



RESEARCH ARTICLE

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## THE ROLE OF TEAM LEADERSHIP ON CRITICAL THINKING SKILLS – A CASE STUDY OF BUSINESS MAJOR STUDENTS USING A ROLE-PLAY SIMULATION AT THE AMERICAN UNIVERSITY IN THE EMIRATES (AUE)

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### ABSTRACT

Team leadership is essential component employers seek in candidates. This study brings to the forefront a unique discovery showing the impact of team leadership on critical thinking while conducting negotiation role-play activities. The findings highlight the importance of team leadership and how it helps improving critical thinking skills. The nature of this study is qualitative and conducted on graduate level students majoring in business studies at the College of Business Administration at the American University of the Emirates in the United Arab Emirates. The findings have shown that team leadership can impact critical thinking skills while conducting the negotiation role-play simulation.

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### INTRODUCTION

There are shared common characteristics between team leadership and negotiation role-play (Jones, 2015). This is simply because of the cognitive skills associated with the use of critical thinking skills (Jones, 2015). The use of cognitive skills in negotiation role-play is an integral part of achieving a successful negotiation (Jones, 2015, 2018). The nature of negotiation in general and negotiation role-play in particular requires interaction among team members. Therefore, there might be a pre-assigned leader while negotiating or leadership in fact is shared among the group. This is what is referred to as team leadership. Team leadership is defined as collective efforts shared among one group or multiple groups with goals set in place beforehand with no definite assigned leader (Jones, 2015). Team leadership is a field on the rise within organizations across the world (Hill, 2010). It focused on accomplishments and end results (Day *et al.*, 2004). The nature of it is non-traditional. In other words, it requires no assigned leader among the group but rather a leader might emerge during a certain task (Jones, 2015).

Therefore, getting to know teamwork dynamics is important. Teamwork has five dynamics each associated with members, relationships, problem solving, leadership and the organization environment (LaFasto & Larson, 2001). The aim of this research paper was to determine the impact of team leadership on critical thinking skills using the negotiation role-play simulation (NRP).

### Literature review

One of the characteristics of critical thinking is problem solving (Paul, 1992; Paul, Elder & Bartell, 1997; Paul & Elder, 2002) Based on the above, problem solving is part of team dynamics (Halpern, 2003; Halpern 2010). Therefore, there is a concrete relationship between critical thinking skills, team dynamics and team leadership. This is simply because problem solving is a component of team dynamics (LaFasto & Larson, 2001). Hence, it is important to know what critical thinking means. Critical thinking refers to the manual thinking that is also called smarter thinking and referred to as a process of unique head scratching (Kallet, 2014). Employers consider it one of the top required skills especially in the age of advanced technology (Brotherton, 2011). It enables students to think

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logically, evaluate relevantly, and deals with things intellectually (Jones, 2015; Elder 2004). The priority of today's world is on creating a generation that is able to meet the demands of the complex world we live in today who can be effective, creative, communicative, thinkers, problem solvers, and negotiators (Jones, 2018). A generation that is cable of playing a significant role in teams, focus on being part of a team, able to handle complex problems and focus on collaborative efforts. The performance of a team is affected by its collaborative efforts of achieving success (Zaccaro, Rittman & Marks, 2001). Role-plays are conducted in teams mostly. Role-plays resemble a game or simulation (Sutcliffe, 2002). Research has shown that role-plays have several positive benefits. Most importantly, they are effective across disciplines and age groups. They help participants to develop their communication skills (Aspegren, 1999; O'Brien, Freemantle, Oxman, Wolf, Davis & Herrin, 2007). The nature of it requires participants to be active-listeners and use their analytical skills to solve problems in collaboration with other team members in the same group (Perry, 2007). It is categorized into two ways: (1) interactive – the participants act out a designated, pre-scripted role; and (2) non-interactive – the participants take on the roles of specific characters, but their actions are not pre-scripted (Lean, Moizer, Towler, & Abbey, 2006). They have five distinct stages: (1) the instructor's explanation of how the role-play activity will be run, (2) the students' preparation for their roles in the activity, (3) the running of the role-play, (4) the discussion or debriefing after the activity, and (5) instructor's observation conducted during role-play alone or with support of others to ensure proper recording of behaviour and interaction (Cherif, Verma, and Summervill, 1998; Jones, 2015). They increase participants' interest, involvement and understanding of the concepts they are studying; stimulate their thinking both intellectually and socially through interaction with others (Joyce & Weil, 2008; Cherney, 2008) and promote the active participation of all team members (Teahan, 1975; Silver & Silver, 1989).

**Data:** The data were collected from graduate level students at the College of Business Administration (COBA) at the American University in the Emirates (AUE) in the United Arab Emirates. The sample size was relatively small conducted in a classroom setting. Total number of participants was 30 valid sample sizes: 24 males and 6 females. The measures of demographics contained gender, age, education level, and occupation in case students were working while studying. Age of participants' ranged from 20 to 50 years old. Level of education was a mostly graduate level student. Most students were studying than working with the aim of focusing on the completion of their studies.

## RESEARCH METHOD

Business major students were introduced to a role-play simulation. Participants were put into groups of 3-5 members in each group. The aim of which was: 1) encourage negotiation through a social activity of a negotiation role-play, 2) encourage collaboration through team leadership efforts, 3) measure their team leadership style using a Team Leadership Survey (TLS), and 4) measure the impact of critical thinking through the use of such a simulation (Jones, 2015). The simulation was adopted from a role-play exercise titled the Giant Panda found in (Lewicki, Barry, & Saunders, 2015). The goal of it was to negotiate a deal of certain endangered species

of Panda called the Giant Panda bringing them over from China to the Canadian Zoo. Groups were asked to work collaboratively with minimum guidance to be able to observe their teamwork, collaboration and working in groups. TLS is a measurement tool of team leadership developed over an extensive research of over 15 years (LaFasto & Larson, 2001). The instrument focuses on the following six dimensions along with the its means: 1) Focus on the Goal ( $M = 1.38$ ), 2) Ensure a Collaborative Climate ( $M = 1.41$ ), 3) Built the Team's Confidence ( $M = 1.29$ ), 4) Demonstrated Sufficient Technical Know-How ( $M = 1.35$ ), 5) Set Priorities ( $M = 1.34$ ), and 6) Managed Performance ( $M = 1.31$ ). The response rate for each of the questions was 100%. The descriptive data of respondents showed the following: 1) Focus on the Goal (67%), 2) Ensure a Collaborative Climate (68%), 3) Built the Team's Confidence (73%), 4) Demonstrated Sufficient Technical Know-How (70%), 5) Set Priorities (70%), and 6) Managed Performance (75%). The overall survey results showed that the highest percentage of respondents answered that their team leader was able to focus on the goal, ensured a collaborative climate, built confidence of the team, demonstrated sufficient technical know-how, was able to set team's priorities, and managed team performance.

**Analysis of group dynamics:** The researcher developed ten criteria for the purpose of observing group dynamics. The aim of which was to record each group interaction and collaboration among group members of each team. The terms group and teams were used interchangeably during this section. The ten criteria included: 1) Collaborative climate, 2) Knowledge and skills, 3) Trust, 4) Effectiveness of the team, 5) Leadership, 6) Critical thinking, 7) Problem solving, 8) Goal, 9) Communication, and 10) Resources. The rating of each was based on three level measurement criteria highest to lowest as follows: a) Excellent, b) Adequate, and c) Inadequate (see *Appendix A*). The analysis of the ten above criteria has shown that collaboration among teams was significantly excellent. Most of groups possessed adequate knowledge and skills that enabled them to run the simulation successfully. The interaction among groups has shown a high level of trust among team members. Discussions and suggestions were based on high level of questioning that demonstrated the use of participants' critical thinking skills. Leadership was not assigned in advance and none of the groups assigned a member to lead each group. It was rather based on shared collaborative efforts of team leadership. The goal of most was focusing on solving the issue. Most teams were insightful in coming up with solutions and alternatives that showed significant problem solving skills. Most groups showed effective communication skills among each other. This has contributed to successful timely interaction as each group were given 30 minutes from beginning to the end. Timing started when the simulation was distributed and explanation time was deducted from the overall to ensure enough time was given. Each group was given a supporting sheet titled Negotiation Role-Play (NRP) Planning Sheet (see *Appendix B*). Most teams used the sheet successfully to record each of their progress.

**Conclusion:** The findings of this study cannot be associated with any previous studies. This is simply because there was limited academic studies studying the impact of team leadership on critical thinking using a role-play simulation at the time of conducting this study. The study was descriptive in nature. Therefore, the conclusion out of it either

acknowledging or it does not. The study come with the following model:

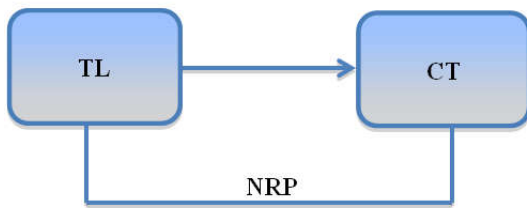


Figure 1. Team Leadership and Critical Thinking Model

The above model shows the relationship between team leadership and critical thinking skills while conducting the NRP. It was acknowledged that team leadership has contributed to the development of critical thinking through the use of NRP simulation. This is simply because that team leadership is described as a dynamic social process and when used in teams it is meant to solve problems (Burke, Stagl, Klein, Goodwin, Salas, & Halpin, 2006). Groups used their social and problem solving skills throughout the simulation. Each of the solution has contributed to the use of their cognitive skills. The overall performance of a team is impacted by the collective efforts of a group using their team leadership and cognitive skills collaboratively (Lester & Kezar, 2012). The functionality and nature of teams is challenging and complex in nature. Therefore, proper planning, dedication and commitment are required to achieve the desired outcome of such a study. Further testing is required on multiple disciplined using the designed observation criteria shown in this study. The later can be used to measure and record students performance in class. It can also be used on organizational level for overall assessment of group dynamics and team leadership across the whole organization with or without the use of the simulation. The model was not tested and requires further testing on the same discipline and others. The males and females behaviour was not recorded and further studies are required. Furthermore, the NRP simulation can work as a fun activity in class and organizations when used along with the appendices provided in this study. The study has concluded that there are five stages of NRP each of which contributes significantly to the success of the NRP depicted in the following model:

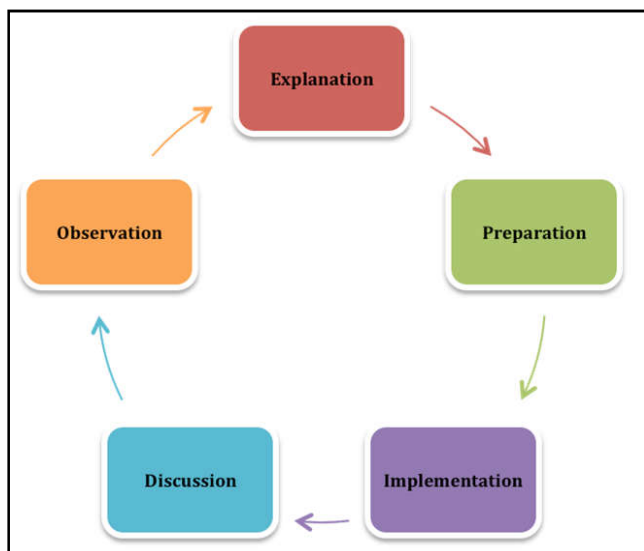


Figure 2. Five Stages of the NRP

Each of those components is essential in the development of the NRP. They can be followed systemically to achieve the desired outcome when conducting a role-play simulation. They can also conduct based on the environment and age group of participants. Maturity of participant can impact the overall performance of the NRP. Further testing is required to measure the impact of such on the performance of the group and the NRP. The model required further testing and can contribute significantly to the research field when associated with other factors when applicable.

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**Appendix A**

**Criteria for the Group Observation Dynamics Assessment of the NRP**

Criteria	Rating		
	Excellent	Adequate	Inadequate
Collaborative Climate	Collaboration between team members was excellent.	Collaboration between team members was fair.	Collaboration between team members was inadequate.
Knowledge and skills	The team members were highly knowledgeable and very skilled.	The team members were moderately knowledgeable and skilled.	The team members lacked adequate knowledge and skills.
Trust	The overall trust among team members was high.	Trust among team members was moderate.	Team members generally lacked trust of each other.
Effectiveness of the team	The team was highly effective in working together.	The team was somewhat effective in working together.	The team lacked effectiveness in working together.
Leadership	The leadership of the team was shared by all members.	The leadership of the team was moderately shared among members.	The leadership of the team was weak and dominated by one person.
Critical thinking	The team demonstrated a high level of critical thinking ability when doing the NRP.	The team demonstrated a moderate level of critical thinking ability when doing the NRP.	The team lacked the critical thinking ability needed to do the NRP.
Problem solving	The team had excellent problem-solving skills.	The team had adequate problem-solving skills.	The team lacked sufficient problem-solving skills.
Goal	Team members focused on the goal of the team.	The team members divided their focus between the team's goal and their individual goals.	The team members lacked the goal objectivity.
Communication	Communication among team members was excellent.	Communication among team members was adequate.	Communication among team members was poor.
Resources	The team made excellent use of the resources provided.	The team made adequate use of the resources provided.	The team did not adequately use the resources provided.

Source: A.Jones, (2015)

**Appendix B**

**Negotiation Role-Play (NRP) Planning Sheet**

Instructions: Place your response next to or immediately below the question.

Negotiation Title:	Your Name:
Your Role:	Date:
7. Briefly State the issue of your negotiation:	
8. What is your goal you want to achieve from this negotiation?	
3. Identify the resistance point you might face while negotiating?	
4. What strategy will you use?	
a. Briefly describe your strategy?	
b. Why did you choose this strategy?	
c. Identify a backup plan/best alternative strategy in case you fail in your first negotiation?	

Source: A.Jones, (2015)

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