



Effectiveness of Teamwork In the Workplace

Ashley M. Khawam^{a*}, Toni DiDona^b, Brenda S. Hernández^c

^a*Department of Psychology, Carlos Albizu University, 2173 NW 99th Avenue, Miami 33172, United States*

^{b,c}*Department of Psychology*

^a*Email: akhawam031@sunmail.albizu.edu*

^b*Email: tdidona@albizu.edu*

^c*Email: bhernandez339@sunmail.albizu.edu*

Abstract

Teamwork has been a key factor in the progress, evolution, and survival of humanity. Research suggests that teamwork provides better results for organizations than individual work. Teamwork is considered one of the most effective work forms. Working in teams also benefit the individual on a personal level as it fulfils needs such as social interaction and affiliation. Regardless of the profuse research validating the effectiveness teamwork brings to organizations, many management personnel still do little to build teams. The researchers explored the differences in teamwork preference across ethnicities, and the differences in self-awareness across genders. A 33-question survey was administered, thru SurveyMonkey to 225 participants across the country ($n = 119$ females, $n = 106$ males). The participants were recruited on a convenient basis utilizing snow ball sampling, and social media (Facebook, Instagram, WhatsApp, emails, etc.). Participants were between the ages of 18 and 80, with a total of 44% between the ages of 25-34. Most of the sample were Hispanic/Latino (56%), followed by White/Non-Hispanic (40%); while 4% represent other races. Results showed a significant difference between ethnicity and teamwork preference, while surprisingly no significant difference was found between gender and perceived self-awareness. Based on the findings, it is suggested that organizations that are open and supportive of cultural diversity in the workplace are more likely to have effective work teams.

Keywords: cultural diversity; effectiveness; ethnicity; self-awareness; teamwork.

* Corresponding author.

1. Introduction

Since the beginning of time humans have been driven to form groups and work together to achieve their goals, solve problems, generate more ideas, develop skills, survival, among other purposes. Teamwork is one of the most noticeable and essential work configurations of the 21st century. Teamwork is considered one of the most effective work forms [1]. The 21st century has brought many changes to the structure of organizations and also to the nature of jobs. Levi [2] suggests that even though the use of teams in the workplace has a long history, the past decades have shown that the notion of organizational teamwork has reformed. In the last decades, many studies have been conducted on the effectiveness of teams (i.e. Sundstrom, McIntyre, Halfhill, & Richards [3]; Kozlowski & Bell [4]; Salas, Stagl, & Burke [5]; Gil, Alcover, & Peiró [6]; Ilgen, Hollenbeck, Johnson, & Jundt [7]; Nielsen, Sundstrom, & Halfhill [8]; Kozlowski & Ilgen [9]; Mathieu, Maynard, Rapp, & Gilson [10]; Goodwin, Burke, Wildman, & Salas [11]). However, in this competitive and globalized economy, organizations face many challenges due to their constant evolution. There is still limited knowledge about how work teams function and many questions remain about how employers can successfully create productive and effective work teams. Given the globalized economy of the 21st century, there is also a lot to learn about multicultural teams. Additionally, there is much to learn about the support systems needed to manage this work configuration [12].

Many organization's workforces are using different types of teams, such as production teams, project teams, service teams, and action teams to accomplish its different goals and stay competitive [13]. The literature based on teamwork suggests many benefits for organizations and for individuals. Some of the benefits of teamwork include their effectiveness at improving employee relations, employees' technical and interpersonal skills, quality of work life, job satisfaction and performance, organizational effectiveness growth, and flexibility. Teamwork also provides social support, encourage cooperation, and make jobs more interesting and challenging [2].

According to Hartenian [14], managers and supervisors are becoming more aware that teams are more effective in providing results than employees working individually. This is one of the reasons the use of work teams has become more popular. Alie, Beam, and Carey [15] speculate that teamwork is becoming the foundation in organizations. As part of many reorganization agendas, many organizations are using work teams as the principal component to staying competitive [16]. Cohen and Bailey [17] found that 85% of the organizations composed of 100 employees or more are using work teams to achieve their goals, and in fact there is a strong enthusiasm for this work configuration. Employers are confident that they can hire employees with the ability to work in teams. Despite the many benefits teamwork brings, developing them is not always an easy task. However, employers are under the notion that they can develop this dexterity in their team members through training and mentoring. Hartenian's [14] research study, about team member acquisition of team knowledge, skills, and abilities found that work teams who were offered training and mentoring demonstrated higher team skills than those who did not receive it. Stevens and Campion [12] performed a study with the purpose of

determining the knowledge, skills, and abilities (KSA) required for teamwork and also with the purpose of considering the implications of these teamwork KSAs for Human Resource management. After an extensive literature review, Stevens and Campion [12] concluded that it is imperative for HR to understand the requirements of the job, and KSAs required for teamwork, to effectively hire employees. It was also concluded that HR needs to understand the tasks and role expectations, required trainings, job analysis, appraisals, among others factors that can potentially affect the implementation of teamwork programs.

Collaboration is necessary for tasks that require creativity, problem solving, and innovation [18]. Collaboration is a competitive method for achieving difficult goals and tasks. As globalization keeps forcing organizations to face more challenges, more tasks are assigned to and performed by work teams. Fitz-Enz [19] speculates that work teams are the most noticeable indicator that organizations are changing towards a collaborative environment. Organizational management is becoming more aware that jobs are becoming more complex. Wheelan [18] suggests that this complexity is requiring employees to work in teams to ensure organizational success. The implementation of work teams is known to be one of the most effective organizational interventions for improving organizational performance [20]. Gwynne [21] suggests that a key aspect considered in helping organizations and industries stay competitive is the transition from individual work to teamwork. Recent findings by Manzoor, Ullah, Hussain and Ahman [22] suggest that teamwork is the most significant independent variable having a strong relationship with the dependent variable of employee performance. Manzoor [22] research study analyzed the effect of teamwork on employee performance of the staff members of an Education Department. It revealed that teamwork when properly implemented is of significant importance, which brings benefits in terms of increased product quality and quantity, competitive advantage and higher productivity, and performance [22].

Amongst the different types of teams mentioned by Sundstrom [13], the use of production teams has motivated several studies to demonstrate their effectiveness in specific scenarios [23,20,17]. Sundstrom [23] concluded that specific context factors in teamwork effectiveness, such as organizational context, boundaries, and team development, were to be assessed by organizations to ensure team effectiveness. Guzzo and Dickson [20] reviewed all the available literature about team effectiveness and performance in the organizational context. They found that indicators of performance show the highest improvements when multiple changes are simultaneously done in aspects such as human resource management practices [20]. Additionally, they found that organizations employing sets of practices that included teams as an important element of organizational design are inclined to excel on several performance areas.

Levine and Tyson [24] argued that high representative, consultative and substantive participation by employees result in a significant and long-lasting increase in productivity. It was also found that substantive participation is obtained primarily through work teams. Levine and Tyson also suggest that work teams succeed the most when these conditions are implemented: profit sharing or gain sharing, guaranteed long term employment, narrow wage differentials, and guarantees of workers' rights. All of these conditions foster cooperation, cohesiveness, and solidarity.

Campion, Medsker, and Higgs' [25] research study revealed that there is evidence of member's preference for

teamwork related to effectiveness. This research study was conducted in a large financial services company where 19 group characteristics, representing composition, context interdependence, job design, and process, were evaluated by workers and executives. These characteristics were then compared to effectiveness criteria which included employee satisfaction, productivity, and manager judgments. Data was collected from 39 employees, 70 managers, and archival records for 80 work groups. It was found that all three effectiveness criteria were predicted by the characteristics, and nearly all characteristics predicted some of the effectiveness criteria [25]. Campion [25] suggests that the motivational value of work group comes because such work designs, especially self-managed groups, increase the motivational quality of member's job. Stevens and Campion's [12] research study, about the importance and effect HR has in the process and effectiveness of forming work groups supports Campion's [25] research study.

A Cross-sectional survey data by Chuang, Dill, Morgan and Konrad [26] submitted to 661 Frontline Health Care workers in 13 large health care employers was collected between the years 2007 - 2008. The data was studied using both regression and fuzzy-set qualitative comparative analysis [26]. Their research found that supervisor support and team-based work practices were identified as necessary for high job satisfaction and high quality of care. However, supervisor support and team-based work practices were not sufficient to achieve these results unless implemented in combination with other high-performance work practices. In this same study, it was also found that several configurations of high-performance work practices were associated with either high quality of care or high job satisfaction. Nonetheless, only one configuration of high-performance work practices was enough for both: flexible work, performance-based incentives, the combination of supervisor support and team-based work [26].

Although there are many benefits for using teamwork, research on the subject has also revealed that there are problems; many people don't like to work in teams. Work teams have gained so much popularity that sometimes they are used in situations where other approaches, like individual work, are more suitable [2]. Many of the studies on quality circles demonstrate team ineffectiveness, while studies on factories have widely inconsistent outcomes [20].

Saratoga Institute's [19] research study on team performance produced mixed results regarding the effectiveness of teamwork. Saratoga Institute surveyed 61 U.S. companies about their methodology in regards to compensation, performance measurement and team design. It was found that more than 50% of the organizations reported progress in surpassing the risks linked with teamwork and in attaining their operational goals. This result suggests that half of the companies are not meeting their goals [19]. This implies that the team-based structure still has a long way to go before it becomes truly effective. Organizational work teams need to have precise objectives and goals. The objectives and goals need to be measurable, stimulating, and always shared with the team. These objectives and goals must support the business culture, values and strategies, and should be tied to business results [19].

Sherwood [27] conducted an executive-level survey in which it was found that being a team player, working hard, being creative and performing quality work, are the most important factors for job satisfaction. Sherwood surveyed 200 executives of Goodrich & Sherwood Co. It was found that 94% of the participants responded that

the quality of their work was very important to their job satisfaction and success. A total of 6% of the participants responded that the quality of their work is somewhat important to their job satisfaction and success. Results also found that 88% of the participants responded that being creative and introducing new ideas is very important. The remaining 12% responded that being creative and introducing new ideas is somewhat important. Results revealed that 87% of the participants responded that working hard is very important, while 12% responded that working hard is somewhat important. To the question of the importance of being a team player, 83% of the participants responded that being a team player is very important, while 17% responded that being a team player is somewhat important [27]. These results leave many questions as to what are the reasons there is still 17% of employees who do not think team work is important or satisfying, a total of 50% of companies not meeting their goals, and studies revealing some degree of team ineffectiveness. Therefore, one of the questions motivating this study was to identify what population is more willing to work in teams.

Despite the abundance of valid research regarding the positive effects teamwork can have in a work environment, as well as the value it can add to the overall organizational culture, most organizations still do little to build teamwork. At the individual level, something to consider when building teams is the different personality traits each employee has and how well they would work with those of other team members. Golonka and Mojsa-Kaja [28] discuss Emotional Intelligence and how it correlates teamwork and its effectiveness. Emotional Intelligence can be defined as the awareness of one's emotions, the ability to control and express those emotions and handling of relationships in that same regard. The objective of Golonka and Mojsa-Kaja's [28] research was to describe the relationship between the concept of team roles and these psychosocial factors. To measure such, they distributed two instruments to students and results showed a significant positive correlation between ability to perceive and manage emotions and (the) roles assigned to each person in a group [28]. Through the research by Golonka and Mojsa-Kaja [28] it was also suggested that the more diverse a team is, the higher its potentiality and possibility for achieving success.

Golonka and Mojsa-Kaja [28] make an important note that the ability to deal with one's own emotions allows the members of a team to be driven to listen and be open to the perspectives of others and look for common ground solutions without feeling susceptible by the likelihood of being mistaken. In this sense, having emotional intelligence can contribute significantly to individual and team performance, and therefore improving overall effectiveness of teamwork in the workplace. Golonka and Mojsa-Kaja [28] often referenced effective and efficient teams as the foundation and best method to achieving organizational objectives. Since the sample used for this study was quite small, a follow-up step to take with this study would be to test it on a larger scale. If the researchers could retrieve a significant positive correlation with a small sample, it would then be important to replicate the results on a larger scale to determine significance, if possible.

Aside from personality traits, teamwork research has often focused on the impact of interpersonal relationships as well. What has not been well documented in teamwork research, is the significance of the different team skills between men and women [29]. As previously mentioned, at the individual level, personality traits can have a lot to do with how one works in a team; additionally, Metcalfe and Linstead [29] discuss more specifically how flexibility and commitment in organizations influence men and women differently. This alludes to the idea that how flexible and committed one is, not just to their organization but to their team as well, can

greatly affect the outcome. Research on teamwork is for the most part very positive, apart from failed teamwork and the reasoning behind it. Metcalfe and Linstead [29] further evaluate the role gender plays in teamwork, and suggest that by conducting additional research on gender differences we might be able to uncover more information about why some teams fail. They hypothesize that the neglect of gender, more specifically, the neglect of the female gender, is what may be causing team disconnect.

The terms masculine and feminine are often used to describe different team characteristics and roles, resulting in segregation of genders and disrupting what could be a powerful working relationships. Metcalfe and Linstead [29] suggest that the attitudes and behaviors of team members, as well as their concern for others, are directly linked to their performance impact. For example, being supportive of one another, consensual in decisions and the ability to collaborate are all highly encouraged traits in all team members, yet are still considered to be feminine traits. Metcalfe and Linstead [29] follow the progress of the company Nylons, to see where their faults lie in terms of teamwork and gender bias. The company is described to be comprised of mostly male filled leadership positions, with a few exceptions. One of those exceptions, being a female named Nia, who often works in teams. Nia recognizes the gender differences and the impact it has on team success. Despite how hard she has worked to be in the position she is in, her male colleagues associate her success with her having masculine traits and management style. Nia respectfully disagrees with these opinions and observes that what sets women apart from men in the workplace and makes women more beneficial to employers are the different skill set females possess, such as teamwork, communication and interpersonal skills [29]. This could easily be a generalization based on Nia's personal observations in her workplace, but an interesting theory that could be addressed in ongoing research.

A study conducted by Lanaj and Hollenbeck [30] took gender bias a step further and looked at leadership over-emergence, which can be defined as a situation in which an individual's leadership emergence is greater than their leadership effectiveness. One important characteristic related to this concept is gender. Lanaj and Hollenbeck decided to examine the role of gender with respect to this concept by distributing a survey to 181 MBA students at three different points in time and measuring their leadership emergence, leadership effectiveness and leadership over-emergence. It was hypothesized that men will over emerge as leaders in self-managing teams due to gender bias [30]. This was proposed due to the pre-conceived notion that men tend to believe themselves to be stronger leaders than women. Not with much surprise, results supported this hypothesis by showing gender having a significantly larger effect on leadership emergence than on effectiveness [30]. These results allude to the idea of women, in fact, being more effective leaders. Whether this again be due to gender bias, women work harder to try to compete with status of men, or another factor would have to be considered further.

Expanding back out a bit to look at teamwork in a more general light, and without going into individual and gender based skills, teamwork has many benefits. Gallie, Zhou, Felstad, and Green [31] notes that teamwork can help enhance performance for employees through its ability to push individuals to use their knowledge, skills and abilities to work with others and achieve a common goal. The concept of teamwork can cover a wide range of potential forms in addition to the ones previously listed, such as improving job satisfaction, personal skill development, creativity to ways of dealing with stress [31]. It truly can impact all aspects of an organization and

change it for the better. Of utmost significance is the ability of teamwork to facilitate employee learning and gaining of new skills as a result of sharing of ideas and collaboration often used in teamwork. Additionally, a team environment may be more supportive for the development of skills as the team members can provide constructive feedback and advice on how to improve and better succeed [31].

Gallie, Zhou, Felstad, and Green [31] make an important note that there is not one specific pattern all teams should follow to obtain positive results, as teamwork will affect everyone differently. To measure the impact of skill development as a result of teamwork, a survey was distributed within an organization that included three question indicators of strength based on team learning culture. Results showed a strong support for teams being in a positive work context that is more encouraging of skill formation, however, these results were only regarding teams with significant decision making responsibilities [31]. Of high interest were the result from the third question indicator that referred to an individual's willingness to learn new skills; Gallie [31] reported that the coefficients for these results remain positive for both non-self-directed teams and self-managed teams. As this study was more of a general standpoint, more detailed analysis of these results and identification of any correlations between gender and those who were considered more willing to learn new skills, might provide further insight into the differences between males and females in the workplace.

Griffin, Patterson, and West [32] investigated the relation between job satisfaction and teamwork by researching a sample of 48 companies, consisting of around 4780 employees. The questionnaire itself measured teamwork and job enrichment on an organizational level and an individual level. Control measures were also included to account for any outside factors, such as firm size and company productivity [32]. Results suggested that the link between teamwork and job satisfaction was partially described by job enrichment practices associated with teamwork [32]. Effective team implementation can increase the motivational properties of work and ensure that there is a team behind the employee supporting him/her. This in turn can increase job satisfaction as the workplace becomes a more inclusive environment in which an individual's role can actually make a difference, especially within a team.

Additionally, the researchers in this study wanted to explore the different ways changes in leadership roles could influence overall job satisfaction in teams [32]. The results suggested that the strong determinants of employee job satisfaction are the consideration and support of their supervisors [32]. When implementing teams into a workplace, leadership roles are bound to change, mostly because of the way in which a team flows as everyone has more of a say in certain matters and therefore reduces supervisory support. Although the development of teams may lower the amount of supervisory support provided, that is not to say this support is unimportant, especially because it is still shown to help increase job satisfaction [32]. Despite these revelations, what remains unknown are the different ways supervisors provide can support within teams; obtaining this information can produce future practical applications for better design and management of teamwork [32]. It is known that supervisory support on an individual level improves satisfaction, so it would be interesting to see if support still has as much of an impact on an individual's satisfaction once they are in a team and that individual's support has decreased.

Drach-Zachary and Freund [33] conducted a study regarding another way in which teamwork can have a

positive effect; they examined whether working under stressful conditions, which in nature places demands on teams or individuals, limits or increases team effectiveness. Considering the structure of a team, it makes sense that having that implemented would help to reduce stress. Despite the increasing demand of work among a team and the notion that more output is expected as there is more than one person, having people stand behind you, who know what you are going through and understand what is expected will help support each other through those stressful times. Drach-Zachary and Freund [33] state that when a team faces stressful circumstances its performance may benefit from the availability of a wide range of viewpoints, which its members can discuss and evaluate to come up with the needed solution. As each person in a group comes to the table with their own set of skills and expertise, the sharing of ideas between these team members is what helps the others learn more to expand their knowledge base and come up with creative ways of solving problems. While there is no single answer to the questions of how to structure teams working under stress, Drach-Zachary and Freund [33] allude to the idea of team members under stress being more receptive to the task inputs of others due to a selfish need of preventing increased individual responsibility. This in turn not only increases the effectiveness of teamwork in the workplace, but also increases individual effectiveness. Being open to the opinions and criticism of others in the field, and taking their advice into consideration can encourage an individual to perfect their skills and learn new ones. Drach-Zachary and Freund [33] discuss the scarcity of research on how team effectiveness changes because of stress, and how further research should focus on ways to maneuver between the contrasting perspectives of structuring teams working under stress to obtain a superior structuring process. Additional research on this topic would be excellent in showing organizations that already have teams in place, what they could do to better it and reduce stress, thus improving overall job satisfaction.

The above researches come together to suggest that teamwork is truly considered more effective than other work forms, such as working independently [1]. As discussed in the article by Drach-Zachary and Freund [33], it is not only the individuals within a team that can improve effectiveness, but also the structuring of the team overall. Richter [1] note that several researchers have previously suggested that the very tasks teams perform may represent an important contingency influencing a team's effectiveness. This idea follows the fact that sometimes there are tasks that just simply would be done best in an individual setting rather than as a team, and vice versa. That being said, it is equally important for supervisors to provide teams with tasks that would be best done in that type of setting. Richter [1] also discuss the benefits of teamwork on an individual and on a personal level; they state that working in teams fulfills some of employees' social needs, such as the needs for social interaction and affiliation. The feeling of being included, being a part of something (a team), can not only create a trust between team members to provide for a strong support system, but can also create a more open and comfortable working environment for all. A basic overview of how teamwork can affect different characteristics of a job role has been provided in this review, such as job satisfaction, increased innovation, decreased stress and improvement in attitude. Seeing the many effects teamwork can have on an organizational and individual level, there is much to support the increased use of teams as opposed to simply individual work, however, there still so much more to be examined.

Having a more open working environment, especially while working in a team, provides opportunity for increased feedback and constructive criticism. Collaborating with other members on a project or topic, there is bound to be feedback provided. This feedback can be taken in many different ways, it could allow an individual

to listen to what his/her members have to say and use the new information for self-enhancement, or a member could look at it in a negative light. Mo, Burlap, Trujillo, James, and Xiang [34] decided to take a deeper dive on this subject, and see what factors contribute to how receptive an individual may be to feedback. More specifically, Mo [34] were interested in studying what difference, if any, age would have on perceptiveness to feedback. The study conducted specifically addresses the relationships between feedback and reactions to feedback. They were interested in seeing if age correlated with perceptions of feedback favorability, delivery and quality, and how those perceptions would influence their reactions [34]. As younger adults are typically newer to the working environment, they should be willing to do what they can and accept all advice to help them build credibility, skills and advance on the corporate ladder. Mo [34] hypothesized that younger adults focus more on values of social relationships to help facilitate increased learning and personal growth, rather than focus on the emotional aspect of those social relationships. Mo [34] administered a survey to an organization of 623 employees, the survey intended to measure feedback orientation, feedback characteristics, and feedback reactions. Results showed that it was the older workers who had higher levels of feedback orientation on social awareness, however there was a stronger positive association between feedback quality and reactions for younger workers [34]. Simply put, older workers focused more on social awareness, the emotional aspect, while younger workers focused on the quality of feedback provided and ultimately had a positive reaction to any feedback received.

Prior research on effectiveness of teamwork in the workplace has shown the concept of teamwork to have a very positive effect on both the individual and organization levels. We have seen further research on what makes these teams effective and saw significant results due to factors such as leadership, personality traits, attitudes. In reviewing the literature on this topic, what is still missing in this field of teamwork research, is a deeper dive into factors such as age and gender for any significant correlations. Further research on these factors may provide valuable insight as to how teams should be structured for maximum effectiveness. It is hypothesized that there is a significant difference across gender in self-reported measures of social awareness. It is also hypothesized that there is a significant difference between Hispanic/Latino and Non-Hispanic/Latino preference for teamwork

2. Materials and Methods

2.1 Participants

To assess the effectiveness of teamwork in the workplace, a sample of 265 respondents were recruited to participate in this study, however 40 responses were deemed incomplete leaving only 225 responses to be analyzed. The participants were recruited on a convenient basis utilizing snow ball sampling, and social media (i.e. Facebook, Instagram, WhatsApp, emails). Participants were equally recruited by gender and from a mix of ethnic/racial backgrounds and ages. The sample consisted of two groups (n = 119 female participants, n = 106 male participants). The average age of respondents in both sample groups combined was 35.44 years (SD = 12.03), ranging between the ages of 18 and 80. A total of 56% of the participants were Hispanic/Latinos, 40% were White/Non-Hispanics, 3% were Black/African American, while 1% belongs to other races. To analyze the relationship between ethnicity and teamwork preference, the sample was combined and divided into two ethnic

categories, Hispanic/Latino (56%) and Non-Hispanic/Latino (44%). On average, the participants reported to have 16.15 years of formal education, which translates to a bachelor's degree. While 86% of the participants were employed, only 14% were unemployed, retired, or other. In regards to job level, the overall sample mainly consisted of professionals (60%). Participants reported an average of 6.15 years of job experience. The average annual income reported by the participants was 30,000 – 50,000. U.S. Dollars. A total of 49.8% of participants were married, 39.6% were single, while the rest of them (10.6%) reported to be separated, divorced, widowed or other. While 44% of the participants reported not having children, 56% reported having between 1 and 4 children. Single income household (56%) and dual income household (41%) were rather evenly distributed.

2.2 Materials

Materials required for this study included, a computer or mobile computer device that can be connected to the internet to access the survey link hosted on SurveyMonkey, an online survey software.

2.3 Procedure

The questionnaire administered to the participants began with an informed consent disclosure requiring the respondent's acceptance to proceed, as well as an introduction informing them of the researchers who were administering the survey, approximately how long the survey would take and that their responses would remain confidential and anonymous. Following the instructions were 22 questions regarding the constructs being measured and finally 11 questions for demographic purposes only (see Appendix B). The inclusion criteria for the study included understanding English, being 18 years of age or older, and agreeing on signing the consent form. The exclusion criteria included those participants who were 17 years of age or younger.

2.4 Instrumentation

The survey was created with the online program SurveyMonkey, and was presented to the participants in an electronic format. Participants were asked to complete a 5-point rating scale of five statements regarding social Awareness (see Appendix C), four statements on Teamwork (see Appendix D) and 1 statement on Judgment/Open-mindedness (see Appendix E) on which the individual rated their agreement with the statement between strongly disagree to strongly agree. Additionally, participants were asked to complete a 5-point rating scale of five statements regarding Teamwork (see Appendix D), three statements on Accountability (see Appendix F) and four statement on Independence (see Appendix G) on which the participant rated their agreement with the statement between strongly disagree to strongly agree.

3. Results

To determine if there is a (a) statistically significant difference in self-awareness score across genders, there were a total of 225 respondents recruited for this study and separated into one of two groups, males and females. The t test for (a) difference in self-awareness score across genders revealed the mean score for self-awareness for Group 1 (females) is 3.76 while Group 2 (males) had a mean score of 3.72. The ANOVA table reveals that the significance of these means is (p) .600 which is more than the α level of .05. This suggests that there is no

statistically significant difference between the mean scores of these groups. As seen in the results (Fig. 9), on average, females rated themselves 0.033 points higher than males (3.756 v 3.723). Using a .05 α level, the p value of .600 suggests that this difference is not statistically significant and therefore, the researchers fail to reject H_0 and reject H_1 . In this case, it is safe to assume the results do not support the first hypothesis and gender is not related to perceived self-awareness.

Table 1: T Test Results (Descriptives and ANOVA tables) For (a) Difference in Self-Awareness Score Across Genders

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Female	119	3.756	.4991	.0458	3.666	3.847	2.4	4.7
Male	106	3.723	.4580	.0445	3.634	3.811	2.3	4.8
Total	225	3.740	.4794	.0320	3.677	3.803	2.3	4.8

	Sum of Squares	df	Mean Square	F	Sig.
Between Group	.064	1	.064	.275	.600
Within groups	51.418	223	.231		
Total	51.482	224			

To determine if there is a statistically significant difference in teamwork preference score across ethnicities, there were a total of 225 respondents recruited for this study and separated into one of two groups, Hispanic/Latinos and Non-Hispanic/Latinos. The original set of ethnicity categories were White/Non-Hispanic, Black/African American, Hispanic/Latino, and Other. The category of Hispanic/Latino was separated out and the other 3 categories were combined to be identified as Non-Hispanic/Latino. This combining of categories was done to ensure that pre-test criteria would be met and to simplify data results. The t test for (b) teamwork preference across ethnicities revealed the mean score for teamwork preference for Group 1 (Hispanic/Latinos) is 3.02 while Group 2 (Non-Hispanic/Latinos) had a mean score of 3.42. The ANOVA table reveals that the significance of these means is (p) .000 which is less than the α level of .05. This suggests that there is a statistically significant difference between the mean scores of these groups at the .05, .01, and .001 α levels. As seen in the results (Fig. 10), on average, Non-Hispanic/Latinos rated themselves 0.402 points higher than Hispanic/Latinos (3.016 v 3.418). Using a .05 α level, the p value of .000 suggests that this difference is statistically significant and therefore, the researchers reject H_0 and fail to reject H_1 . In this case, it is safe to assume that the second hypothesis was in fact supported and ethnicity is related to teamwork preference.

Table 2: T Test Results (Descriptives and ANOVA tables) For (b) Teamwork Preference Across Ethnicities

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Hispanic	126	3.0166	.48085	.04284	2.9318	3.1014	1.75	4.50
Nonhispanic	99	3.4181	.41302	.04151	3.3357	3.5005	2.42	4.50
Total	225	3.1932	.49352	.03290	3.1284	3.2581	1.75	4.50

	Sum of Squares	df	Mean Square	F	Sig.
Between Group	8.937	1	8.937	43.684	.000
Within groups	45.620	223	.205		
Total	54.557	224			

4. Discussion

The main findings of this study are that there is no significant difference across genders in self-reported measures of social awareness, and that there is a significant difference across ethnicities in teamwork preference.

Earlier, this study identified possible reasons as to why there would be a significant difference in gender across self-reported social awareness and feedback acceptance. The first hypothesis predicted that females have a strong perceived self-awareness level as they seem to pay attention to detail more. Atwater and Yammarino [35] define self-awareness as the individual's ability to assess other's evaluations of the self and to incorporate those assessments into one's self-evaluation. It was a surprise to find no significant difference in self-awareness across genders, as the results imply that men perceive self-awareness just as well as women. These results are contrary to the results of a study by Veslor, Taylor, and Leslie [36] that showed gender difference do exist in both rated self-awareness and in one of its subcomponents, knowledge of self. The results of this study do not suggest that the level of self-awareness is equal across genders, despite the fact there is no statistical significance between the two.

Regarding the second hypothesis, in the beginning this study identified reasoning as to why some ethnicities would have a difference in teamwork preference. Although there is no specific definition for teamwork preference, Shaw and Duffy [37] note that preference for group work is a dimension of the broader individualism-collectivism construct. It refers to the level at which an individual has preferences for working in a group rather than autonomous work. The second hypothesis predicted that that differences in teamwork preference are related to the culture of difference ethnicities, more specifically, between Hispanic/Latinos and

Non-Hispanic/Latinos. The results supported the second hypothesis and validated the researcher's prediction that there are significant differences across ethnicities in regards to teamwork preference. Specifically, the data implies that there is a difference in teamwork preference between Hispanic/Latinos and Non-Hispanic/Latinos. The Hispanic/Latino culture has strong ties to a collectivist mentality while Americans (for example) are more individualistic. Harms [38] states that people characterized by high collectivism will prefer working in groups. Nowak [39] explains that members of collectivist cultures tend to be interdependent and define their self-concepts in terms of relationships and social obligations, which would be why they prefer working in groups. On the other hand, Nowak [39] notes that members of individualist cultures tend to strive for independence and put importance on their own aspirations and achievements, which would imply individuals of this culture would prefer working alone rather than in a team. The results of this study show contrary to this with Non-Hispanic/Latinos having a higher average score of teamwork preference.

4.1. Limitations

This study used a snowball sampling method, which lowered the ability of this data to be fully reflective of the entire population. If the sample were truly randomized, it is possible the results might have shown a difference. Further limitations included sample size for each ethnicity, as this study did not have a big enough sample for all four ethnic categories, three of the four needed to be combined. This could explain why Hispanic/Latinos (a typically collectivist culture) scored lower, as there could be other ethnicities in the Non-Hispanic/Latino sample that would also be considered from a collectivist culture.

4.2. Practical Implication

The practical implications of this study apply to organization management systems and HR practices regarding hiring and training. By knowing the conditions and circumstances under which teams become more effective, organizations can take advantage from all the benefits this work configuration brings, and stay competitive. Knowing what ethnic groups have a preference for team work, cannot only assist in building such teams, but in helping to increase job satisfaction, productivity and its overall effectiveness. Another incentive of knowing which groups are more prone to teamwork is that it becomes easier for HR to target those groups who need more training, coaching, and support in becoming effective team players. Practical implications of the above results can also apply to the initial implementation of work teams and/or the transition from individual work to group work. Knowing that certain personality traits or cultural backgrounds have influence on teamwork allows management to build more easily build effective teams. Combining employees with a collectivist mindset and those with a non-collectivist mindset encourages employee growth, as well as allows employees to expand their skill set, and better collaborate as a team. Improvement of collaboration skills provides advantages not just for work teams, but for the overall organization. An organization with a workforce that can easily transition from completing individual assignments to group assignments, while effectively working together to efficiently solve problems has competitive edge over others.

5. Conclusion

Taking into account the limitations the researchers had to endure, this study was still able to accomplish what it sought out to do. It took a seemingly general population, categorized it and compared it against values that had

not often been studied before. The building and incorporating of teams in the workplace is still a growing method, while not all organizations use work teams, higher management are at least starting to see the benefit they can provide. This change in work method gives even more reason as to why this topic should be studied. Now that it is known teams can be useful, what can be done to make them most effective? There are a lot of factors that tie into teamwork effectiveness, gender and ethnicity being two major components. The research in this study sheds light as to how teams should be built, meaning who they should be comprised of, as well as which individuals may work best together. However, this study only touches the tip of the iceberg. There are more components that now need to be considered, such as employment history, experience, skill level, education, salary, and age. What this study certainly could improve on is taking a deeper dive and separating the population sample into more specific and narrowed criteria. Further analysis on the data could help those in the field better understand what to look for in employees when selecting individuals for a work team.

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References

- [1] A. W. Richter, J. F. Dawson and M. A. West (2011). "The effectiveness of teams in organizations: A meta-analysis". *International Journal of Human Resource Management*. [On-line] 22(13), pp. 2749-2769. Available: doi:10.1080/09585192.2011.573971
- [2] D. Levi. *Group dynamics for teams* (4th ed.). Thousand Oaks: Sage. (2014).
- [3] E. Sundstrom, M. McIntyre, T. Halfhill and H. Richards. "Work groups: From the Hawthorne studies to work teams of the 1990s and beyond". *Group Dynamics: Theory, Research, and Practice*, vol. 4(1), pp. 44-67, 2000.
- [4] S.W. J. Kozlowski and B. Bell. "Work groups and teams in organizations". In W.C. Borman, D.R. Ilgen, & R.J. Klimoski (Eds.), *Industrial and Organizational Psychology* Chichester: John Wiley & Sons, 2003, pp. 333-375.
- [5] E. Salas, K.C. Stagl and C.S. Burke. "25 years of team effectiveness in organizations: Research themes and emerging needs". In C.L. Cooper, & I. T Robertson (Eds.), *International Review of Industrial and Organizational Psychology*, vol. 19, pp. 47-91, 2004. Chichester: John Wiley & Sons.
- [6] F. Gil, C.M. Alcover, and J.M Peiró. "Work team effectiveness in organizational contexts: Recent research and applications in Spain and Portugal". *Journal of Managerial Psychology*, vol. 20, pp. 193-218, 2005.
- [7] D.R. Ilgen, J.R. Hollenbeck, M. Johnson and D. Jundt. "Teams in organizations: From I-P-O models to

- IMOI models". *Annual Review of Psychology*, vol. 56, pp. 517-544, 2005.
- [8] T.M. Nielsen, E.D. Sundstrom and T.R. Halfhill. "Group dynamics and effectiveness: Five years of applied research". In S.A. Wheelan (Ed.), *The Handbook of Group Research and Practice*. Thousand Oaks, CA: Sage, 2005, pp. 285- 311.
- [9] S.W.J. Kozlowski and D.R. Ilgen. "Enhancing the effectiveness of work groups and teams". *Psychological Science in the Public Interest*, vol. 7, pp. 77-124.
- [10] J. Mathieu, M.T. Maynard, T. Rapp and L. Gilson. "Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future". *Journal of Management*, vol. 34, pp. 410-476, 2008.
- [11] G.F. Goodwin, C.S. Burke, J.L. Wildman, and E. Salas, E. "Team effectiveness in complex organizations: An overview". In E. Salas, G.F. Goodwin, & C.S. Burke (Eds.), *Team Effectiveness in Complex Organizations. Cross-Disciplinary Perspectives and Approaches*, pp. 3-16, 2009. New York: Psychology Press
- [12] M.J. Stevens and M.A. Campion (1994). "The knowledge, skill, and ability requirements for teamwork: Implications for human resource management". *Journal of Management*. [On-line]. 20(2), pp. 503-530. Available: http://www.krannert.purdue.edu/faculty/campionm/Knowledge_Skill_Ability.pdf
- [13] E. Sundstrom. "The challenges of supporting work team effectiveness". In E. Sundstrom (Ed.), *Supporting Work Team Effectiveness*. San Francisco, CA: Jossey-Bass, 1999, PP. 2-23.
- [14] L.S. Hartenian. "Team member acquisition of team knowledge, skills, and abilities". *Journal of Team Performance Management*, vol. 9(1/2), pp. 23-30, 2003.
- [15] R.E. Alie, H. Beam, T.A. Carey. "The use of teams in an undergraduate management Program". *Journal of Management Education*, vol. 22(6), pp. 707-19, 1998.
- [16] S. Mohrman, S. Cohen and A. Mohrman. *Designing team-based organizations*. San Francisco, CA: Jossey-Bass, 1995.
- [17] S.G. Cohen and D.E. Bailey. "What makes teams work: Group effectiveness research from the shop floor to the executive suite". *Journal of Management*, vol. 23, pp. 239-290, 1997.
- [18] S. Wheelan. *Creating effective teams: A guide for members and leaders* (4th ed). Thousand Oaks: Sage, 2013.
- [19] J. Fitz-Enz, J. (1997, June). "Measuring team effectiveness. Managing team performance: Evaluation, measurement, rewards". *HR Focus*, vol. 74(8) 3(1). Available: <http://infotrac-college.cengage.com>

- [20] R. Guzzo and M. Dickson. "Teams in organizations: Recent research on performance and Effectiveness". *Annual Review of Psychology*, vol. 47, pp. 307-338, 1996.
- [21] S. Gwynne. "The right stuff". *Time*, pp. 74-84, 1990.
- [22] S.R. Manzoor, H. Ullah, M. Hussain and Z.M. Ahmad (2011, Jun). "Effect of teamwork on employee performance". *International Journal of Learning & Development*, vol. 1(1), pp. 110-126. Available: <http://dx.doi.org/10.5296/ijld.v1i1.1110> Doi:10.5296/ijld.v1i1.1110.
- [23] E. Sundstrom, K.P. DeMeuse, and D. Futrell, D. "Work teams: Applications and Effectiveness". *American Psychologist*, vol. 45, pp. 120-133, 1990.
- [24] D.I. Levine, and L. Tyson, L. "Participation, productivity, and the firm's environment". in A.S. Blinder (Ed.), *Paying for productivity*. Washington, DC: Brookings, 1990, pp. 183-243.
- [25] M.A. Campion, G.J. Medsker and C. Higgs. "Relations between work group characteristics and effectiveness: Implications for designing effective work groups". *Personnel Psychology*, vol. 46, pp. 823-850, 1993.
- [26] E. Chuang, J. Dill, J.C. Morgan and T.R. Konrad (2012). "A configurational approach to the relationship between high-performance work practices and frontline health care worker outcomes". *Health Services Research*, vol. 47(4) 1460(22), Available: <http://infotrac-college.cengage.com> [Jun, 5 2016].
- [27] A. Sherwood (1991). "Quality, creativity, hard team work, keys to job satisfaction". *Supervision: National Research Bureau* 1991, vol. 52(9), 13(1). Available: <http://infotrac-college.cengage.com> [Jun 5, 2016].
- [28] K. Golonka, and J. Mojsa-Kaja. "Emotional intelligence and team roles – Analysis of interdependencies with regard to teamwork effectiveness". *Contemporary Management Quarterly / Wspólczesne Zarzadzanie*, vol. 12(4), pp. 32-44, 2013.
- [29] B. Metcalfe and A. Linstead. "Gendering Teamwork: Re-Writing the Feminine". *Gender, Work & Organization*, vol. 10(1), pp. 94-119, 2003.
- [30] K. Lanaj and J.R. Hollenbeck. "Leadership Over-Emergence In Self-Managing Teams: The Role of Gender and Countervailing Biases". *Academy of Management Journal*, vol. 58(5), pp. 1476-1494, 2015. Available: doi:10.5465/amj.2013.0303
- [31] D. Gallie, Y. Zhou, A. Felstead and F. Green (2012). "Teamwork, Skill Development and Employee Welfare". *British Journal of Industrial Relations*, vol. 50(1), pp. 23-46, 2012. Available: doi:10.1111/j.1467-8543.2010.00787.

- [32] M.A. Griffin, M.G. Patterson and M.A. West. "Job satisfaction and teamwork: the role of supervisor support". *Journal of Organizational Behavior*, vol. 22(5), pp. 537-550, 2001. Available: doi:10.1002/job. 101
- [33] A. Drach-Zachary and A. Freund. "Team effectiveness under stress: a structural contingency approach". *Journal of Organizational Behavior*, vol. 28(4), pp. 423-450, 2007.
- [34] W. Mo, G. Burlacu, D. Truxillo, K. James and Y. Xiang. "Age differences in feedback reactions: the roles of employee feedback orientation on social awareness and utility". *Journal of Applied Psychology*, vol. (4), pp. 1296, 2015.
- [35] L.E. Atwater and F.J. Yammarino. "Does Self-Other Agreement on Leadership Perceptions Moderate The Validity Of Leadership And Performance Predictions?" *Personnel Psychology*, vol. 45(1), pp. 141-164, 1992. Available: doi:10.1111/j.1744-6570.1992.tb00848.x
- [36] E. Van Velsor, S. Taylor, and J.B. Leslie. "An Examination of the Relationships among Self-Perception Accuracy, Self-Awareness, Gender, and Leader Effectiveness". *Human Resource Management*, vol. 32(2/3), pp. 249-263, 1993.
- [37] J.D. Shaw and M.K. Duffy (2000). "Interdependence and preference for group work: Main and congruence effects on the satisfaction and performance of group members". *Journal of Management*, vol. 26(2), pp. 259-279, 2000. Available: doi:10.1016/s0149-2063(99)00045-8.
- [38] W. Harms (2007). "America's individualist culture influences the ability to view others' Perspectives". *The University of Chicago Chronicle*, vol. 26(19). Available: <http://chronicle.uchicago.edu/070712/perspectives.shtml> [Jan. 1, 2017].
- [39] M. Nowak. "Controllers, Non-Controllers and potential future controllers. Preferences on individualism or collectivism in professional work". *Research Papers Of The Wroclaw University Of Economics / Prace Naukowe Uniwersytetu Ekonomicznego We Wroclawiu*, vol. (290), pp. 72-86, 2013.
- [40] InstitutionLinderbaum/Levy. "The Development and Validation of the Feedback Orientation Scale (FOS)". *Journal of Management*, vol. 36(6), pp. 1372-1405, 2010.
- [41] C. Peterson and M.P. Seligman (2004). *Character strengths and virtues: A handbook and classification*. Washington, DC, US; New York, NY, US: American Psychological Association, 2004.
- [42] Sharma. "Measuring Personal Cultural Orientations: Scale Development and Validation". *Journal of the Academy of Marketing Science*, vol. 38(6), pp. 787-806, 2010.

Appendix A

Informed Consent Form

You are being asked to participate in an anonymous survey about the Effectiveness of Teamwork in the Workplace which is being conducted as a course project by graduate students at Carlos Albizu University (CAU).

Our team members are:

Ashley Khawam akhawam031@sunmail.albizu.edu 813-957-3675

Brenda S. Hernandez bhernandez339@sunmail.albizu.edu 682-227-9248

This survey is anonymous, you will not be asked to include your name or any other identifying information. There are no known risks for participation in anonymous online surveys. If you feel uncomfortable with any part of the survey, you may discontinue at any time without any penalty or consequence. In addition, there are no specific benefits to you for your participation.

If you agree to participate you will be asked to complete a series of questions including basic demographic information as well as questions related about the Effectiveness of Teamwork in the Workplace. The survey should take approximately 10-15 minutes to complete. The results of this survey may be published. The data from this project will be stored in a password protected file and only the researchers will have access to it. The data may be combined with the data from other studies and published as part of other papers. No identifying information will be included in any publications. Results will be available to you upon request by contacting any member of our research team in approximately 6 months.

Questions regarding the purpose or procedures of the research should be directed to any member of our research team. If you have a question or concern that cannot be addressed by the primary researcher, you may contact her supervisor and professor for this course project, Toni DiDona, PhD at tdidona@albizu.edu.

Your participation is completely voluntary and you may choose to withdraw at any time with no penalty. You must be at least 18 years of age to participate in this study.

Your completion of the survey serves as your voluntary agreement to participate in this research project and your certification that you are 18 or older.

Appendix B

Demographics

What is your gender?

[male, female]

What is your age in years?

[leave a fill in the blank] years old

Which best describes your racial/ethnic identity?

[White/Non Hispanic; Black/African American; Hispanic/Latino; Other]

What is your marital status?

[single, married, separated, divorced, widowed, other]

How many children, if any, do you have?

[0, 1, 2, 3, 4+]

How many years of formal education have you completed? (If you finished high school you would answer 12, if you have a bachelor's degree you would answer 16, a doctoral degree would be 20) [leave a fill in the blank] years

Which best describes your current job?

[professional, administrative, technical, clerical, self-employed, retired, unemployed, other]

How many years of experience do you have in your current field?

[leave a fill in the blank] years of experience

How many years of experience do you have in your current job?

[leave a fill in the blank] years of experience

What is your annual income?

[0-30k, 30-50k, 50-70k, 70-90k, 90k or more]

Which best describes your household?

[single income household, dual income household, more than 2 income household]

Appendix C

Social Awareness [40]

- I try to be aware of what other people think of me.
- Using feedback, I am more aware of what people think of me.
- Feedback helps me manage the impression I make on others.
- Feedback lets me know how I am perceived by others.
- I rely on feedback to help me make a good impression.

Appendix D

Citizenship/Teamwork [41]

- Don't miss group meetings or team practices.
- Enjoy being part of a group.
- Support my teammates or fellow group members.
- Feel I must respect the decisions made by my group.
- Am not good at working with a group.
- Prefer to do everything alone.
- Work best when I am alone.
- Don't think it's important to socialize with others.
- Lose respect for leaders if I disagree with them.

Appendix E

Judgment/Open-mindedness [41]

- Don't think about more possibilities than the one I like first

Appendix F

Accountability [40]

- It is my responsibility to apply feedback to improve my performance.
- If my supervisor gives me feedback, it is my responsibility to respond to it.
- I feel obligated to make changes based on feedback.

Appendix G

Independence [42]

- I would rather depend on myself than others.
- My personal identity, independent of others, is important to me.
- I rely on myself most of the time, rarely on others.
- It is important that I do my job better than others.