PURPOSE OF THE STUDY

The purpose of the research was to understand the latest job skill requirements for undergraduates from the real world as perceived by the students themselves and their career counselors at a university in South Florida. The study intended to provide relevant inputs to enhance the marketability of the undergraduate students by seamless transformation of students from ‘learning to earning’ stage in life by using two interventions, de Bono’s Six Thinking Skills and Covey’s 7 Habits.

Hypotheses and Research Questions:

The researcher utilized the questions for this study relevant to problem, hypotheses and the target population.

H1: There is a positive relationship between having future work skills, namely, critical thinking and teamwork and the perceived marketability of undergraduate students for a successful navigation through the employment market.

RQ1: What are the curriculum and the non-academic interventions offered by the university from the employability perspective as perceived by the students and the career counselors?

RQ2: What are the skills students and career counselors perceive as lacking, to succeed in today’s dynamic and competitive world, and why?

H2: There is a positive relationship between use of components of de Bono’s thinking skills and Covey’s 7 habits and improvement of the future work skills of undergraduate students in bridging the skill gap.

RQ3. What are the relevant components of de Bono’s thinking skills and Covey’s 7 habits that help students improve their marketability in the competitive job market by reconnecting their academics to the employment?

RQ4. What needs to be modified in the curriculum to remove employment barriers faced by the undergraduate students and equip them with future work skills?

Research questions 1 and 2 are related to hypothesis 1, that there is a positive relationship between having future work skills and improved marketability of undergraduate students for a successful navigation through the employment market. Research questions 3 and 4 are related to hypothesis 2, that there is a positive relationship between uses of components of de Bono’s thinking skills and Covey’s 7 habits and improvement of the future work skills of undergraduate students in bridging the skill gap. Research questions 1, 2 and 3 are meant for both the selected undergraduates and the career counselors, whereas research question 4 is specifically meant for the career counselors.

Significance of the Study

The study sought to understand the perceptions and practices of the undergraduate students and the career counselors in relation to the de Bono (1985) thinking skills and Covey’s 7 Habits (1989) and the extent to which such awareness would help in their lives after college graduation. The study may provide useful insights into the nature of self-development not only to the students but also to the educators and the program developers in developing appropriate pedagogical reform initiatives.

Assumptions

The research was based on responses from a sample of undergraduate students at a private university and therefore, the conclusions drawn will or cannot be generalized. While efforts would be made to minimize subjectivity of responses from the target population, it could not be totally avoided.

Delimitations

The variables affecting college graduates’ unemployment were both micro and macro in nature. The study addressed the micro level issues involving the students and career counselors, which were relatively controllable. Macro level issues like the state of the economy, labor policies of the government, and inflation were out of the scope of this study.
REVIEW OF RELATED LITERATURE

The literature review would help provide relevant inputs from the different research studies conducted in order to enhance the marketability of the undergraduate students by seamless transformation of students from ‘learning to earning’ stage. The literature review started with the broader aspects of the problem, that is, unemployment among college graduates, progressively narrowed down by employability skills and the skill gaps, and finally the effect of interventions of de Bono’s Six Thinking Skills and Covey’s 7 Habits.

Conceptual Framework:

Two major skill gaps, thinking skills and self and team management have been identified as the potential barriers to employment for undergraduate students after graduation. The researcher proposed to formulate the solution strategy based on two conceptual models as discussed here. de Bono’s Six Thinking Hats model and Covey’s 7 Habits for improving critical thinking skills and self and team management respectively are the recommended tools.

Edward de Bono’s Thinking Skills (Six Thinking Hats model)

Six Thinking Hats is a useful technique for decision-making and problem solving. It makes a person look at a problem from different perspectives and think out of the box. It thus opens up issues and opportunities which otherwise would have been missed in conventional thinking. The perspectives of thinking are differentiated by assigning imaginary colored hats. A person mentally wears and switches hats of different colors to stimulate different ideas.

Stephen Covey’s 7 Habits of Highly Effective People

“Habit is the intersection of knowledge (what to do), skill (how to do), and desire (want to do).” (Covey’s “The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change,” 1989).

Philosophical Assumptions

The researcher chose interpretive philosophy for investigation in this research study. The landscape of the social and business world is too complex to be described or formulated into one-word fixed theories. According to this philosophy, the nature of observed facts or truths is dynamic and situational. So, the philosophy is suitable for most situations and research problems (Johnson & Christensen, 2004). The emphasis is on the human interpretations of the sensory perceptions.

Setting

The university is an American independent, non-profit, coeducational, residential university in southern Florida. The university is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate’s, baccalaureate, master’s, and doctoral degrees. The university offers undergraduate and graduate curricula built on individualized attention and an international focus. The university enrolls more than 2,000 students representing nearly all 50 U.S. states and approximately 90 nations in four academic colleges and three specialty programs. Approximately 25 undergraduate degrees and 10 graduate degrees are offered in the four colleges.

Selection Criteria

Eighteen students from the university pursuing their undergraduate degree were selected based on their years spent in the university, gender, program and program major. Two career counselors from the Center for Career Connections were selected. Career counselors were included in the sample for the reason that they were more knowledgeable about the employers’ expectations and thus they would act as the bridge between the students and their prospective employers. All participants were older than 18 years with no known psychological or physical disabilities.

Data Collection Tools and Procedures

Interviews

Individual interviews and semi-structured observation, complemented by extensive one-on-one interviews with the student group and the career counselor group separately were the primary data collection instrument for this study. In addition to the interviews, data from documents in various sources, either direct or online, were utilized.

Interview Plan and Interview Process

Each interviewee was emailed to set up a mutually convenient time for a meeting. The interviews began with mutual introduction of the researcher and participants. All participants were given a consent form to get permission for participation in the study.

METHODOLOGY

Mixed Design Approach

According to leading experts such as Merriam (1988), Eisner (1991), Bogdan and Biklen (1998), and Creswell (1998), some of the characteristics shared by most qualitative studies are the following: a) natural setting, b) researcher playing a key role in data collection, c) data collected in words or pictures, d) research outcome seen as a process, not a product, e) inductive analysis of data, f) focus on individual participant's perspective, g) use of expressive language, and h) persuasion by reason. Case method was used in this study.
A copy of Covey’s 7 Habits and de Bono’s Six Thinking Hats was shared, to give participants enough background information towards the research questions. The majority of the questions were open-ended and qualitative in nature, seeking responses as perceived by the interviewees.

All participants of each group were asked the same basic demographic questions. If, during the interview, the participant moved to another question, or moved away to another topic during the course of one’s remarks, then the interviewer explored with follow-up questions. Moreover, the questions were worded in an open-ended way to allow for a broad spectrum of answers. The time taken for the interviews was two weeks.

SUMMARY OF FINDINGS

Hypothesis 1

Hypothesis 1 stated that there is a positive relationship between having future work skills, namely, critical thinking and teamwork and perceived marketability of undergraduate students for a successful navigation through the employment market.

Almost half (46%) of the students and the counselors agreed and 26% of them strongly agreed to the tough job market situation and the lack of employability skills demanded by the employers. Again, creativity and innovation, critical thinking, leadership, prioritizing, interpersonal/intercultural skills and team work were the top ranked employability skills identified by the students and the counselors. To a question on the comparative effectiveness between independent working and working with others in an organizational setting, a majority of the students opted for group working as the more appropriate mode of working in an organization.

Hypothesis 1, Research Question 1

The research question one addressed in the study was: "What are the curriculum and the non-academic interventions offered by the university from the employability perspective as perceived by the students and the career counselors?"

Most of the students agreed that the non-academic interventions were helpful to make them work-ready. To the question, "Do you think that you have the opportunity to get exposure to the skills in demand by the employer?"

![Figure: de Bono’s 6 Hats](image)

**The Six Thinking Hats**

**The White Hat**
White Hat thinking focuses on data, facts, information known or needed.

**The Black Hat**
Black Hat thinking focuses on difficulties, potential problems. Why something may not work.

**The Red Hat**
Red Hat thinking focuses on feelings, hunches, gut instinct, and intuition.

**The Green Hat**
Green Hat thinking focuses on creativity: possibilities, alternatives, solutions, new ideas.

**The Yellow Hat**
Yellow Hat thinking focuses on values and benefits. Why something may work.

**The Blue Hat**
Blue Hat thinking focuses on manage the thinking process, focus, next steps, action plans.

Note: Edward de Bono’s Six Thinking Hats model, from de Bono (1985).
the responses from the students were mixed. While eight students recognized the existence of such opportunity, seven students gave ‘qualified yes’ responses. This indicates that some opportunities do exist within the campus to learn work-ready skills but they need to be supplemented to ensure that all students benefit. All the students affirmed the benefit of classroom projects to improve their thinking process. Both counselors opined that fortifying the existing non-academic interventions would address the skill-gaps faced by the students.

Hypothesis 1, Research Question 2

Research question two asked: “What are the skills students and career counselors perceive as lacking, to succeed in today’s dynamic and competitive world and why?”

The majority of the students said that they knew the reasons why some undergraduates did not get hired and went further to cite those reasons which ranged from personal development issues such as lack of professionalism, lack of individuality, lack of ambition to macro-issues such as competitive job market, and too many people graduating from colleges. However, when questioned about the issues presented in recent employment surveys on the lack of employability skills, the majority of students (12) were either in full or partial agreement with the survey findings. As to the three most important reasons for the difficulty in employability of undergraduates, the students’ responses were wide-ranging, from economic issues such as sluggish economy, mechanization of jobs, to personal issues such as lack of interpersonal skills, lack of experience, lack of creativity. As to the counselors, one of them did not agree with the researcher’s proposition that critical thinking and team work were the two important personal skills demanded by the employers and the other counselor was not sure. On the skill gaps that needed to be addressed, the counselors mentioned professionalism, communication and confidence as those that needed attention.

Hypothesis 2

Hypothesis two stated that there is a positive relationship between uses of components of de Bono’s Thinking Skills and Covey’s 7 Habits, and improvement of the future work skills of undergraduate students in bridging the skill gap.

de Bono’s Six Thinking Hats:

Almost all students came to know of de Bono’s Six Thinking Hats only during their interviews. They did not have an opportunity to discuss or share the concept with others earlier, as they were unaware of the 6 hats. However, some students, despite not being consciously aware of the thinking hats concept, were able to relate their personal experiences to the various thinking hats. One of the two counselors knew about the concept in the 1990’s and the other counselor heard about it ‘just now.’ The top three thinking hats ranked by the participants were green (creativity), blue (action) and yellow (values) hats.

Covey’s 7 Habits:

The majority of students (14 out of 18) had not heard about Covey’s 7 Habits earlier and only a few

Figure: Covey’s 7 Habits

![Image of Covey’s 7 Habits]

Note: From Stephen Covey’s 7 Habits of Highly Effective People, (1989).
discussed or shared the concept with others. Some students were able to identify some of their actions and relate them to the 7 habits. The dominant habits perceived by the students were: Habit 1 (be proactive), Habit 2 (begin with the end in mind), Habit 4 (think win-win) and Habit 5 (seek first to understand and then be understood). Both counselors were aware of the 7 habits and also shared it with others. Both of them identified Habit 2 (begin with the end in mind) as their dominant habit. The students and the counselors ranked Habit 1 (be proactive), Habit 3 (First things first) and Habit 5 (seek first to understand and then be understood) as the top desirable habits.

Hypothesis 2, Research Question 3

Research question three asked: "What are the relevant components of de Bono's thinking skills and Covey's 7 habits that help students improve their marketability in the competitive job market by reconnecting their academics to the employment?"

All students agreed that training in the two models, namely de Bono's thinking hats and Covey's 7 habits would improve their transition from college to work. Similarly, both the counselors supported the view that training in both the models would be useful and relevant to the students, educators and colleges. While agreeing that additional skills or attributes were needed for the undergraduates, the counselors felt that these two training programs would be more useful if companies would conduct training programs on the campus.

Hypothesis 2, Research Question 4

Research question four asked: "What needs to be modified in the curriculum to remove employment barriers faced by the undergraduate students and equips them with future work skills?"

Half of the student respondents mentioned that the existing curriculum was up-to-date and relevant whereas seven students said that the curriculum was not very relevant due to non-availability of real world experience, and too much emphasis on institution-centric knowledge rather than student-centric knowledge. On a similar but differently phrased question (Is the current curriculum not adequate enough to address the skill gap?), there was a mixed response. To another question on the need for any additional inputs to improve job preparedness, the students favored training in job-oriented skills, more CEO speaker series and mock interviews. One of the counselors said that more role models were needed to walk the talk. The other counselor felt that the skill gaps were being addressed by the university through initiatives such as internships.

CONCLUSIONS AND IMPLICATIONS

Based on the findings and the discussions the following conclusions are drawn:

1. Hypothesis 1 has been accepted evidencing the positive relationship between future work skills, mainly critical thinking, and teamwork and perceived marketability of the undergraduate student for successful navigation through the employment market.

2. Hypothesis 2 has also been accepted confirming a perceived beneficial use of the de Bono's thinking hats and Covey's 7 habits in bridging the skills-gap of undergraduate students.

3. In addition to reinforcing the existing body of knowledge on the need for future work skills as discussed in the literature review, the research brought into focus the most popular yet underutilized models of de Bono's Six Thinking Hats and Covey's 7 Habits in the context of higher education. Interestingly, these models have been in existence for decades but their application was predominantly in the corporate world. For some reasons, higher education rarely uses them for the benefit of students except in a few stray cases. The literature on the use of these models in higher education is scant and the researcher hopes that this study would become a catalyst by evoking interest for the college administrators.

4. The need for continual monitoring of the ever-changing employers' demands to keep the students' skills up-to-date is an important outcome of this study.

5. Sharing of ideas among the students, the faculty and the career counselors goes a long way in formulating appropriate pedagogical interventions.

Recommendations for Practice

Based on the findings of this research, the following recommendations are offered:

1. The university career counselors may initiate the process of identifying the future dynamic work skills on a continual basis and collaborate with the prospective employers and the recruitment agencies.

2. Equipped with awareness and sensitization of employer-centric work skills, the administrators, and faculty may evaluate the academic curricula to assess the extent of skill-gaps faced by the students.

3. The administrators and faculty may design appropriate pedagogical interventions that can integrate the future work skills into the traditional teaching.
4. The students should be sensitized to the need for upgrading their skills and offered the opportunities to learn and practice those skills while on campus.

5. Partnering with industry is a viable option to ensure that the students leave the college with work-ready skills. It is even advisable to include some generic work-related needs such as internships and field trips into the curricula.

6. Finally, the university administrators may find it worthwhile to arrange training programs in the two interventional models mentioned in the hypothesis, namely, de Bono’s Six Thinking Hats and Covey’s 7 Habits, which the participants of the survey endorsed.

Recommendations for Future Research

The recommendations for further research in related areas are given based on the data analyzed, methodology employed, and inherent limitations of this study.

1. This study found that many students were unaware of the de Bono’s Six Thinking Hats and Covey’s 7 Habits models. Perhaps a pilot study coupled with a reasonable exposure to these two models be given to students before actually embarking on the main study. This enables the students to understand and appreciate the implications of the models and to respond to the survey questions more meaningfully.

2. The findings of this study support the hypothesis that there is a positive relationship between use of components of the two interventional models, namely, de Bono’s Six Thinking Hats and Covey’s 7 Habits, and bridging the skill-gap of undergraduate students. However, the application of these two models at the undergraduate level has been an exception rather than a rule. Thus, there is a scope for further exploring the need for use of these models in other colleges.

3. Given the dynamic nature of the work skills, especially due to the disruptive elements such as technology and globalization, a series of longitudinal studies will be helpful in documenting the trends over a period of time.

4. The perceptions of the students on this research topic varied from those of the career counselors, in some areas. This variation between the two groups warrants further study to find out the reasons, and their possible reconciliation.

5. The faculty who are in close touch with the students on a daily basis should also be included as participants.

6. The study can be extended to the public universities and to other geographical areas, as the employment conditions differ from place to place.

REFERENCES


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