0.521	0.00	0%
Goal achievement								
Goals/Objectives	3	903	0.42	0.00 0.83	62.67	0.00	0.47	97%
Outcomes								
Efficiency	3	589	0.55	0.18 0.93	32.01	0.00	0.29	93.75%
Performance	5	498	0.12	0.02 0.22	5.05	0.282	0.06	20.86%
Effectiveness	2	91	0.37	0.20 0.54	0.66	0.416	0.00	0%

Table 2: Note: (r) the summary correlation, (k) referring to the number of independent effect sizes, (N) is the number of individuals. 95% confidence intervals and their respective upper limits and lower limits. (Q) measures the heterogeneity, a measure of weighted square deviations and (p) is the p value for the statistic Q. The (T) refers to the standard deviation of the effect size and (I^2) percentage of dispersion that can be

To test hypothesis 2, variables such as knowledge sharing, communication and tactical implementation were utilized. Results obtained provide support for hypothesis 2, concluding the positive relationship between team based rewards and team behavior (r = 0.32, k = 5,95% CI [0.22, 0.42]), where knowledge sharing had greater weight on team behavior (r = 0.35, k = 3, 95% CI [0.25, 0.46]). Similarly to the previous results presented, hypothesis 3 is also supported and with the highest effect size, however, due to zero being present in the confidence interval, the relationship between team based rewards and goal achievement is not significant (r = 0.42, k=3, 95% CI [0, 0.83]). Lastly, studies examining the dependence of outcomes on team based rewards manifested a positive relationship (r = 0.32, k = 10, 95% CI [0.15, 0.49]), the variable efficiency has greater effect on outcomes (r = 0.55, k = 3, 95% CI [0.18, 0.93]). Moreover, a subgroup analysis was also conducted in this category to study the different settings which were agglutinated. These settings consisted of enterprise/organizational settings, sports setting and academic setting. After running the subgroup analysis, the results suggested team based rewards had more effect on outcomes in enterprise setting, followed by academic and sports ambience (r = 0.54, k = 4, 95% CI [0.27, 0.82]; r = 0.21, k = 4, 95% CI [0.10, 0.32]; r = 0.03, k = 2, 95% CI [0.03, 0.03] respectively). Providing these facts, we can prudently determine, team based rewards positively affect all variables tested above.

Discussion

This meta-analysis aimed to provide quantitative data about the effects of incentives on team dynamics, behaviors, targets and actual outcomes. Previously, Garbers and Kondrat (2014) had constructed a meta-analysis where findings suggested team based rewards had more impact than did individual based incentives hence, sparking interest in investigating which team contextual factors did incentives significantly enhance. Ultimately, our results all determine the existence of a positive relationship of incentives on teams.

Constructing on previous findings and adopting a team process' framework, our findings suggest financial incentives undoubtedly boost team contextual factors, being individuals' willingness to get involved the most inveigled. Our conclusions reconciles with previous studies findings where motivation was greatly influenced by extrinsic factors such as financial incentives and intrinsic factors like, team relations (Anderfuhren-Biget et al., 2010). The overall effect size for individuals' willingness to get involved was not the highest in respect to the remaining variables, (r = 0.34)however, it was the most significant. Proven that team dynamics is statistically significant, the following step would be to determine the possible factors behind this proactivity. Some authors defend individuals' emotional states as well as, their satisfaction with pay and the job, while others defend when monetary incentives are involved, individuals are expected to prove themselves and this can potentially shy one away personal responsibilities (Chiu, 2000; Kamphorst and Swank, 2013). After exploring how goal realization was influenced by financial incentives, and realizing the relatively high effect size and insignificance, succeeding research was conducted. The evidence collected in this attempt of explaining this episode suggested that at times, firms can establish rather easy goals which trigger individuals to lose interest. Another reason could be organizations provide complex incentive schemes dependent on goal achievement and at times just the fact that teams are being well lead and managed could explain the insignificance incentives have on goal achievement (Blimpo, 2014; Griffith and Neely, 2009).

Moreover, previous studies have investigated team member's attitudes and behaviors as well as cognitive attributes, on the other hand, this meta-analysis magnifies intragroup behaviors such as communication, knowledge sharing and tactical implementation, deriving from implementing rewards. These intragroup behaviors showed to be positively related to team based rewards, siding with Wegner (1987) transactive memory theory, stating that individuals use each other as memory aids and develop ways to coordinate responsibilities and assign a designated expert depending on

personal knowledge. Therefore, when incentives are added to the equation, individuals feel the need to intercommunicate, share knowledge and information with colleagues instead of engaging in competitive behavior.

Earlier in this meta-analysis, incentives were believed to have more effect on team outcomes, meanwhile that was soon contradicted after all analysis were completed. Inevitably aware of the expression "time is money" organizations are rewarding teams with the belief it is an optimal solution for increasing efficiency, effectiveness and performance. However, although individuals increase their performance with the presence of incentives, the efficiency is at times sacrificed because individuals prefer to achieve and sometimes surpass objectives while ceding the actual outcome. Likewise, another subgroup analysis was conducted and determined team based incentives influence teams efficiency more than their performance, reaffirming efficiency is essentially jeopardized when incentives are introduced. Incentives have superior impact on teams organizations followed by teams in academic context and lastly sports teams. Perhaps sports teams are less concerned with incentives, because of being in an expanded competitive environment where rival sports teams are also offered rewards and bonus. Speculating individuals present in these competitive atmospheres possess animosity towards other teams which could be consequences of fans, media and other issues, incentives for sports teams are simply a mere number added to the equation. Furthermore, contemporary organizations are shifting from individualcompetitive incentives to cooperative-team based incentives which may support the previously stated speculation about sports teams being less influenced by incentives than organizational teams (Beersma et al., 2009; Allred et al., 1996).

The comparisons of these distinct factors made throughout this meta-analysis contribute to further investigation in the team based rewards field. After thoroughly analyzing a sample size of 3,279 individuals from more than 259 groups, the most remarkable finding continues to strengthen the idea that team based incentives have greater influence on team members willingness to get involved, motivation and effort.

Limitations

Overall, although this meta-analysis uncovers significant conclusions it also experienced several limitations. The first limitation consisted of the quality of studies collected. With this in mind and not trying to underestimate the value of studies collected, the sample size was relatively small.

Likewise, only published studies with adequate statistical data were considered, consequently disregarding studies which certainly could have been of great qualitative significance, but due to the lack of quantitative data they were overlooked. Additionally, due to having relatively few studies, this insufficiency restricted the possibility of conducting a subgroup analysis on two categories; team behavior and goal achievement. Another limitation this meta-analysis possess is not distinguishing between the types of team incentives provided and their value (e.g. high or low rewards, frequent or dispersed). It is also important to determine the timing of rewards and if they are given to teams before or after project execution because this too could influence team members contextual factors.

Conclusion

Conclusively, as spoken earlier, organizations are beginning to adopt team based rewards and leaving behind individual incentives, hence the importance of understanding where incentives are most significant in team based contextual factors. How should organizations utilize the previously collected knowledge? Firms should be transparent with individuals about compensation plans and goals which are clear, comprehensible and straightforward therefore encouraging teams to work together and more efficiently. Additionally, organizations should promote knowledge sharing, communication and inter-help, enabling them to create stronger bonds and relationships within colleagues and superiors as well. Quantitative data was collected from thirteen articles which all investigated team based incentives. After thoroughly reviewing these articles and analyzing the results obtained, our findings provide support for a positive relationship between rewards and team dynamics, behaviors, goal achievement and outcomes. This meta-analysis highlights the importance of providing incentives to motivate team members' willingness to get involved in organizational tasks. Ultimately, this study provides resilient evidence suggesting that, organizations should continue to provide incentives to emphasize team dynamics, not excluding the importance the importance these rewards have on other circumstantial group aspects. Future research should focus on which team process phase do incentives have greater influence, for instance, perhaps providing incentives to groups in the transaction phase than in the action phase could have significantly distinctive consequences. Furthermore, this research deviated from other meta-analysis which focused on individual level rewards and aimed to contribute to additional knowledge on team based incentives and their effects in various settings.

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А	nn	lex

	Κ	ES	Ν	CI 95%		Q	Р	T ²	I^2
				LL	UL	-			
Willingness to get involved	5	0,34	792	0,27	0,41	2,65	0,618	0	0
Team behavior	5	0,32	406	0,23	0,41	3,13	0,537	0	0
Goal Achievement	3	0,42	903	0	0,83	62,74	0	0,22	0,9 7
Outcomes	1 0	0,32	1178	0,15	0,49	89,1	0	0,08	0,9

Table 3: Note: (r) the summary correlation, (k) referring to the number of independent effect sizes, (N) is the number of individuals. 95% confidence intervals and their respective upper limits and lower limits. (Q) measures the heterogeneity, a measure of weighted square deviations and (p) is the p value for the statistic Q. The (T) refers to the standard deviation of the effect size and (I^2) percentage of dispersion that can be attributed to study effect size.



