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Does participation in model UN develop higher order thinking? A study of Indian students

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Abstract
Purpose: This paper aims to explore the effect of participation in Model United Nations conferences by Indian school and college students on development of their higher order thinking skills and educational and career choices.
Methodology/approach: A questionnaire survey was conducted for school and college students who have experience of MUN participation with a sample size of 150.
Findings: The respondents indicate that participation in MUN has led to development of all nine higher order thinking skills: critical, team, problem solving, communication, personal, autonomous, dealing with changes, time and creative. Team skills and communication skills were found to receive the highest rating in terms of perception of being developed through MUN participation. Most respondents chose technical fields for further education and entrepreneurship for a future career.
Practical implications: The findings of this paper suggest that more schools and colleges should use MUN as a tool to enable development of higher order thinking skills among their students.
Originality/value: The paper is the first to explore the connection between MUN participation and higher order thinking skills of Indian school and college students.

Keywords: model united nations, India, simulation, higher order thinking, skill development, experiential learning

Introduction

Among the various exercises used for experiential learning, the Model United Nations (MUN) is one of the most popular simulations around the world. It is usually used in courses in the areas of political science and international relations to give participants a better understanding of the realities of their field (Hammond and Albert, 2019) [12].

The trend of participating in MUN is increasing world-wide, not just among college students, but among school students too (Datta, 2013) [8]. This trend has been observed among Indian school and college students too, even those who are not pursuing their education in political science or international relations.

This research paper treats MUN as a tool of experiential learning in general, instead of one confined to a particular area of study and aims to analyse its impact not on conceptual knowledge, but on higher order thinking skills. The paper explores the extent to which students perceive that they have developed certain higher order thinking skills as a result of participation in MUN, and how their expectations about their further education and career are influenced by MUN.

While there are several studies that address similar objectives in the Western context (Coticchia, Calossi and Cicchi, 2020) [7], there is a lack of research on the learning effects of Model United Nations simulations on higher order thinking skills of Indian students. This research paper aims to fill the gap in the existing research by attempting to understand the benefits that students believe they have obtained from their MUN participation, especially in terms of higher order thinking skills.

It seeks to answer the following research questions:

RQ 1: How is the MUN perceived as an experience that helps improve higher order thinking skills (critical, team, problem solving, communication, personal, autonomous, dealing with changes, time and creative)?

RQ 2: What are the views of students who participate in MUN on their future area of study and work?

The paper is organized as follows. The next section deals with an in-depth literature review about higher order thinking skills, experiential learning through simulations and the use of MUN to develop higher order thinking skills. This is followed by the research methodology adopted and the findings of the questionnaire survey. Finally, the discussion section provides the practical implications of the study for the use of MUN as a tool to develop higher order thinking skills among Indian school and college students. It also discusses limitations and further scope for research.

Literature Review

Higher Order Thinking Skills

In response to the question of what constitutes higher order thinking, Ennis (1987) [10] believes that the concept iterates the fact that there is more to learning than the mere memorization of facts and figures.

According to Ivie (1998) [3], the concept of higher order thinking reflects these three elements – a) using abstract structures for thinking b) organizing information into an integrated system c) applying sound rules of logic and judgment

Fostering students' higher order thinking skills is considered an important educational goal for all students. (Zohar and Dori, 2003) [11], and it has been discussed by several researchers (e.g., Adey, 1999; Burden & Williams, 1998; De Bono, 1985; Perkins & Grotzer, 1997; Resnick, 1987; Tishman, Perkins, & Jay, 1995) [1, 5, 9, 22, 24]. Each study has its own definition of thinking and of skills and various options for how they can be inculcated among students (Marzano *et al*., 1988) [18].

Resnick (1987) [24] states that though higher order thinking

skills may be difficult to define precisely, they can be recognized when they occur. Some of the characteristics of higher order thinking are: "it is nonalgorithmic, it tends to be complex, it often yields multiple solutions, and it involves the application of multiple criteria, uncertainty, and self-regulation" (Resnick, 1987) [24].

Zohar and Dori (2003) [11] believe that the term higher order thinking skills may also be used to differentiate cognitive activities that move beyond the stage of understanding and lower level application according to Bloom's taxonomy (Bloom, 1956) [4]. Based on Bloom's taxonomy, memorization and recall of information are classified as lower order thinking whereas analyzing, synthesizing, and evaluating are classified as higher order (Bloom, 1956) [4]. Other activities that are considered as higher order include constructing arguments, asking research questions, making comparisons, solving complex problems, dealing with controversies, and identifying hidden assumptions (Zohar and Dori, 2003) [11].

Experiential Learning: Learning by simulations and games

Experiential learning refers to learning by doing and usually consists of experiments, simulations, and role-play (Sj€ostedt, 2015). Its foremost characteristic is that it turns students into active participants rather than being passive observers in the classroom (McCarthy 2016). Kolb (1984) defined experiential learning as, "the process whereby knowledge is created through the transformation of experience."

Experiential learning can take many different forms such as service learning, study abroad, undergraduate research, internships, leadership experience, and simulations or game-based methods (Hammond and Albert, 2019) [13].

Several researchers have documented the benefits of experiential learning. According to Perrin (2014) [23] experiential learning allows students to identify the change they have created, leading to an increased sense of engagement and motivation". In the experiential learning environment, working on projects with real-world implications increases student confidence and efficacy, which correlates positively to classroom skills as well as skills needed for future success in one's career (Perrin 2014) [23]. Other studies have demonstrated various benefits of experiential learning on a student's learning, such as a positive outcome on student success (Smart and Csapo, 2007), development of higher order thinking skills and increase in student ability to build positive relationships (Coker *et al*. (2017) [6].

Games and role-playing simulations are the most commonly used tools of experiential learning (Coticchia *et al*, 2020) [7]. The use of simulations for the purpose of education is based on the student-centered approach (Jonassen and Land, 2000) [16] and on the emerging focus of "students as producers of knowledge" (Obendorf and Randerson, 2012, p. 1) [21]. Existing evidence shows how the use of simulations leads to an increase in students' substantive knowledge as well as critical and analytical thinking skills (Shellman and Turan, 2006) [25].

Learning Higher Order Thinking Skills through MUN

MUN is a form of experiential learning that encourages learnings through a simulation in which students role-play a delegate and/or ambassador of a United Nations Member-State (Hammond and Albert, 2019) [12].

There are very few studies that explore the learning effects of MUN on students. Hazleton and Jacob (1983) [14] were among the first to study the benefits of the National Model United Nations (NMUN) and they demonstrated that most respondents perceived their preparation and participation in the NMUN as being beneficial. Hazleton and Mahurin (1986) [15] found that students who participated in MUN had higher levels of knowledge of diplomatic strategies, better understanding of key concepts and complexities and more positive attitudes (Hazleton and Mahurin, 1986) [15].

McIntosh (2001) [20] believed that the MUN is a very good supplement to more traditional teaching methods and helps in building social interaction or social confidence, as well as peer-to-peer teaching. Ginn, Albert, and Phillips (2011) [13] argued that MUN programs can develop academic and social integration and lead to increased student persistence, retention, and graduation rates.

Ginn *et al.* (2015) [12] found that MUN brings a strong positive impact on student intellectual skills, especially higher order employable skills such as critical thinking, team-working, problem-solving, effective communication, personal development, and application of knowledge. Taylor (2013) [6] found a range of skills acknowledged by students themselves as having been enhanced by their participation in MUN. Some of these are: communication and public speaking, negotiation, problem solving, research, writing professionally and teamwork. Datta (2013) [8] maintains that participating in MUN helps a student in multiple ways. The MUN experience leads to improvement in their research, written and oral communication, negotiation, persuasion and problem-solving skills. Additionally, the experience of interacting with and persuading others to come to a resolution on conflicting issues helps in developing leadership qualities and team building skills which will later help them in any business or career setting (Datta, 2013) [8].

Hammond and Albert (2019) [12] believe that these benefits accrue because the MUN simulation provides experiential learning, which assists in embedding different levels of knowledge.

However, all the studies reviewed have been conducted in Western countries. There is a lack of studies that measure the learning effects of Model United Nations simulations on higher order thinking or employable skill sets of Indian students. This research paper aims to fill the gap in the existing research by attempting to understand the benefits that students believe they have obtained from their MUN participation, especially in terms of higher order thinking skills.

Research Methodology

A primary survey was conducted among Indian school and college students who had participated in Model United Nations conferences with ages ranging from 11 to 25 years. The sample size for the students' survey was 150, out of which 128 responses were received, generating a response rate of 85 percent. The research instrument was a questionnaire with close-ended questions that was administered electronically via email and WhatsApp. The research instrument was based on existing instruments used by Hammond and Albert (2019) [12] and Coticchia *et al* (2020) [7], adapted to suit the current study. The sampling method used was judgement sampling, where students who

had a history of MUN participation were included in the sample.

Findings

Demographic Profile

The sample of 128 had a mix of school and college students across genders and age groups. Figures 1 to 3 show the demographic composition of the sample.

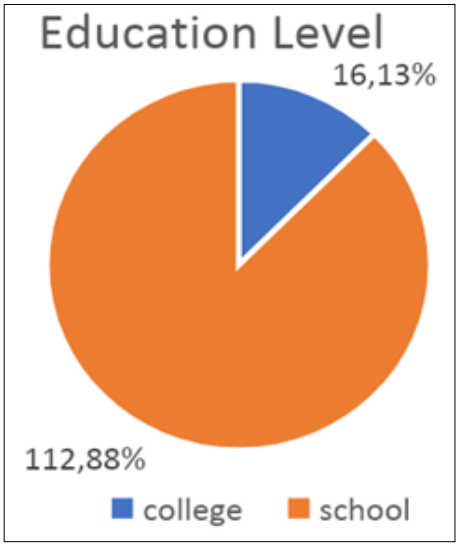

Fig 1: Respondents' Education Level

Eighty-eight percent of the respondents were school students, while 12 percent were college students.

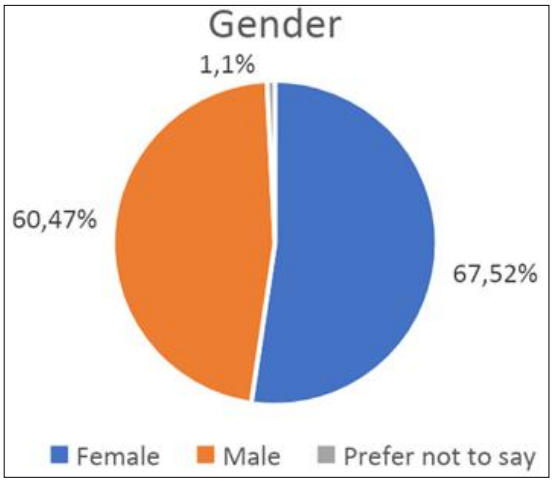

Fig 2: Respondents' Gender

The sample had an almost equal mix of male and female students, with female students being slightly more at 52 percent.

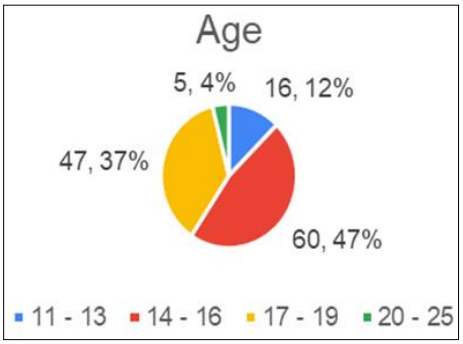

Fig 3: Respondents' Age

The maximum number of respondents were in the age group of 14-16 years, followed by 17-19 years, which typically includes high school and college students in their first and second years, as these are the age groups that are most active in MUN conferences.

Perception of Development of Skills after MUN Participation

Table 1 below shows the scores given by respondents on a scale of 1 to 5 (with 1 being the lowest and 5 being the highest) to indicate the extent to which they felt that they had developed a particular skill as a result of participation in Model United Nations conferences.

Critical Skills: While participating in an MUN, students are required to scale widespread global issues to relatively smaller perspectives, develop a personal understanding of a country that they are representing and also take into account different interests, which helps hone their critical skills. These skills are especially essential while dealing with large amounts of data, which is reflected in the responses: respondents have given the highest mean rating (3.77) to 'Distinguish between different types of information to arrive at conclusions'. Overall, the respondents have a mean rating of 3.69 for Critical Skills.

Team Skills: Respondents have given a mean rating of 3.87 to Team Skills, implying that their experience of participating in MUN, particularly (here you mention a couple of team activities that are required to be done as part of MUN) helps them in developing the skills of working effectively in teams. Of all the Team Skills, the highest rated (4.07) team skill was the ability to 'Interact well with others and work cooperatively as a team members' (4.07) followed by 'work effectively with others to complete tasks and achieve results' (3.92).

Problem-solving Skills: In the context of an MUN, problem solving not only requires an intricate understanding of the country one is representing but also an understanding of allies and enemies, economical stances and political regimes of other nations. This experience is very useful in building overall problem-solving skills, which could be reflected in the mean perception rating of 3.67 and a mean rating on 3.79 to 'Consider others' ideas to solve problems'.

Table 1: Self-reported Perception of Development of Skills after MUN Participation

Skill Group	Skill Description	Average	Median	Mode	GRP Mean
Critical Skills	Relate and compare data from different sources, identify issues and obtain relevant information	3.59	4	4	3.69
	Apply decision-making processes and consider how to find solutions to problems	3.66	4	4	
	Review a range of different points of view and select the most appropriate conclusion	3.76	4	5	
	Distinguish between different types of information to arrive at conclusions	3.77	4	5	
Team Skills	Build and develop working relationships with academic staff, peers, and colleagues	3.87	4	4	3.87

	Work effectively with others to complete tasks and achieve results	3.92	4	4	
	Interact well with others and work cooperatively as a team member	4.07	4	5	
	Understand how to gain the attention of others in a team or group	3.62	4	5	
Problem Solving Skills	Frame questions to gain information from which to draw conclusions	3.40	4	4	3.67
	Make good use of verbal reasoning skills, able to handle complex data, and make selective use of information	3.72	4	5	
	Explore more than one solution in order to solve a problem	3.76	4	4	
	Consider the ideas of others to help solve problems	3.79	4	5	
Communication Skills	Understand the differences in presenting types of documents—e.g., reports, essays, summaries	3.71	4	4	3.83
	Check written work for errors before submission	3.91	4	5	
	Express and convey ideas appropriately and accurately in writing	3.85	4	5	
	Demonstrate that information being received is understood by using a range of verbal and nonverbal signals	3.83	4	4	
Personal Skills	Recognize and develop skills and competencies required for learning and future employment	3.61	4	4	3.79
	Develop opportunities for learning activities through current and future roles	3.77	4	5	
	Recognize the importance and value of activities outside the curriculum—e.g., work experience, sports, clubs	3.98	4	5	
	Identify when extra support and help may be useful	3.80	4	5	
Autonomous Skills	Aspire to and maintain a results-driven approach where appropriate	3.48	4	4	3.71
	Focus on results and use different strategies to achieve targets	3.76	4	4	
	Apply suitable approaches and put in extra effort if required in order to meet tight deadlines	3.75	4	5	
	Work without close supervision and use own initiative	3.86	4	4	
Dealing with Change Skills	Use effective planning and preparation to anticipate and overcome problems	3.50	4	3	3.64
	Maintain effectiveness in changing environments	3.68	4	3	
	Make appropriate adjustments when undertaking tasks	3.72	4	5	
	Set own goals and review these systematically	3.65	4	5	
Time Skills	Establish a course of action for self and others to achieve goals	3.65	4	4	3.74
	Plan and prepare effectively for assignments	3.88	4	5	
	Plan day in order to manage time more effectively	3.67	4	5	
	Prioritize own and others' work	3.75	4	5	
Creative Skills	Generate and recognize best practice and apply imaginative ideas to different situations	3.70	4	4	3.67
	Work out a preferred course of action	3.66	4	4	
	Think laterally and encourage others to do so and consider how they approach an unconventional task	3.65	4	5	

Communication Skills: Participants in an MUN represent a member nation in the global community and are therefore required to be politically correct, linguistically accurate and persuasive and diplomatic in communication, both written and verbal. This leads to enhanced communication skills, as reported by respondents who have given a mean perception rating of 3.83 to Communication Skills. MUN conferences inculcate a constant pursuit towards precision and correctness of both speech and writing, which is confirmed by respondents rating the skill "Check written work for errors before submission" a mean value of 3.91.

Personal Skills: MUN is becoming an increasingly common extracurricular activity that school and college students take up outside their curriculum academic requirements. Most respondents feel like that they have been able to 'Recognize the importance and value of activities outside the curriculum—e.g. work experience, sports, clubs' and have given it a mean perception rating of 3.98, in addition to an overall mean of 3.79 to Personal Skills.

Autonomous skills: The pursuit towards consensus allows MUN participants to employ various methods of deliberation and effective lobbying. Respondents too have noted that they 'Aspire to and maintain a result-driven approach where appropriate' and 'Focus on results and use different strategies to achieve targets'. The mean values of 3.48 and 3.76 help us conclude this.

Dealing with changes Skills: This group of skills is composed of several sub-skills such as effective planning and preparation, effectiveness in changing environments, appropriate adjustments when undertaking tasks and setting and systematic review of goals. Representing a member nation in an MUN simulation gives participants the opportunity to work without any supervision and solely depend on themselves for research, lobbying in committees and drafting of speeches and substantive paperwork. Respondents have indicated that this leads to development of skills that help deal with change (3.64), especially 'Work without close supervision and use your own initiative" (3.86).

Time Skills: MUN conferences train participants to be better time managers both before and during the conference. Usually, allotments for country portfolios and committees are provided a short while (typically a month to 15 days) before the conference. Delegates are expected to understand and analyze both the problem at hand and the country's stance in the committee before the conference through widespread research. In committee, furthermore, with a mere 2-3 days' time at hand delegates work towards consensus making and drafting resolutions to solve agendas at hand. Respondents feel that the development of time management skills can be extended to assignments outside the MUN, as evidenced by the mean perception rating of 3.74 given to this skill group.

Creative Skills: MUN participation requires both - an

understanding of historical context and a focus on fresh solutions to global issues Innovation and originality are rewarded heavily and participants need to employ imagination, intuition, and humanitarian regard. The respondents of this study clearly agree that MUN helps develop creative skills in general as seen by the mean perception score of 3.67 and specifically the skill of 'applying imagination to different situations' (3.70).

Table 2: Mean Perception of Skill Development across Age Groups

Age (in years)	Critical Skills	Team Skills	Problem Solving Skills	Communication Skills	Personal Skills	Autonomous Skills	Dealing with Change Skills	Time Management Skills	Creative Skills
11- 13	2.81	3.22	2.95	3.52	3.13	3.02	3.12	3.30	2.92
14- 16	3.75	3.96	3.68	3.81	3.82	3.80	3.61	3.70	3.70
17- 19	3.93	4.03	3.89	3.92	3.97	3.83	3.82	3.97	3.88
20- 25	4.19	3.60	4.25	4.41	4.38	4.28	4.16	4.16	4.21

Responses of students in the age group of 11-13 years showed lowest mean rating to critical skills and problem-solving skills while majority of them agreed that they had developed good communication skills. The students in the age group of 14 -16 years were of the opinion that they had acquired the skill of dealing with change. This age group also showed one of the highest ratings for acquisition of time management, creative and team skills. The age group of 17-19 years felt that they had developed not only team skills but also autonomous skills. The least commonly acquired skill for this age group was dealing with change. The respondents in the age group of 20-25 years believed that their communication skills were a direct result of while team skills were the least attributed to participation in MUN.

Overall, the mean perception of having acquired each skill as a result of MUN participation was higher in higher age groups.

Perspectives on Future Areas of Study

Table 3 shows the perspectives of respondents towards future areas of study. The aim of this section is to preliminarily investigate how, and to what extent, MUN participation influences students' views on future studies.

Table 3: Respondents' Perspectives on Area of Study

Subject	School Students (%)
Economics	14.9
Law	12.6
Languages	3.4
Political Science	8.0
Technical or Scientific (Science/Engineering/Medicine)	39.1
Undecided/Not Sure	21.8
Others	11.5
Total	100.0

From the group of high school students, the majority, almost 32% were more likely to study a technical or scientific subject such as science, engineering or medicine. Almost 18 per cent were not yet sure about what they wanted to study in college.

MUN exposes participants to a variety of issues that concern multiple areas, fraternities, professions and schools of thought. In an MUN setting one can deal with the environment in the UNEP (United Nations Environment Program), discuss and deliberate on the global economy in the WMF or ECOSOC, work to denuclearize and disbar countries in the UNGA DISEC or fight for women's rights in the UNW. Highly technical issues like space prospects, nuclear treaties, right to privacy on the internet and others may spark interest in related fields of technology. Since conferences require a thorough understanding of the contact of the issue at hand, participants indulge in extensive research, and in the pursuit, develop a keen interest for a particular field. This is reflected in the respondents' choices who have successfully extended their probable interest in a field outside committee and grew passionate about it. Leading them to wanting to study the same in college.

Perspectives on Future Work

Table 4: Respondents' Perspectives on Future Work Grouped by Gender

Future Work	Female (% of respondents)	Male (% of respondents)
Academics and Research	7.8	8.7
International Organizations	5.9	0.0
Arts and Music	2.0	0.0
Chef	2.0	0.0
Civil Service	13.7	13.0
Commerce	3.9	6.5
Corporate Lawyer	3.9	0.0
Diplomatic Corps	3.9	2.2
Doctor/Physician	2.0	0.0
Economics/Finance	2.0	10.9
Entrepreneurship	9.8	23.9
Journalism	3.9	2.2
Management	9.8	6.5
Marketing and Communication	11.8	2.2
Private Practice	2.0	8.7
Psychology	9.8	0.0
Travel Management/Designing	2.0	0.0
Webtoon Creator	2.0	0.0
Armed Forces	0.0	2.2
Law	0.0	4.3
Politics	0.0	6.5
Nuclear Scientists	0.0	2.2
Ai Developer	2.0	0.0
Undecided/Not Sure	25.5	17.4
Total	100.0	100.0

The highest proportion of male students who have MUN experience saw their futures as Entrepreneurs (23.9%) while most of the female students were yet indecisive of their work in future (25.5%). For female students who were sure about their future work, the highest percentage of respondents chose to work in civil services (13.7%) and marketing and communication (11.8%) respectively.

Practicing diplomacy in an MUN simulation frequently requires delegates to be effective communicators, leaders, innovators and problem solvers. Furthermore, Model UN also enables individuals to role play in different capacities

similar to a business setting or a leadership position. As ambassadors, participants are required to market the conference and as organizers they encounter differences in opinions, build and lead teams and positively influence others. Individuals also work for finances and look over the human resource side of a conference (chairpersons, secretariat members etc.) All of these traits are fundamentally the prerequisites of building an entrepreneurial spirit and skill set. Exposure to these activities and inculcation of these skills not only leads to an interest in the field of entrepreneurship but also enables them to cater to global consumers and demand. This is evident from the analysis of the respondents who either choose to innovate in the field of entrepreneurship or serve in civil service. Contribution to society stands elemental to both of these fields: something that participants in MUN conferences aim to pursue. The extension of skills inculcated through conferences also enables these respondents to feel confident and prepared for a career in marketing and communication.

Discussion

As already discussed, there is a general consensus in the literature that sees participation in simulations as beneficial to students' skills (Coticchia *et al*, 2020) [7]. This research paper attempts to identify the impact of MUN as a tool of experiential learning and simulation, on higher ordered skills. This has been done by determining whether specific skills that can be considered higher order are developed by participation in MUN, and uses the already-validated scale of Hammond and Albert (2019) [12] for this purpose.

This paper argues that participation in MUN conferences can enhance student skills, especially higher ordered skills. All the nine higher order thinking skills as described by Hammond and Albert (2019) [12] - critical, team, problem solving, communication, personal, autonomous, dealing with changes, time and creative – are found to be developed. Team Skills and Communication Skills are perceived to be most developed as a result of participation in MUN simulations. The increase in skills sets was found across both genders and all age groups. Technical areas such as science, engineering and medicine were the most common preferred areas of study, and entrepreneurship, civil services and marketing and communication were the most preferred future work.

This research has several practical implications. Foremost is the indication that MUN is a suitable tool to enhance higher order thinking skills among school and college students, even if their area of study is not political science or international relations. This finding will help schools and colleges arrive at a decision to use the MUN simulation tool to develop higher order thinking skills among their students. It will also enable students who have hitherto not participated in MUN to begin doing so considering the advantages in terms of skill development.

Just like any research, this study has some limitations. First, though students in this study reported higher skills sets after participating in MUNs, the skill may not be improved solely by the MUN participation. The improvement may be a result of several factors. Second, as with all self-reported surveys, the use of self-assessment introduces some bias into the study and serves as another limitation of this study. Third, the respondents have experienced MUN at different conferences and for various durations. This may lead to a lack of uniformity in terms of their experience and resulting perception of skill sets. Fourth, the findings of this paper are based on a small sample and may not be generalized to a larger student body.

Further research can examine the underlying reason for students' perception of their skills sets and changes in these skills over their course of their MUN experience as well as the role played by the MUN. Other researchers can try to confirm and generalize these findings with larger samples.

Overall, this research paper contributes to the literature on the use of simulations, especially MUN, as learning tools and demonstrates the range of higher order thinking skills that participants perceive an improvement in as a result of MUN.

References

1. Adey P. The science of thinking, and science for thinking: A description of Cognitive Acceleration through Science Education (CASE) [INNODATA Monographs-2]. Geneva, Switzerland: International Bureau of Education, UNESCO, 1999.
2. Andrew Phillips. "Modeling Student Success: How Model UN Programs can Enhance Performance and Persistence." Questions in Politics. 2015; 2:167-195.
3. Ausubel's Learning Theory: An Approach to Teaching Higher Order Thinking Skills Author(s): Stanley D. Ivie Source: The High School Journal, Oct. - Nov. 1998; 82(1):35-42
4. Bloom B. Taxonomy of educational objectives: Handbook-I. Cognitive Domain. New York: David McKay, 1956.
5. Burden R, Williams M. Thinking through the curriculum. London and New York: Routledge, 1998.
6. Coker Jeffrey Scott, Evan Heiser, Laura Taylor, Connie Book. "Impacts of Experiential Learning Depth and Breadth on Student Outcomes." Journal of Experiential Education. 2017; 40(1):5-23. doi: 10.1177/1053825916678265.
7. Coticchia F, Calossi E, Cicchi L. "A Reality Check for Students? How Participating to the Model United Nations influences skills, IR Perceptions and Perspectives on Future Career" Politics. 2020; 40(2):245-261.
8. Datta R. Teaching the UN through Experiential Education, 2013. Retrieved from https://www.un.org/en/chronicle/article/teaching-un-through-experiential-education
9. De Bono E. The Cort thinking program. In J. W. Segal, S. F Chipman, & R. Glaser (Eds.), Thinking and learning skills (Vol. 1, pp. 389-416). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc, 1985.
10. Ennis RH. A taxonomy of critical thinking dispositions and abilities. In J B. Baron & R. J. Sternberg (Eds.) Teaching thinking skills: Theory and practice (dd. 9-26). New York: W. H. Freeman, 1987.
11. Fostering students 'higher order thinking skills is considered an important educational goal. Although learning theories see the development of students' thinking as an im- portant goal for all students. (Zohar and Dori), 2003.
12. Ginn Martha Humphries, Craig Douglas Albert, Andrew Phillips. "Leaving the Classroom to Stay in College: Investigating the Relationship between Model UN Study Away and Retention." Proceedings of the

Georgia Political Science Association, 2011, 1-17.
13. Ginn Martha Humphries, Craig Douglas Albert, Lance Y Hunter, Kirsten Fitzgerald, Hammond A, Albert CD, *et al*. Learning by Experiencing: Improving Student Learning Through a Model United Nations Simulation. Journal of Political Science Education. 2019; 16(4):441-458. doi:10.1080/15512169.2018.1548967
14. Hazleton William A, James E Jacob. "Simulation International Diplomacy: The National Model United Nations Experience." Teaching Political Science. 1983; 10(2):89-98. Doi: 10.1080/00922013.1983.9942346.
15. Hazleton William A, Ronald P Mahurin. "External Simulations as Teaching Devices: The Model United Nations." Simulation & Games. 1986; 17:149-171. Doi: 10.1177/0037550086172002.
16. Jonassen DH, Land SM. Theoretical Foundations of Learning Environments. Mahwah, NJ: Lawrence Erlbaum Associates, 2000.
17. Kolb David Y. Experiential Learning: Experience as the Source of Learning and Development. New Jersey: Prentice-Hall, 1984.
18. Marzano RJ, Brandt RS, Hughes CS, Jones F, Presseisen BZ, Rankin SC, *et al*. Dimensions of thinking: A framework for curriculum and instruction. Alexandria, VA: Association for Supervision and Curriculum Development, 1988.
19. McCarthy Mary. “Experiential Learning Theory: From Theory to Practice.” Journal of Business & Economics Research. 2016; 14(3):91-100. doi: 10.19030/jber.v14i3.9749.
20. Mcintosh D. The Uses and Limits of the Model United Nations in an International Relations Classroom. International Studies Perspectives. 2001; 2(3):269-280. doi:10.1111/1528-3577.00057
21. Obendorf S, Randerson C. The Model United Nations Simulation and the Student as Producer Agenda. Enhancing Learning in the Social Sciences. Working paper. University of Lincoln, 2012.
22. Perkins DN, Grotzer TA. Teaching intelligence. American Psychologist. 1997; 52:1125-1133.
23. Perrin Jeffrey. "Features of Engaging and Empowering Experiential Learning Programs for College Students." Journal of University Teaching & Learning Practice. 2014; 11(2):1-12.
24. Resnick L. Education and learning to think. Washington, DC: National Academy, 1987.
25. Shellman Stephen M, Kür}ad Turan. "Do Simulations Enhance Student Learning? An Empirical Evaluation of an IR Simulation." Journal of Political Science Education. 2006; 2:19-32. Doi: 10.1080/15512160500484168.
26. Sjöstedt Roxanna. "Assessing a Broad Teaching Approach: The Impact of Combining Active Learning Methods on Student Performance in Undergraduate Peace and Conflict Studies." Journal of Political Science Education, 2015. doi: 10.1080/ 11:204-220. 15512169.2015.1030502.
27. Smart Karl, Nancy Csapo. "Learning by Doing: Engaging Students through Learner-Centered Activities." Business Communication Quarterly. 2007; 70(4):451-457.
28. Taylor K. “Simulations Inside and Outside the IR Classroom: A Comparative Analysis”. International Studies Perspectives. 2013; 14(2):134-149.
29. Tishman S, Perkins D, Jay E. The thinking classroom. Boston: Allyn & Bacon, 1995.