A Simulation as a Pedagogical Tool for Teaching Professional Competencies in Public Relations Education

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ABSTRACT

Research indicates there are common competencies that are required by the public relations industry, such as business acumen, communication skills, and critical thinking. This study examined how the use of a simulation exercise could assist students in developing these competencies. The simulation exercise was blended with other pedagogical tools to assist in teaching crisis communications to a group of post-graduate public relations students. A mixed methods methodology was used. Situational judgment tests were exclusively designed for this research, in consultation with a team of public relations professionals. These tests were used for the quantitative analysis while a focus group and reflection were used for the qualitative analysis. The exercise was found to have a positive effect on the development of competencies in students. The findings are useful for establishing competency standards for entry-level preparation and for identifying pedagogical approaches that may assist students in preparing for careers in the industry.

Keywords: public relations, pedagogy, competencies, situational judgment tests, experiential learning, blended learning

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Higher education institutions are grappling with the challenges of meeting the modern learning needs of students and the ever-evolving demands of industry. Research indicates there are competencies needed within the public relations industry such as critical thinking and communication skills (Barnes & Tallent, 2015; Commission on Public Relations Education, 2018; Flynn, 2014; Madigan, 2017). The purpose of this study was to explore if specific pedagogical techniques, including a simulation exercise, could assist students in developing these competencies. To achieve this aim, a research study was designed based on Picciano's (2009) multimodal model of blended learning and Kolb's (2015) experiential learning cycle. A simulation exercise was blended with other face-to-face and online pedagogical tools and used to assist in teaching students to manage media communications in a crisis situation.

The study was conducted with post-graduate public relations students, using a concurrent mixed methods methodology. To assess the efficacy on the development of the competencies in students, situational judgment tests were designed specifically for this study, in consultation with a team of public relations professionals. A focus group and a reflection formed the qualitative analysis. The findings of the research are of benefit to the public relations industry in that they could help with the testing of competencies required at entry-level into the profession and in the identification of pedagogical approaches that have the potential to assist public relations students in preparing for careers in the industry.

Competencies Required by the Public Relations Industry

The higher education sector has been in a period of significant transition over the last two decades as a result of the evolution of technology, widespread participation in education, and changing competency demands from the industry regarding entry-level preparation (Price Waterhouse Coopers, 2018; Strategy Group, 2011). Flynn (2014) postulated that 21st century public relations practitioners are required to

have a "different skill set and competencies [than] their counterparts" who practiced before them (p. 363). In its 2018 report on the Workforce of the Future, Price Waterhouse Coopers (PWC) stated: "We are living through a fundamental transformation in the way we work. Automation and 'thinking machines' are replacing human tasks and jobs and changing the skills that organisations are looking for in their people" (p. 3). In a survey of academic and industry leaders, the IBM Institute for Business Value found that 71% of industry recruiters had difficulty finding applicants with sufficient practical experience (King, 2015). The IBM study also revealed that the skills leaders required in the industry were the very skills graduates lacked: problem solving, collaboration and teamwork, businesscontext communication and flexibility, agility, and adaptability. In its most recent report on the needs within the PR industry, the Commission on Public Relations Education (2018) echoed those desires for problem solving—"the most desired abilities are creative thinking, problem solving, and critical thinking" (p. 15). Alongside problem solving, other communication skills are requirements for senior public relations professionals, whose role is ultimately to communicate on behalf of an organization in a written or oral manner.

The essential skill of critical thinking is defined by the Foundation for Critical Thinking (n.d.) as:

That mode of thinking—about any subject, content, or problem—in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing, and reconstructing it. . . . Critical thinking is self-directed, self-disciplined, self-monitored, and self-corrective thinking. . . . It entails effective communication and problem-solving abilities. (para. 2)

A study by Barnes and Tallent (2015) focused specifically on teaching critical thinking skills to Millennials (people born between 1981 and 2000) in public relations classes. They referred to an ability to think critically as

vital in public relations professionals and recommended that it should be taught in communication courses.

Communication skills are clearly foundational in public relations, as can be seen in this definition of the field: "the art and social science of analyzing trends, predicting their consequences, counseling organization leaders and implementing planned programs of action which will serve both the organization's and the public interest" (Theaker, 2016, p. 5). These "planned programs of action" can be interpreted as strategies that assist an organization in communicating its messages with its publics, including through the media. Thus, in addition to general oral and written communication skills, an ability to communicate specifically with the media is a vital skill required by all public relations professionals.

In addition to skills such as writing, content creation, and problem solving, the Commission on Public Relations Education's (2018) latest report lists items entry-level PR practitioners need to know, including business acumen. The CPRE report defines the term business acumen as "understanding how business works, to provide the contextual significance of public relations" (p. 28). Following the Oxford Dictionary of English's (n.d.) definition of acumen, competency in business acumen would indicate an ability to make good judgments and quick decisions that are appropriate in business. Business acumen has also been explained as a "good appreciation of business, business strategy, and business intelligence" (Gregory, 2008, p. 220). Flynn (2014) proffers that business acumen is a competency that has been widely reported in the literature and by industry professionals as important to public relations practice. In their article published on the Institute of Public Relations' (IPR) website titled "Public Relations and Business Acumen: Closing the Gap," Ragas and Culp (2014) stated, "As the public relations industry evolves, the need for greater business acumen among professionals working in all levels of the field . . . has never been more important" (para. 1). They added that

"to be a strategic partner to clients requires an intimate understanding of business, and how your counsel can advance organization goals and objectives" (Ragas and Culp, 2014, para. 1).

Blended Learning and Learning Theory

While the industry is demanding graduates with more specific skills, higher education institutions are grappling with larger class sizes and a more diverse student population comprising a range of ages, genders, nationalities, and academic abilities (Strategy Group, 2011). To address the increased diversity of the student population, higher education is required to be more creative in its curricula design and in its teaching methods. As the Irish Strategy Group led by Dr. Colin Hunt stated, "we need new structures that better reflect the diverse learning requirements of our students" (p. 4). At an institutional level, this has resulted in a move away from the traditional didactic approach of teaching toward a more student-centered approach, involving a more interactive style of learning (Kember, 2009). This has translated to curriculum design that encourages active learning and employs pedagogical techniques that can assist in the development of what the Strategy Group refers to as the "high-order knowledge-based skills" (p. 4).

Blended learning is an educational approach that combines traditional and contemporary teaching and learning methods. Cost effectiveness, access, flexibility, and an ability to address diverse student needs are cited among its benefits (Bonk & Graham, 2006). "Blended learning" is a term that has evolved in tandem with the evolution of technology over the last 20 years and although it has many definitions, it is most commonly used to describe a program or module where face-to-face and online teaching methods are combined (Partridge et al., 2011).

There are many models of blended learning available, one of which is the multimodal model of blended learning (Picciano, 2009). This model offers clear direction on basic pedagogical objectives and

approaches that can be employed to assist the instructor in achieving the required outcomes. This model recognizes the role of blended learning in addressing the varying learning needs in a group of learners. Picciano (2009) states that this model caters to the diverse needs of a modern classroom that may include different personalities, generations, and learning styles. In the multimodal model, six basic pedagogical objectives are recommended when designing a blended learning program, including content, social and emotional factors, dialectic/questioning, synthesis/ evaluation (assignments/assessment), collaboration/student-generated content, and reflection. Picciano recommends teaching approaches to assist the learners and the teachers in meeting these objectives, including content management systems (CMS), multi-user virtual environments (MUVE), discussion boards, presentations, assessments, e-portfolios, wikis, blogs, and journals.

Blended learning is a style that is rooted in constructivist teaching and learning theory. According to Schunk (2012), "Constructivism requires that we structure teaching and learning experiences to challenge students' thinking so that they will be able to construct new knowledge" (p. 274). Within the constructivist learning philosophy, several teaching and learning strategies have been proposed, with one of the most influential contemporary models being Kolb's (2015) experiential learning cycle. The experiential learning cycle identifies four modes of learning the learner needs to transition through to develop a deep understanding of a topic. The modes are defined as concrete experience, reflective observation, abstract conceptualization, and active experimentation. Concrete experience involves the dissemination of information, for example, through a lecture or another means of content delivery. Abstract conceptualization refers to the development of the learner's own thoughts. Reflective observation allows the learner to learn through reflecting on the information acquired, and during the active experimentation phase, the

learner puts the learning into practice.

Public Relations Education

The Commission on Public Relations Education (2018) made recommendations for designing and structuring higher education undergraduate public relations programs. It stated PR educational curricula should cover six essential topics, including introduction to or principles of public relations, research methods, writing, campaigns and case studies, supervised work experience or internships, and ethics. A course that has work experience incorporated into its curriculum would be ideally placed to provide students with the best opportunity to learn in the areas of campaigns and case studies, work experience/internships, and ethics, as they are topics that are more practical in nature. Many public relations courses offer a combination of theoretical content and work experience, presumably to prepare the students for industry by equipping them with both theoretical and practical knowledge. The question is then, what are the most appropriate pedagogical methods to use to equip students with this practical knowledge?

Present research supports the use of creative teaching methods in the classroom to teach practical skills, such as simulations and what Barnes and Tallent (2015) referred to as "constructivist thinking tools" (p. 437). Their study offered examples of exercises, such as group work, discussions, reflective writing, and mind-maps in which students are encouraged to visualize information, group related items together, and identify problems and solutions as a result.

The word "simulation" can be used to define the "imitation of a situation or process" or "the production of a computer model of something, especially for the purpose of study" (Oxford Dictionary of English, n.d.). Evidence of the use of simulations in PR pedagogy as an "imitation of a situation or process" (Oxford Dictionary of English, n.d.) is more common. In an Australia-based study, Sutherland and Ward (2018)

conducted research on the efficacy of using an immersive simulation as a pedagogical tool to provide students with practical experience of a media conference. In the study, they combined simulation tools such as role-play and immersive technology in which scenes from PR scenarios were projected onto the walls. They found that students enjoyed the experience, and it enhanced their learning and analytical skills. The students recommended the use of the pedagogical tools in the future. Similarly, Veil (2010) simulated a press conference held in response to a crisis. Role-based scenario simulations were the main simulation tool used in the study, which was conducted with communication students. Students reported finding the exercise beneficial to their learning, although some did report reservations about the spontaneous nature of the activity. Another study in the U.S. found that crisis simulation can significantly increase students' crisis management competencies. The author recommends simulation-based training could be used in other areas of public relations and should become part of the "pedagogical toolbox" (Wang, 2017).

When assessing the specific competencies required by the PR industry, more interactive tools than the common written assignments might be required. For example, Bartam (2004) links competencies to performance and identifies workplace assessments and simulations as appropriate measurement tools. An example of an assessment format that has been used in the medical profession to measure non-academic attributes in medical graduates is the situational judgment test (SJT) (Patterson et al., 2016). Specific competencies the SJT can test include reasoning, problem solving, and decision making. An SJT comprises a hypothetical scenario (presented in written or video format) that medical graduates are likely to encounter in the workplace. Candidates are asked to identify the appropriateness or effectiveness of various response options from a predefined list. Patterson et al. (2016) recommend that response

instructions for SJTs should fall into one or two categories: knowledge-based (what is the best option? / what should you do?) and behavior (what would you be most likely to do?). To ensure validity, the response options and scoring mechanism should be agreed upon in advance by industry experts.

This study set out to explore the use of a simulation as a pedagogical tool and its ability to assist students of public relations in developing competencies required by the public relations industry. A constructivist pedagogical approach that used a specifically designed blended learning model, comprising a practical simulation at its core, was designed for this research and to assist students in developing the competencies identified. A situational judgment test was specifically designed for this study and used to assess the development of these competencies in students alongside a focus group and a reflective exercise.

Method

This study sought to examine if the use of a simulation as a pedagogical tool could assist students of public relations in developing competencies required by the public relations industry. The research involved the use of a concurrent mixed methods methodology involving qualitative and quantitative techniques. The quantitative analysis was conducted through a situational judgment test (SJT) specifically designed to measure the competencies identified as required by the PR industry. The SJTs were designed to ultimately assess students for the competencies of critical thinking and media communication skills, and the questions were therefore centered around the development and communication of effective arguments in response to difficult questions. Qualitative methods included a focus group and a reflective exercise, which were used to analyze the students' learning experiences and the development of the competencies of critical thinking, business acumen, and communication skills. The design of the research strategy was rooted in constructivist

teaching and learning philosophy through the use of Kolb's (2015) experiential learning cycle and Picciano's (2009) multimodal model of blended learning.

Participants

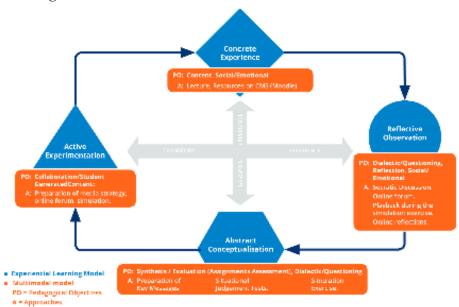
The research was conducted over a two-month period as part of the standard curriculum delivery in a PR module. Sixteen full-time postgraduate students of public relations in Ireland volunteered to participate in the study. The group was approximately split 50% between male and female students, and all participants were within the 21-30 age bracket with limited to no relevant work experience. The participants were students of the researcher's in the final semester of a one-year postgraduate module in public relations. The course is registered as a Level 9 course on the National Framework of Qualifications Grid as set by the National Qualifications Authority of Ireland (2020). As the lecturer for these students was also the conductor of the research, there may have been a potential for bias. However, to conduct the simulation, a facilitator was required who had the specific knowledge of and skills in the practice of public relations, and it was deemed that this requirement would outweigh any potential for bias. It was submitted to the Ethics Committee at Griffith College Dublin, and all participants indicated their understanding and agreement to participate by signing a consent form. Participants were offered the opportunity to revoke their consent at any stage during the process. All information provided by the participants was treated in the strictest of confidence. Data collected from the questionnaires was anonymized, and the data were not identifiable during the research process or in the findings presented.

Research Design

The study was developed around the teaching of crisis management. A blended learning model was designed to ensure the simulation could be combined into the course in a manner that enabled

the pedagogical objectives and learning outcomes of the public relations curriculum to be achieved. The program was designed using the pedagogical objectives and approaches outlined in the multimodal model of blended learning. These were then mapped against Kolb's (2015) experiential learning cycle to direct the learning stages and approaches and ensure the model was rooted in learning theory. This process is illustrated and explained in Figure 1.

Figure 1 *Kolb's Experiential Learning Cycle and the Multimodal Model of Blended Learning*



In Picciano's (2009) multimodal model of blended learning, six basic pedagogical objectives are recommended when designing a blended learning program, including content, social and emotional, dialectic/questioning, synthesis/evaluation (assignments/assessment), collaboration/student-generated content and reflection. Picciano proposes teaching

approaches to assist the learners and the teachers in meeting these objectives, including CMS, MUVE, discussion boards, presentations, assessments, e-portfolios, wikis, blogs and journals.

The process outlined above explains how this model was mapped against the four modes of learning identified in Kolb's (2015) experiential learning cycle to produce a program of face-to-face and online pedagogical activity that could meet the learning objectives. The process can be broken down by examining each mode of the experiential learning cycle individually. For example, in this instance, the theory and relevant information delivered by the lecturer on the management of media relations in the event of a crisis provided the "concrete experience." Figure 1 demonstrates the lecture and content that was made available on Moodle during these exercises also fulfilled two of the multimodal model's pedagogical objectives of "content" and "social and emotional factors." The multimodal model views "content" as "the primary driver of instruction" and states that it can be delivered and presented via numerous means (Picciano, 2009, p. 14). In this program, the content was delivered by using a lecture and PowerPoint slides and by making case studies and articles available on the course management software system. The delivery of the content through an in-class lecture also fulfills the "social and emotional" pedagogical objective of the multimodal model. The model stipulates that "social and emotional development is an important part of anyone's education" and that even students on advanced graduate courses require "someone with whom to speak, whether for understanding a complex concept or providing advice" (Picciano, 2009, p. 14). Therefore, the diagram demonstrates that the delivery of the content using these face-to-face and online approaches meets the "content" and "social and emotional" pedagogical objectives of the multimodal model and falls under the "concrete experience" learning mode of Kolb's experiential learning cycle. Figure 1 can continue to be followed in the same manner

to examine each of the modes of experiential learning and the associated pedagogical objectives, as well as the learning approaches used to achieve them

To explain the timeline of the study, at the outset, students were presented with content on crisis management through a PowerPoint lecture. The lecture provided students with information about crisis management and steps as to how to communicate with the media on behalf of an organization in a time of crisis. Students were presented with a case study involving a data breach by an internationally renowned technology company. They watched a video relating to this crisis, followed by a Socratic discussion led by the lecturer. As identified in a study by Parkinson and Ekachai (2002), the leader of the Socratic discussion is required to have a knowledge of the subject, in addition to an understanding of how to conduct a Socratic discussion. The aim of this discussion was to assist the students in developing an understanding of the principles and concepts involved in representing an organization in the media in response to a crisis. Following the completion of the Socratic discussion, students were directed to work in groups to develop their media strategies to respond to the crisis. Each group then worked together outside of the classroom and online in a collaborative forum where the groups posted their strategies to enable feedback from their peers and from the lecturer.

An immersive simulation exercise then took place in which students assumed the role of the spokesperson for the organization in crisis in an interview with a professional news journalist. A camera was set up and operated by a professional camera technician. Microphones and lighting were connected to simulate a real-life television news interview situation. The students were split into two groups of eight. Each individual group member was then immersed in the experience as they were interviewed individually by the journalist and asked to put their

learning into practice by responding to the crisis in a simulated live media interview. The journalist asked challenging questions, such as "When did you learn about this issue?," "Why did it take so long to communicate with your customers?," "How do you plan to prevent this from happening again?" Students were required to think quickly and revert to their key messages and their preparation to respond. Students had been given 24 hours' notice to prepare their key message to simulate a real-life situation in which a spokesperson would often be given very short notice before a media interview. Each student was recorded on camera and observed and assessed as the interview took place. On completion of all eight interviews, a selection of excerpts from videos were played back for discussion and formative feedback. The process was repeated with the second group. Students were assessed on their performance and the mark/grade represented a percentage of their overall grade for the module.

Measurement

The methods used in this research were evaluated using bespoke scenario-based multiple-choice questionnaires (situational judgment tests, known as SJTs), a focus group, and a reflective exercise. At the commencement of the study, prior to the first lecture and again on completion of the study, students were directed online to complete the SJT. An SJT template was designed for the purpose of this research by a team of senior PR professionals who were assembled to consult on the scenarios, questions and answers, and scoring method for each test (see Appendix A). Scenarios were drafted and questions were formulated around these scenarios. Critical thinking and media communications skills were the core competencies that were measured in the SJTs. The questions were designed to demonstrate an ability to make effective arguments to support the key messages that the students were attempting to communicate. In line with best practice as identified in the literature review on SJTs, the questions were set into the two categories of

knowledge (what is the best option?/what should you do?) and behavior (what would you be most likely to do?). Answers were proposed for each question, and the expert team reached a consensus on the most appropriate answers for each question. A scoring key was then developed for each test in order to group student responses into the categories of excellent, good, satisfactory, and poor. Students' answers were analyzed and counted on completion of the first test, and responses were compared to those of the second test on completion of the entire study to provide a quantitative analysis on the development of each of the predefined competencies. The process of designing the SJT in consultation with industry experts ensured the validity of these tests in their use for the first time as tests to measure competencies in PR students. Examples of the tests and scoring key are available in Appendix A.

Following completion of the simulation and the second SJT, students were afforded the opportunity to reflect on their performance and the learning experience in an online exercise. All participants watched their performance through a secure video link on their own time and in privacy. Students then completed an online reflection, the objective of which was to inform the research as to the development of the competencies of critical thinking, business acumen, and communication skills. The reflection also served as a learning exercise for the students to encourage a deeper learning experience. The reflection consisted of a question asking the students to provide their opinions, in no more than 500 words, on the simulation exercise.

Finally, on completion of the study, students participated in a focus group to discuss their perceptions of the learning experience and the impact they felt it had on the development of the competencies identified (see Appendix B). According to Daymon and Halloway (2011), the purpose of a focus group is "to concentrate on one or two clear issues or objects and discuss them in depth" (p. 241). In addition to offering insight

as to students' perceptions, the focus group was a useful exercise in itself for students in using and developing critical thinking skills. Eight students participated in the focus group, which was facilitated, recorded, and transcribed by the lecturer.

Results

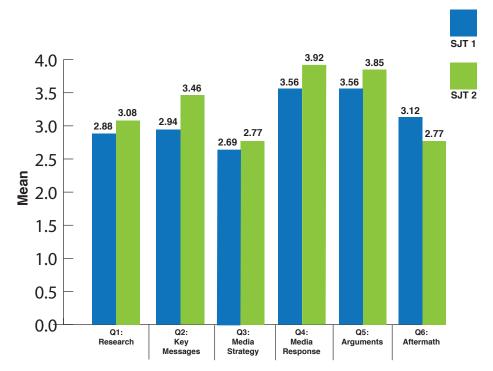
The overall objective of this study was to ascertain if the use of a simulation could assist students in developing the competencies required by the public relations industry. Overall, the results show that the questions in the situational judgment test that were most focused on critical thinking and media communication skills showed slight improvements. The development of business acumen was not evidenced in the SJTs specifically; however, the development of this competency was inferred from the results of the qualitative analysis.

In an effort to quantify any change in student performance from SJT I to SJT II, it was necessary to develop a standardization that was not sensitive to the different number of students in each. Direct comparison is not possible with two different student totals and the small data sets. Thus, each student who received a "poor" score was given one point, two points were given for each "satisfactory," three for "good," and four for excellent. The point total was then divided by the total number of students (16 for SJT I; 13 for SJT II) to determine the dimension's mean score. Since the mean scores are a measure of the overall performance on the SJT and are not sensitive to different response totals, they allow for direct comparison.

Figure 2 shows a comparison of the means between SJT I and SJT II for each of the six dimensions, while Table 1 presents the numerical scores for each measure of student performance. The number of students receiving that score for each of the six dimensions is reported. Using the scale described in the previous paragraph, a point total for the student performance for that SJT is attained and a mean score is calculated. The final column gives the difference in the mean scores for SJT I and SJT II.

The mean score differences for five of the six dimensions were positive, indicating improved student performance. The greatest increase in student performance was for Dimension 2: Key Messages. Only one dimension, Aftermath, showed a negative difference, demonstrating lower mean scores on the second SJT.

Figure 2
Overall Means for SJT 1 and SJT 2



The first question asked in the SJTs was centered around research. The question asked participants to explain how they would approach the fact-gathering exercise involved in crisis communication management. There was an improvement of one participant achieving an excellent result in this question between the first and second questionnaires. The second question was focused on the development of key messages and asked students to identify the three most important key messages. In this

question, there was an improvement of six people in those achieving an excellent result in the second questionnaire. Question three in each SJT asked participants to explain how they would approach the media. This question was the most difficult for participants with limited experience in media communication, and the results are perhaps indicative of this with five fewer students achieving an excellent result. However, five more students received a good result in SJT II in this question. Questions four and five were centered around the media response and the arguments to make within the media. In both these questions, there were slight improvements of three and two participants, respectively, in

Table 1Situational Judgment Tests 1 and 2 Mean Comparisons and Standardized Mean Scores

		SJT I	I: Vega	nism		SJT I	I: Defe Ba	ctive C		one	
SJT Dimension	Poor	Satisfactory	Good	Excellent	Mean (point Total)	Poor	Satisfactory	Good	Excellent	Mean (point Total)	Mean Difference
1-Research	2 (2)	2 (4)	8 (24)	4 (16)	2.88 (46)	1 (1)	2 (4)	5 (15)	5 (20)	3.08 (40)	+.20
2-Key Messages		2 (4)	13 (39)	1 (4)	2.94 (47)		1 (2)	5 (15)	7 (28)	3.46 (45)	+.52
3-Media Strategy	6 (6)		3 (9)	7 (28)	2.69 (43)	2 (2)	1 (2)	8 (24)	2 (8)	2.77 (36)	+.08
4-Media Response			7 (21)	9 (36)	3.56 (57)			1 (3)	12 (48)	3.92 (51)	+.36
5-Arguments			7 (21)	9 (36)	3.56 (57)			2 (6)	11 (44)	3.85 (50)	+.29
6- Aftermath	4 (4)	1 (2)		11 (44)	3.12 (50)	2 (2)	5 (10)		6 (24)	2.77 (36)	35

those achieving an excellent result. Finally, in question six, participants were asked to explain how they would manage communications in the aftermath of the crisis. The majority of participants in both SJTs achieved a satisfactory to excellent result with two fewer participants in the poor category in SJT II.

Analysis

Critical Thinking

Two questions within the SJTs were specifically focused on critical thinking (questions 4 and 5). These questions centered around the response to and the making of effective arguments in the media. In the first of these questions, three more participants in question 4 and two more participants in question 5 achieved an "excellent" result in the second test.

The next of these questions related to the construction of arguments. In this question, two more students received an "excellent" result in SJT II compared to the same style of questions in SJT I. The content of these questions is detailed in Appendix A.

The increase in the number of students achieving good and excellent scores in the second test for both these questions could indicate that the exercise had a positive impact on the participants' ability to think critically. In addition, in the qualitative analysis through the reflection and the focus group, students pointed to critical thinking as one of the learning achievements from the exercises. For example, when asked what they learned from the experience, one student said, "being creative in thought—creative mentally," while another mentioned "on-the-spot critical thinking." The observations of the students indicate the immersive nature of the simulation exercise impacted their critical thinking skills. For example, a student cited a key learning takeaway from the activity was "applying your skills in the outside world."

Business Acumen

In this study, business acumen was largely demonstrated through

the students' conveyed understanding of the challenges that businesses face in the event of a crisis and in communicating with the public through the media as a result. One student said, "It was an eye-opener to find solutions to problems other companies are facing. It was practical." Another stated, "If I were working in a massive organization that had this crisis and I'm approached by the media, even without them informing me in time, I would have something to say. It was of immense benefit for me." These comments indicate students developed a better understanding of how a situation like this might affect a business and how it could protect its reputation in the media as a result.

Communications Skills

The effect of the exercise on media communication skills can be seen in the responses to this question on key message development. The results for this question in SJT II indicated an increase of six people in those selecting all three most appropriate key messages (or an "excellent" result). The content of this question is detailed in Appendix A. Students also referenced the importance of key messages several times within their feedback during the focus group and reflections. For example, one student said, "I learned how important it is to have key messages that you can refer to when answering tricky questions," while another said: "I was pleased with how I communicated my message. I thought that I reverted back to the key messages when in a difficult corner."

In addition to media communication skills, the qualitative analysis offered insight into the impact of the exercise on students' verbal and non-verbal communication skills. Verbal communications were assessed through the students' ability to make effective arguments during the simulation and to effectively express their key messages they had prepared in advance. Non-verbal communication consisted of tone of voice, hand gestures, body language, and facial expressions. The majority of students referenced communication skills as a key takeaway and focused heavily

on this in their reflections and the focus group. Students discussed the importance of content, such as communicating their top-line and three key messages, and they addressed style, such as speaking clearly and slowly in concise sentences. One student commented, "I sometimes talked more than needed, so going forward I could stop sooner when I was happy with my answer."

The analysis also reveals that there was a tendency for students to be self-critical of their non-verbal communication skills, more so than their verbal communication skills. This is evidenced in the following comments: "I think that at times my facial expressions during the questioning were a little bit distracting, so I would try and keep a less expressive face next time" and "I assumed my body language was OK but I realized there were some mistakes after I watched the video."

Discussion

The higher education sector worldwide is endeavoring to meet the learning requirements of a technologically savvy and increasingly diverse student demographic. Simultaneously, the sector is challenged with ensuring higher education graduates can bring modern relevant competencies required by industry with them into entry-level positions upon graduation. There is evidence to suggest the industry is actively seeking competencies in new entrants to the PR profession that can also be difficult to teach such as business acumen, communication skills, and critical thinking. The objective of this research was to ascertain if a simulation could assist students in developing these competencies that are required by the public relations industry.

To investigate this, a blended learning model was designed that was based on the multimodal model of blended learning and mapped against Kolb's (2015) experiential learning cycle. In this model, a simulation exercise was blended with other face-to-face and online pedagogical tools to teach students how to manage media communication

in the event of a crisis. To analyze the efficacy of this model in assisting in developing these competencies, a concurrent mixed methodology was employed using both quantitative and qualitative data collection methods. Qualitative methods included a reflection and a focus group. The quantitative method implemented in the research was an SJT. To ensure its validity for use in this research, the test was designed exclusively in consultation with a team of public relations professionals to test for competencies required at the entry-level in the public relations profession.

Limitations and Future Research

This study was limited by the size of the sample group and the duration of the study. A more detailed study using a larger group, including a control group over a longer period of time would offer further insight into the efficacy of the methods used in this study on the development of competencies required in the PR industry. The results of the exercises, however, indicated the activity had a positive impact on the development of key competencies in students. The qualitative analysis, which included the student reflections and focus groups, offered an indication the students themselves felt the exercises had an impact on their learning experience and assisted them in developing their business acumen, critical thinking, and communication skills.

Although the students indicated they sensed an impact, the SJTs did not show an impact on the development of business acumen among participants. Future investigation would be required to ascertain the most appropriate measurement tool to analyze the development of this competency. The tests did demonstrate slight improvements in the competencies of critical thinking and media communication skills. These tests could be developed further for use as an assessment tool within a public relations curriculum to teach students to consider how they would respond to difficult questions in media interviews or in crisis situations. The tests require students to think of solutions or arguments

to difficult scenarios quickly and, combined with a simulation exercise, this pedagogical approach may be particularly useful in teaching students how to manage common practical problems faced by public relations practitioners. It is worth noting that the comments from participants in the reflections indicated the students tended to be self-critical of their body language; future studies should encourage educators to guide students in order for them to recognize the importance of nonverbal communication, but help them not to focus on it to the exclusion of other elements of their message delivery.

In addition to the pedagogical benefits, the SJTs may also contribute positively to the PR industry in that they could be used by employers to test interviewees for competencies in specific areas. A standardized SJT could contribute positively to the PR industry and increase employability of students. They could be designed to complement CPRE's list of competencies as tests for employers when interviewing new entrants to the industry and as class assignments for more practical subjects such as crisis communications and medical skills.

Another example of simulation as "the production of a computer model of something" can be seen in the emerging technologies of virtual reality (VR) and augmented reality (AR), which could be the topic of future research. VR allows users, through the use of a headset, to immerse themselves completely in an alternative reality. AR allows the user to bring elements of the artificial world into the real world. Both technologies are being used in education in the STEM disciplines, but there is little evidence cataloging their use in the teaching of public relations. Research in this area of PR education could offer insight as to whether simulations of this nature could be beneficial in teaching media communication skills and critical thinking by enabling learners to immerse themselves in computer- or video-generated common scenarios, such as press conferences or media events.

The results of this research benefit the public relations industry and public relations education. In relation to experiential and blended learning, this research offers an insight as to how simulations and situational judgment tests can be used as a form of active experimentation and assessment. In terms of public relations education, the findings offer insight to educators as to the most appropriate pedagogical and assessment approaches that can be implemented to assist students in developing competencies required by the public relations industry and thus assist in increasing students' employability. Further research at an industry level would help define the competencies and qualifications required, and additional research at an educational level could help set standards in best practice in public relations pedagogy.

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Appendix A

Situational Judgement¹ Tests

The National Vegan Association has launched a national campaign to raise awareness on animal rights and promote veganism. The campaign includes high-visibility outdoor advertising activity that uses a range of emotive posters to encourage people to cease meat and dairy consumption and to convert to veganism.

The organisation's spokesperson has been in the media (radio, TV, print and online) discussing the new ad campaign and the rationale behind it. The organisation's central argument is that the widespread consumption of animal products is having a catastrophic effect on the environment. The source of the Vegan group's funding is unclear.

You are the public relations officer/consultant for the National Farmers' Association, who view this as a potential crisis situation. The Farmers'

¹Because this document in Appendix A was created for Irish public relations students, UK spellings were maintained.

Association is concerned that the Vegan Association is communicating information that could be harmful to the business of its members.

Please outline your PR strategy in response to this crisis by responding to the following questions.

Please answer all questions with a view to what the best course of action should be and do not base your answers on your own personal beliefs. For example, if you yourself agree with the vegans or the meat-eaters, it is of no relevance to this test.

1. Research

The first step in managing a crisis is to gather the facts. Rank the actions you would take in order of priority below. (1 = most effective, 2 = very effective, 3 = quite effective, 4 = slightly effective and 5 = least effective).

A: Check media (including social media) and analyse	coverage.
B: Find out what the best practice is in your organisati	on and
check if there is a precedent for this activity in other co	ountries.
C: Pull together a crisis management team consisting of	of the
most informed people in the organisation on this topic	, brief
them on the situation and acquire their feedback.	
D: Contact a journalist for an "off-the-record" chat on	the topic.
Investigate the potential of running a negative story ab	out the
vegan group.	
E: Contact the vegan group, away from media view, to	discuss
and try and silence the conversation.	

2. Key Messages

Your key messages should aim to present the organisation's business objectives and protect the reputation of your organisation and its members. Choose the THREE most appropriate key messages that you think would

be most effective in your communication with the media (all three choices are equal in importance).

A: There are many benefits to eating meat and dairy.
B: Vegans are prone to various health issues.
C: The source of the vegan group's funding is not clear.
D: The importance of farming and agriculture to the economy.
E: A list of top ten healthy meat and dairy recipes.

3. Media Strategy

As part of its campaign, the vegan group has also cited a report stating that the public's consumption of meat and dairy is harming the environment. Please rank the most appropriate media approaches below (1 = most appropriate, 5 = least appropriate).

A: Host a press conference to announce your response to the ad
campaign and state your case. Invite all media to attend.
B: Contact a select number of trusted journalists and arrange to
set up feature interviews with them in which you set out your
key messages and evidence-based arguments.
C: Contact a prime-time current affairs show and request a live
debate between the heads of the two organisations.
D: Issue a press statement to all media criticising the vegan
campaign and dismissing its arguments.
E: No comment.

4. Response to Media

There has been some discussion in the media regarding the sources of funding for the vegan group's campaign. The vegan group has not disclosed its sources.

During an interview, a journalist cites a recently published report in which it states that meat consumption must decrease significantly to avert a climate catastrophe. The journalist has asked you, as the representative for the Farmers' Association, for your response to this report.

Choose the THREE most appropriate responses below:

A: Highlight the lack of transparency in the vegan group's
finances.
B: You agree that sustainable farming is important, but this
country has one of the most sustainable records in the world.
C: Question the accuracy of the vegan group's research.
D: Agree with the seriousness of some of the issues presented
in the report, but outline the health benefits of meat and dairy
consumption.
E: Present research and studies supporting meat and dairy
consumption.

5. Arguments

Your arguments should assist the interviewer and the listener/reader in understanding your key messages. Choose the THREE most appropriate arguments to support your key messages below:

A: An emeritus professor of agricultural policy at Trinity
College Dublin has said that Ireland's agriculture is mostly
grassland-based and there is no need for a reduction of 90% in
meat consumption.
B: A renowned economist from the London-based Institute
of Economic Affairs, an organisation funded by the tobacco
industry said that the potent combination of nanny state
campaigners, militant vegetarians and environmental activists
poses a real and present danger to a free society.

C: Prior to the release of the findings of this report, the Irish
Prime Minister had said that he was cutting down on his meat
consumption and increasing his intake of vegetables.
D: The Minister for the Environment, said it's really important
that agriculture has a long-term strategy as to how it can
contribute to decarbonisation and be competitive in an
environment when people's choices and expectations may be
different.
E: A report published by a renowned environmental group has
outlined a clear strategy for the reduction of greenhouse gas
emissions in this sector in Ireland.

6. Aftermath

The immediate crisis is over and media attention has been diverted to another issue. Rank the most appropriate course of action for your organisation now (1 = most appropriate, 5 = least appropriate).

A: Correct a journalist on one radio interview in which on
one occasion, they used an incorrect name for one of your
representatives.
B: Assess and analyse the media coverage and the reaction of
your stakeholders/audiences.
C: Immediately launch a high visibility campaign informing
people of the benefits of consuming meat and dairy.
D: Seek corrections in any significant inaccuracies in the media
coverage.
E: Conduct research to support your arguments and launch a
campaign promoting the benefits of consuming meat and dairy
products.

Situational Judgement Test II

You are the public relations manager/communications officer for an international technology company and leading producer of smartphones. One of your phone products, which is already on the market, has been found to have a defect in the batteries. The company has already sold over two million devices, but there have been reports of fires breaking out with some. As a result, all the phones now have to be recalled at a cost of over \$5 million.

Please respond to the questions below to explain how you would manage this crisis.

Please answer all questions with a view to what the best course of action should be and do not base your answers on your own personal beliefs.

1. Research

The first step in managing a crisis is to gather the facts. Rank the first steps you would take to manage this crisis in order of priority below. (1 = most effective, 2= very effective, 3 = quite effective, 4 = slightly effective and 5 = least effective).

A: Check media (including social media) and analyse coverage.
B: Find out what the best practice is in your organisation and
check if there is a precedent for this activity here or in other
countries.
C: Pull together a crisis management team consisting of the
most informed people in the organisation on this topic, brief
them on the situation and acquire their feedback.
D: Contact a journalist for an "off-the-record" chat on the topic.
E: Contact the people who have been affected, away from the
eyes of the media.

2. Key Messages

Your key messages should aim to present the organisation's business objectives.

Choose the THREE most appropriate key messages that you think would be most effective in your communication with the media (all three choices should be equal in importance).

A: We are conducting an investigation, which will result in the
development of even better and safer phones.
B: Our phones aren't the only ones on the market with safety
concerns. There are some safety issues that we are aware of with
competitor phones.
C: We have launched an investigation into the problem.
D: We can assure customers that there are no other phones or
products at risk.
E: A list of the top five safety features of this product.

3. Media Strategy

You have conducted an extensive investigation into the issue and are now ready to release the results. Please rank the most appropriate media approaches below (1 = most appropriate, 5 = least appropriate).

A: Announce a press conference and invite all media to attend.
B: Contact a select number of trusted journalists and arrange
to set up interviews with them in which you set out your key
messages and evidence-based arguments.
C: Contact a prime-time current affairs show and request a live
interview on the topic.
D: Issue a press statement to all media highlighting safety issues
with competitor phones.

E: No comment.

4. Response to Media

In an interview about phone safety, a journalist has thrown you a curveball. The journalist has decided to ask you for your views on a recently published report from a reputable medical organisation into mobile phone usage. The report warns parents to limit screen-time for children due to health risks. The journalist has asked you, as the representative of a leading manufacturer of mobile devices, for your response to this report. Choose the THREE most appropriate responses below:

A: Dismiss the findings of this report.
B: You agree that monitoring children's phone usage is
important.
C: Question the accuracy of this research.
D: Encourage responsible usage of phones amongst children.
E: Highlight some of the benefits of phone use for children,
once usage is controlled by guardians.

5. Arguments

Choose the THREE most appropriate arguments to support your messages:

A: The Royal College of Paediatrics and Child Health recommended time-limits and a curfew on "screen-time," but said parents need not worry that using the devices is harmful.

B: Experts say that looking at screens such as phones, tablets or
computers in the hour before bed can disrupt sleep and impact
children's health and wellbeing. Spending long periods on the
gadgets is also associated with unhealthy eating and a lack of
exercise.
C: Parents are often told that gadgets can pose a risk to their
children, but they can in fact be a valuable tool for children to
explore the world. Nevertheless, screen time should not replace
healthy activities such as exercising, sleeping and spending time
with family.
D: A review published by the British Medical Journal found
"considerable evidence" of an association between obesity and
depression and higher levels of screen time.
E: Although there is growing evidence for the impact of phone
usage on some health issues such as obesity, evidence on the
impact of screen-time on other health issues is largely weak or
absent.

6. Aftermath

The immediate crisis is over and media attention has been diverted to another issue. Rank the most appropriate course of action for your organisation now (1 = most appropriate, 5 = least appropriate).

A: Correct a journalist on one radio interview in which on
one occasion, they used an incorrect name for one of you
representatives.
B: Assess and analyse the media coverage and the reaction of
your stakeholders/audiences.
C: Immediately launch a high visibility campaign informing
people of the safety features of your phones.

D: Seek corrections in any significant inaccuracies in the media
coverage.
E: Analyse the findings of the investigation and launch a
campaign to communicate the findings and the new safety
measures in place as a result.

Appendix B

Focus Group Questions

- 1. Do you think you were well prepared for the interview simulation exercise?
- 2. Did you enjoy the interview simulation exercise?
- 3. What did you like most about it?
- 4. What did you like least about it?
- 5. Do you think you learnt from the exercise?
- 6. What is the key thing that you think that you learnt from this experience and that you will take into the future when you graduate? Give an example.
- 7. Rate the experience from 1 (poor) to 5 (excellent)] in terms of your enjoyment of the learning experience.
- 8. Rate the experience from 1 (poor) to 5 (excellent)] in terms of the learning you think you achieved.