

COPYCATS THRIVE ON THE INTERNET: A MULTIVARIATE STUDY OF THE ATTITUDES OF THE UNDERGRADUATE STUDENTS IN DUBAI AND SHARJAH TOWARDS INTERNET PLAGIARISM

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Abstract

The present research study investigates the UAE undergraduate students' attitude towards the issue of Internet plagiarism and tests whether there is a significant difference between the attitudes of three types of respondents chosen for this study with respect to various factors affecting Internet plagiarism. An instrument for measuring the attitudes of the students towards Internet plagiarism is developed. A research framework is constructed to extract relevant factors affecting students' attitudes towards Internet plagiarism. The results of this survey indicated that the attitudes of students towards Internet plagiarism are reflected in terms of the six extracted factors derived from the analysis of the study. The results of the research also revealed that there is no significant difference between various student groups (respondents) considered for the present research within the selected colleges in Dubai and Sharjah with respect to the issue of Internet plagiarism. The results further demonstrated that there is no significant difference between the attitudes of male and female respondents with respect to Internet plagiarism. Suggestions are also offered to keep the widely prevalent Internet plagiarism practices at bay among the undergraduate students in UAE.

Keywords: Internet plagiarism, World Wide Web (WWW), Principal components analysis (PCA), Varimax rotation, Eigen value and Rotated Component Matrix.

INTRODUCTION

Although technological advances over the past decade have been phenomenal and unleashed a dramatic and revolutionary impact on educational environments, not all of them have been productive. The digital revolution made it easy for students to plagiarize with the help of Internet search engines, online journals, web-based news sources, article databases, and other electronic sources and has increased Instructor's concerns regarding Internet plagiarism in the classroom environment. The advent of the World Wide Web (WWW) has enabled students to sort through thousands of published documents ready to "cut and paste" into their class room related assignment papers and thus has paved the way for a new style of stealing labeled as academic plagiarism which is on the rise in the modern colleges and universities, throughout the world. Although it is easy to identify when someone is stealing money or other tangible items, stealing of words, illustrations, tables, figures, thoughts, or ideas can be harder to recognize. Several education researchers opined that the most common types of plagiarism include submitting someone else's written work as original, copying information verbatim from the Internet and any other source, using incorrect paraphrasing and not documenting references, and copying from self and using the same elsewhere as if it is primary and non redundant.

Many conscientious Instructors in the higher education systems from American, British and various other parts of the world have realized that the growth of Information Technology has disastrous consequences for the students learning outcomes. The ease of use of the Internet technology is the major factor responsible for the increase in academic cheating (Decamp 2001). In this context, another factor to be reckoned with is the increase in the number of digital business sites mushrooming on the Internet such as Buyapapers.com, (<http://www.buyapapers.com/>), term Papers & term Papers (<http://www.term-papers-term-papers.com/>), and Term Papers Amazon (<http://www.termpapers.amazon.com/>) etc. The past decade has witnessed an increased number of plagiarized papers in both graduate and undergraduate courses. Some education thinkers attribute this growing plagiarism to students' laziness, lax morals, or ignorance of the rules, and they demand tougher academic policies, detection efforts, and punishments

to stop it. Some researchers opine that conventional teaching methods invite cheating and a survey conducted by Donald L. McCabe (1997), from Rutgers University found that 41 percent of students said that they engaged in "cut-and-paste" plagiarism from online sources. In the 2003 another survey conducted by National Survey of Student Engagement in which 87 percent of college students who took the survey online said their peers copied data from the Internet without citing sources at least once in a semester. Two-fifths of the students in McCabe's another survey revealed that students plagiarized from online sources as their own papers but cited sources properly because they knew that plagiarism was wrong.

LITERATURE REVIEW

There is an increasing body of research which highlighted the various issues involved in the growing incidence of plagiarism. Several research studies abound, the following studies have influenced the present study. Ann E. Austin (2000), in her in-depth investigation of the graduate school experiences of students working as teaching assistants, reported in The Journal of Higher Education in 2001 that only a small portion of the students she studied, were academically honest and a majority of them plagiarized one occasion or another. Austin noted this does not bode well for the future of academic teaching, because research showed that graduate school experiences strongly influenced the career goals, attitudes, and expectations of the students. Austin's findings were found to be consistent with Spence's observations which revealed that most professors learn to teach through a process of trial-and-error employing the same lecture-based methods of teaching which their professors used and practiced the same instructional methods which their professors used, and so on. Consequently, while most professions have changed considerably over time, Spence (2000) observed that teaching profession has not changed much and he further remarked that, "a 15th-century teacher from the University of Paris would feel right at home in a Berkeley classroom" because most professors continue to believe that "teaching is telling, learning is absorbing, and knowledge is a subject matter content. He related the lack of smartness on the part of instructors to the growth of Internet plagiarism.

A strong relationship has been demonstrated between several

contextual variables and student cheating (McCabe & Trevino 1997, 1993; McCabe et al., Bowers, 1964;). According to McCabe et al., "these variables include perception of peers' behavior, student perceptions of the understanding and acceptance of academic integrity policies, the perceived certainty of being reported for cheating, and the perceived severity of campus penalties for cheating." Perception of peer behavior is an important factor in academic integrity. Multi campus studies by McCabe and Trevino (1993, 1996, and 1997) showed that perceptions of others strongly influenced student academic dishonesty. McCabe and Trevino (1997) concluded, "The most powerful influential factors [regarding cheating] were peer-related contextual factors," including perceptions of peer behavior (p. 391). Elsewhere, McCabe and Trevino (1993) emphasized that "Academic dishonesty is most strongly associated with the perceptions of peers' behavior" (p. 536). Conversely, strong disincentives for academic dishonesty are the likelihood of being caught and the perceived severity of penalties (McCabe & Trevino, 1993). Aaron (1992), based on a survey of 257 chief academic officers, found that few faculty discussed cheating in class, few institutions provided student development programs focused on academic integrity, and almost none made an effort to assess the extent of cheating on their campus.

Hawley (1984), based on a single-- campus survey of 425 undergraduates, reported that 12% admitted asking someone to write a paper for them, 14.6% said they had turned in a paper written by another student, and 5.6% indicated "they had handed in a paper obtained from a research service" (p. 36). In addition, approximately 25% of these students "agree with one or more arguments that plagiarism is acceptable behavior" (p. 38). Nuss (1984) faulted the academic community for lack of success "in communicating the value of independent scholarship to its students" (p. 140). Drum, 1986; Howard, 1999; Kolich, 1983; McLeod, 1992; Wilhoit, 1994), Aaron, 1992; Collison, 1990; argued that if unchecked the issue of academic plagiarism may have serious negative consequences for the academic progress of the student community in general and society in particular. Several research studies conducted by Davis, Grover, Becker, & McGregor, 1992; Gehring, Nuss, & Pavela, 1986; Haines, Diekhoff, LaBeff, & Clark, 1986; highlighted the role of instructors in devising anti plagiarism strategies keeping in view of the sophisticated technology. In this context the series of studies conducted by McCabe, 1992; McCabe & Bowers, 1994; McCabe & Trevino, 1993, 1996, 1997; are a case in point. In a survey of 6,096 undergraduates on 31 campuses, McCabe (1992) reported that 67.4% admitted cheating at least once on a test or major assignment.

Davis et al.(1992) reported in another multi campus survey, conducted on than 6,000 students, that 76% admitted cheating in either high school or college or both. Concerning students' ethical views regarding academic honesty, Davis et al. (1992) concluded, "Most students say that it is wrong to cheat," noting that "the percentage of students answering yes to the question, 'Is it wrong to cheat?' has never been below 90%" at the schools they surveyed (p. 17). However, measures of the incidence of cheating suggest a contradiction between what students say and do. In addition, some have argued that colleges and universities are not doing enough to foster a commitment among students to academic honesty. Shropshire, (1997), Maramark & Maline, 1993; observed that self-reports of cheating are high, although estimates vary widely, with 9% to 95% of those asked admitting

to some form of academic dishonesty.

NEED OF THE STUDY

The present research study gains importance against the backdrop of the inability of the UAE students to turn in their class room assignments/term papers on time and their lazy attitude towards meeting the deadlines. The study becomes relevant in the light of the increasing number of research studies that are being conducted by instructors through out the world on the issue plagiarism to devise effective mechanisms to combat the negative impact on the academic growth of students. The changing attitude of students towards academic learning, hurdles faced by instructors while disseminating the learning inputs and the inability of the students to reach the learning outcomes as enunciated in the course descriptions of a given course also validate the present study.

OBJECTIVES OF THE STUDY

The broad objectives of the study are as follows.

- I. To understand and analyze the attitude of UAE students towards plagiarism.
- II. To identify and interpret the factors those are predominantly influencing the issue of plagiarism in the UAE context.
- III. To test whether there is a significant difference between various factors affecting plagiarism with respect to the various student groups?

RESEARCH HYPOTHESES

Hypothesis 1: The dimensions of the various factors affecting the issue of Internet plagiarism in UAE colleges selected at simple random, taken as a multivariable set are a predictors of plagiarism?

Hypothesis 2: To create effective academic interventions it is important to investigate the students' attitude towards the issue of Internet plagiarism. The aim is to find out the relevant factors affecting the Internet plagiarism.

Hypothesis 3: To evaluate a notion that different sets of variables may affect Internet plagiarism but a few variables affect a given factor. The objective is to identify what set of variables are affecting the factors considered for the plagiarism research in the UAE academic context by using varimax rotation and Principal Component Analysis (PCA)

LIMITATIONS OF THE STUDY

In spite of the constant effort and care taken by the researcher while administering the Questionnaires, some of the respondents were apprehending that this Questionnaire was designed by their instructors to gauge their responses and this marginally limited the study. The present research study is confined to a few colleges in Dubai and one college in Sharjah and does not include all the colleges in UAE. Since the study does not focus on all the emirates of UAE, therefore the sample size is less; however, according to the central limit theorem on the sample size, this is statistically acceptable for such an explorative study with large number of variables such as 35. Further, the study has incorporated only some statistical tools among the various tools that are available in this context. In particular the entire study adhered mainly to Factor Analysis, Analysis of Variance one-way (ANOVA-I WAY) classification

and T-test for independent samples.

QUESTIONNAIRE AND SAMPLE

To assess the attitude of students in UAE towards Internet plagiarism, a survey instrument of 35 variables was used. Respondents were asked to rate these 35 variables which are rooted on a seven point Likert scale of 1-7 where

- 1- Strongly disagree (SD)
- 2- Disagree (D)
- 3- Tend to Disagree (TD)
- 4- Unsure (U)
- 5- Tend to Agree (TA)
- 6- Agree (A)
- 7-Strongly Agree (SA)

SAMPLE SIZE AND DATA COLLECTION

The sample size is 282. The sample includes college going students studying undergraduate courses in Dubai and Sharjah drawn by simple random sampling from both sex groups (Male and Female).The respondents were chosen at random from three sources namely, Dubai Knowledge Village (MAHE and BITS Pilani), Colleges in Dubai city (Emirates College for Management and Information Technology (ECMIT) and Dubai University College) and Skyline College, Sharjah. The primary data was collected by the survey instrument. Questionnaires were administered to respondents directly by the researcher by visiting them in their college with the help of fellow instructors. The main sources of secondary sources include periodicals and journals, internet and magazines. Data collection took place from June 2005 to October 2005. SPSS software (12.0 version) is used for the research analysis.

METHOD

Items (variables) were developed to capture respondents' feelings and emotions with respect to their attitude towards the issue of plagiarism. Principal Components Analysis (PCA) method was performed by varimax rotation with Kaiser Normalization to get percentage of variances for all the 35 variables so as to extract relevant factors reflecting the Internet plagiarism dimensions. Subsequently Analysis of variance one way classification was performed for the extracted factors to test whether there is a significant difference between the various respondents with respect to attitude towards plagiarism. T- Test was performed to test whether there is a significant difference between male and female respondents within the extracted factors individually.

PILOT STUDY AND INITIAL PURIFICATION OF THE SURVEY INSTRUMENT

Initially a pilot study was conducted in order to develop a proper methodology and relevant modus operandi to collect the research data. At the outset it was decided to conduct a survey relating to Internet plagiarism in the UAE context. Therefore, initially the Pilot Study consisted of all the above. A Survey instrument was designed to measure the attitudes of various students with 47 variables on a Likert scale of 1 to 7. Questionnaire was administered with 47 Questions to 25 respondents who were chosen at random in the Skyline College, Sharjah.

The reliability analysis test revealed that the Cronbach alpha value is $.7046 > 0.70$ as suggested by Nunally(1978). However, the number of factors was 47 (not acceptable for a list of 47 variables).During the data collection stage it was also found that the respondents were having difficulty in interpreting 47 statements. It was also observed that issues like the role of peer

advising and issues related to other forms of social interaction need to be deleted from the Questionnaire as wide fluctuations were observed on this item with respect to rating of attitudes. After reviewing the Pilot study, it was decided to confine the research to 35 variables and a new questionnaire was designed. The components in the Questionnaire were fine-tuned keeping in view of the experiences the researcher gained while conducting the pilot study. The deletion of 12 variables from the original questionnaire resulted in the increase in coefficient alpha from .7046 to .760.This is within the accepted limits of reliability as suggested by Nunally(1978). The reliability analysis results for both original and modified questionnaires

Table I - Results of Reliability Test

	Pilot test Questionnaire	Modified Questionnaire
Overall reliability		
Mean	53.4333	112.6938
Variance	747.7713	421.704
Std.Dev	26.9772	21.584084
No.of Variables	47	35
No. of Cases	25	282
Cronbach Alpha	0.7046	0.760

Table II - A Frequency of Respondents

Nature of Respondents	Frequency	Percentage
Knowledge Village Students	179	63.5
Dubai Colleges	71	25.2
Skyline College	32	1.3
Total	282	100

Table II-B Frequency of male and female respondents

Respondents sex type	Frequency	Percentage
Male	165	58.5
Female	117	41.5
Total	282	100

are displayed in Table I. The frequency distribution of the response rate is displayed in Table II A and II B.

PRINCIPAL COMPONENTS ANALYSIS

The responses of 282 respondents were entered into the PCA (Principal Components Analysis) of SPSS software wizard. The data is subjected to PCA (Principal Components Analysis) followed by varimax rotation with Kaiser Normalization to get a correlation matrix to get percentage of variances for all the 35 variables. The purpose is to identify the variables with eigen value more than 1 and to identify the relevant factors which can be extracted from the analysis. It can be interpreted from the cumulative percentage column in Table III (Results of Principal axis factoring) that 6 factors are extracted that account for

Table III - Results of Principal Axis Factoring

<i>Rotation Sums Of Squared Loadings</i>			
Factor	Eigen Value	Percentage of Variance	Cumulative Variance %
1	5.888	12.967	12.967
2	4.871	12.828	25.795
3	4.220	12.352	38.147
4	3.380	11.165	49.312
5	2.4852.480	9.271	58.583
6	2.114	7.016	65.600

65.60 percent of the total variance (information contained in the original 35 variables) and this value is acceptable for further analysis.

A Rotated Component Matrix Table is generated Table IV (Rotated component Matrix for 6 extracted factors) which gives the loading of each variable on each of the extracted factors. This is similar to a correlation matrix with loadings having a value between 0 and 1. Values close to 1 represent high loadings and close to 0 low loadings. The objective is to find variables which have high loading on one factor but low loadings on other factors. Loadings above .50 are considered. The objective of this research is to identify the right set of variables influencing the attitudes towards plagiarism. It is observed that

	Component Matrix ^a					
	Component					
P7	.738	.047	-.248	-.375	-.170	.139
P8	.732	.059	.058	-.293	.201	.074
P18	.897	.084	-.047	.435	-.347	-.150
P10	.885	.234	.199	-.038	.441	-.031
P22	.850	.272	.242	-.343	.229	.249
P27	.848	-.039	-.412	.494	-.222	-.014
P30	.846	-.006	.148	.418	-.064	-.184
P3	.576	-.020	.046	.059	-.216	.224
P35	.489	-.054	-.236	.413	.100	-.320
P21	.177	.815	.194	.192	.011	-.015
P13	-.181	.872	.149	.300	-.489	-.083
P9	.194	.815	.419	.361	.195	-.103
P19	-.402	.600	.444	.122	.029	.040
P11	-.115	.597	.268	.142	-.122	.196
P20	.057	.586	-.037	-.516	-.136	-.223
P24	-.142	.566	.299	.354	.214	-.333
P26	.326	.536	.458	.166	.135	-.186
P14	-.115	.528	-.160	.087	-.016	.058
P33	.382	-.367	.304	.335	.103	.301
P4	-.079	.299	.127	-.200	-.245	.063
P16	.251	.352	-.728	.229	.106	.212
P28	.390	.279	-.718	.257	-.244	.020
P29	.216	.220	-.684	-.181	.149	.115
P15	.316	-.223	.597	-.160	-.239	-.488
P31	.198	.257	.567	-.280	-.194	.349
P17	.398	-.132	.579	.234	-.350	.039
P12	.141	.055	-.351	.040	.172	-.138
P2	.547	.215	-.067	-.861	.027	-.084
P32	.137	.503	-.058	-.518	-.337	-.284
P1	.408	.177	.112	-.430	.382	.006
P23	-.132	.410	-.032	.328	.687	.126
P25	.308	-.091	.238	.055	.605	-.210
P5	-.258	.244	.119	.124	.096	.676
P6	.448	-.114	.193	.193	-.187	.548
P34	.096	-.284	.251	-.127	-.077	.346

Extraction Method: Principal Component Analysis.
a. 6 components extracted.

Factor Name	Item No.	Variables	Factor Loadings
Factor I Internet Browsers	P7	I enjoy surfing on the Internet.	.738
	P8	I feel that reading online journals updates my awareness and helps in getting good grades.	.732
	P18	I feel that Internet resources are helpful to students while preparing for classroom assignments.	.697
	P10	I try to secure some information from the internet for my classroom assignments.	.685
	P22	I feel that internet search engines make my classroom assignments/projects easy.	.650
	P27	My friends also use the Internet resources while answering classroom assignments.	.648
	P30	Information I get on the web is vital and it enhances my class room performance.	.646
	P3	I always make use of the free internet facility in the college whenever I am free.	.576
Factor II Peer Group Help Seekers	P21	I always consult my instructors while solving my class room assignments.	.815
	P13	I feel that discussing with my friends is beneficial to me.	.672
	P9	I score better in the class room assignments when I solve them in group.	.615
	P19	My peer group has an influence on my academic preparations.	.600
	P11	I always help my friends in solving class room assignments.	.597
	P20	I feel that creative solution emerge while discussing with friends.	.586
	P24	I feel that helping my friends in the class helps me in learning better.	.566
	P26	I feel that helping my friends in the class increases my image in the class.	.536
	P14	My instructors always encourage us to help the slow learners.	.528
Factor III Laggards	P16	I hardly visit the library in a given semester.	.728
	P28	I go the library only for collecting and returning the books.	.718
	P29	I frequently miss my class room assignment deadline schedules.	.684
	P15	I find it difficult to cope up with the class room assignments.	.597
	P31	I find it very difficult to solve my assignments without the help of my friends.	.587
Factor IV Library Visitors	P2	I feel that our college library is well equipped with a good collection of textbooks, journals and magazines.	.661
	P32	The library staff is supportive and displays sense of customer service.	.518
Factor V Plagiarism seekers	P23	I always borrow my friend's assignments and change the contents slightly without the instructor's notice.	.687
	P25	My instructors are not aware of the anti plagiarism software.	.605
Factor VI Deliberate Plagiarists	P5	I find it convenient to plagiarize than solving my assignments by working hard.	.676
	P6	I feel that plagiarizing on class room assignments is not a problem unless one is caught by the instructor.	.548

not all the variables are influencing the issue of Internet plagiarism. A detailed explanation of the List of Factors with Variables and Factor Loadings is displayed in Table V.

INTERPRETATION OF THE PRINCIPAL COMPONENTS

It can be interpreted from the Principal components analysis that Internet plagiarism in UAE colleges may be understood in terms of the six Factors extracted below. The extracted factors are as following.

Factor I: Internet Browsers

This factor reflected the attitude of students towards Internet and it is observed that they enjoyed surfing on the Internet. They also felt that reading online journals may update their awareness and may further help in getting good grades. This group of students observed that Internet resources are helpful to them while preparing for classroom assignments and they always made efforts to secure some information from the internet for class-room assignments. They also opined that Internet search engines made solving classroom assignments/projects easy. This group

also felt that their friends also use the Internet resources while answering classroom assignments and the Information they got on the web is crucial as it enhanced the class room performance. This group also made use of the free Internet facility in the college whenever possible.

Factor II: Peer Group Help Seekers

This factor reflected the attitude of the students towards peer group. This group of students always consulted instructors while solving class room assignments and also felt that discussing with friends and peer group is beneficial to them. They also felt that they score better when they work in a group and felt that peer group has an influence on their academic preparations. This group always made efforts to help their friends in solving class room assignments and felt that creative solutions emerge while discussing with friends. They further observed that helping friends in the class helps in learning better and increases their image in the class.

Factor III: Laggards

This factor reflected the lazy attitude of students and describes how they lag behind others in the class room scenario. Students belonging to this group hardly visited the library in a given semester and they went to the library only for collecting and returning the books. This group frequently missed class room assignment deadline schedules and some times found it difficult to cope up with the class room assignments. It is also observed that they found it very difficult to solve assignments without the help of their friends.

Factor IV: Library Visitors

This factor reflected the attitudes of students towards the college library. This group felt that the college library is well equipped with a good collection of textbooks, journals and magazines. They also felt that the library staff is supportive and displayed sense of customer service.

Factor V: Plagiarism seekers

This factor reflected the attitudes of the students towards plagiarism and they typically borrowed their friend’s assignments and changed the contents carefully without the instructor’s notice. Another characteristic of this group is that they perceived that their instructors are not aware of any anti plagiarism software.

Factor VI: Deliberate Plagiarists

This factor reflected the attitude of students towards plagiarism and they found it convenient to plagiarize than solving assignments by working hard. They further opined that plagiarizing on class room assignments is not a problem unless one is caught by the instructor.

Interpretation

In order to test, whether the attitudes of the sample of respondents towards internet plagiarism would differ according the three types of respondents (Business, Information Systems and Tourism) considered for this study, an analysis of variance one way classification was performed on all the extracted factors. The study also revealed that students from various streams seem to have similar attitudes towards classroom assignments and grades, but they differed while responding to the statements (variables) on the issue of Internet plagiarism. Therefore Analysis of variance one way classification was used to test whether these differences are significant at $\alpha=5\%$

(α =level of significance). Surprisingly the analysis of the findings revealed that although all the three groups did not respond

Table VI Analysis of variance between 6 Factors & 3 types of respondents

	Sum of Squares	Degrees of freedom	Mean square	F-Ratio	Significance
Internet Browsers	281	2	.456	.992	.528
Peer Group Help Seekers	281	2	.763	.044	.632
Laggards	281	2	1.363	2.762	.731
Library Visitors	281	2	.997	1.367	.846
Plagiarism Seekers	281	2	1.006	1.96	.656
Deliberate Plagiarists	281	2	2.7228	.874	.673

similarly with regard to Internet plagiarism on a scale of 1 to 7, yet no significant differences were noticed among the three categories with respect to the six extracted factors (See Table VI). In this context, Null Hypothesis is denoted by HO and alternate Hypothesis is denoted by H1.

HO: There is no significant difference between the three types of respondents selected for a given factor with respect to attitudes towards internet plagiarism.

H1: There is a significant difference between the three types of respondents selected for a given factor with respect to attitudes towards internet plagiarism.

For factor I “Internet Browsers”, it can be interpreted that the F- Probability value in the Anova is .528, which is more than .05(level of significance), hence the null hypothesis (at 95% confidence level) is accepted. It can be inferred that there is no significant difference between the three types of respondents with respect to attitudes towards plagiarism for Factor I and the test is not significant at 5% level of confidence.

For factor II “Peer Group Help Seekers”, it can be interpreted that the F- Probability value in the Anova is .632, which is more than .05(level of significance), hence the null hypothesis (at 95% confidence level) is accepted. It can be inferred that there is no significant difference between the three types of respondents with respect to attitudes towards plagiarism for Factor II and the test is not significant at 5% level of confidence.

For factor III “Laggards”, it can be interpreted that the F- Probability value in the Anova is .731, which is more than .05(level of significance), hence the null hypothesis (at 95% confidence level) is accepted. It can be inferred that there is no significant difference between the three types of respondents with respect to attitudes towards plagiarism for Factor III and the test is not significant at 5% level of confidence.

For factor IV “Library Visitors”, it can be interpreted that the F- Probability value in the Anova is .846, which is more than .05(level of significance), hence the null hypothesis (at 95% confidence level) is accepted. It can be inferred that there is no significant difference between the three types of respondents with respect to attitudes towards plagiarism for Factor IV and the test is not significant at 5% level of confidence.

For factor V “Plagiarism Seekers”, it can be interpreted that the F- Probability value in the Anova is .656, which is more than

.05(level of significance), hence the null hypothesis (at 95% confidence level) is accepted. It can be inferred that there is no significant difference between the three types of respondents with respect to attitudes towards plagiarism for Factor V and the test is not significant at 5% level of confidence.

For factor VI “Deliberate Plagiarists”, it can be interpreted that the F- Probability value in the Anova is .673, which is more than .05(level of significance), hence the null hypothesis (at 95% confidence level) is accepted. It can be inferred that there is no significant difference between the three types of respondents with respect to attitudes towards plagiarism for Factor VI and the test is not significant at 5% level of confidence.

T-TEST TO FIND WHETHER THERE IS ANY SIGNIFICANT DIFFERENCE BETWEEN MALE AND FEMALE RESPONDENTS WITH RESPECT TO INTERNET PLAGIARISM

In order to test, whether the attitudes of sample of respondents towards internet plagiarism would differ according to Gender,

Table VII -Interpretation of t-distribution for male and female respondents

Factor	P(probability) Value	Interpretation
Internet Browsers	.723	.723 >.05 ,hence not significant at α =5%
Peer Group Help Seekers	.856	.856 >.05 ,hence not significant at α =5%
Laggards	.774	.774 >.05 ,hence not significant at α =5%
Library Visitors	.532	.532 >.05 ,hence not significant at α =5%
Plagiarism seekers	.641	.641 >.05 ,hence not significant at α =5%
Deliberate Plagiarists	.721	.721 >.05 ,hence not significant at α =5%

an independent t-test was performed on all the extracted factors. The findings revealed that no significant differences were noticed among the male and female respondents with respect to the six extracted factors. In this context, Null Hypothesis is denoted by HO and alternate Hypothesis is denoted by H1. The results are displayed in Table VIII. (T-Test for Male and Female groups)

HO: There is no significant difference between the male and female respondents selected for a given factor with respect to attitudes towards internet plagiarism.

H1: There is significant difference between the male and female respondents for a given factor with respect to attitudes towards internet plagiarism.

Interpretation: The analytical results of t-test revealed that there is no significant difference between male and female respondents towards internet plagiarism. The mean values for 7 extracted factors also demonstrated that there is no significant difference. Since the p-values like .723, .856, .774, .532, .641 and .721 are >.05 (at 5% level of significance), hence the null hypothesis is accepted. So, it can be interpreted that there is no significant difference between male and female respondents with regard to their attitude towards internet plagiarism.

SUGGESTIONS AND POLICY IMPLICATIONS

Instructors play a major role in checking the Internet plagiarism which is widely prevalent among the college going students in UAE. The present research revealed that by understanding the reasons and motives behind the Internet plagiarism, Instructors may devise strategies while focusing on the cohort of the student community. The following suggestions are made to combat the Internet plagiarism in UAE colleges. A majority of these suggestions revolve around the role of Instructors in evolving anti plagiarism climate in the colleges and therefore may also have Institutional policy implications. They include the following:

Instructors need to update themselves on regular basis about the impact of technology on the curriculum development and its implications for the student learning process. Development of technology (Internet) may sometimes have negative repercussions for the class room learning and therefore efforts needs to be made by Instructors to meet the challenges posed by technology. Instructors need to focus on the various forms of plagiarism on research papers like downloading a free research paper, buying a paper from a commercial paper mill, copying an article from the Web or an online or electronic database and copying a paper from a local source (peer group). Some of the papers are surprisingly old (with citations being no more recent than the seventies). These papers can be good--and sometimes they are too good. Moreover, mills often sell both custom and stock papers, with custom papers becoming stock papers very quickly. Checking the citation will expose this practice.

Instructors may need to educate the students about the Consequences of Internet Plagiarism

Discussing with students that plagiarism is a combination of stealing (another's words) and lying (claiming implicitly that the words are the student's own) may be helpful. Many Instructors remind students that Internet plagiarism shows contempt for the professor, other students, and the entire academic arena. Some Instructors also drive home the point that copying papers or even parts of papers short circuits a number of learning experiences and opportunities for the development of skills. Discussing the benefits of citing sources may also be beneficial as many students do not seem to realize that whenever they cite a source, they are strengthening their writing skills. Appropriate quoting and citing also evidences the student's respect for the creators of ideas and arguments--honoring thinkers and their intellectual property.

Instructors may need to make the penalties clear and unambiguous

Lack of consensus among the Instructors on the nature and impact of Internet plagiarism and the corresponding penalties also operates as an abetting factor for the widely prevalent Internet plagiarism in UAE colleges. Many students feel that Internet Plagiarism does not result in serious academic repercussions and therefore they feel that they can get away with a minor penalty. This is because of not having an institutional policy on the same. However some educational Institutions quote it clearly in their syllabus and brochures about the penalties of any sort of plagiarism. For example, some Institutions quote that "Cheating on a paper will result in an 'F' grade on that paper with no possibility of a makeup. A second act of cheating will result in an 'F' in the course regardless of

the student's grade otherwise." These penalties can be presented in a positive light as they exist to reassure honest students that their efforts are respected and valued and in no case they will be equated on par with dishonest students.

Designing the Assignments to discourage Internet Plagiarism

Whenever possible, Instructors need to design the assignments, term papers and research reports in such a way that copying and pasting from another source is of no use to the student. Assignments need to be designed so as to encourage cognitive learning (analyzing, applying, synthesizing, or evaluating) and/or affective learning (challenging, defending and supporting). Instructors may also assign projects where students create a product/brochure on a given set of attributes, designing an advertisement text based on a given concept or a PowerPoint presentation on various factors affecting the economy of a nation etc. Many Instructors make topics or formats for written assignments which are mutually exclusive, different and unusual, so that finding similar material on the Internet will be more difficult. This also serves as a deterrent to check the negative impact of Internet plagiarism on the academic and career growth of students.

Creating a congenial and anti- Plagiarism class room climate

Creation of a congenial class room environment in which plagiarism is ridiculed by peer groups may also minimize the incidence of plagiarism. Several research studies indicate that warning students not to plagiarize, even in the strongest terms, appears to have less impact unless they are backed by serious institutional efforts. In this context, revealing the use of plagiarism-detection software to the students prior to completion of an assignment, on the other hand, proved to be a remarkably strong (though still not absolutely perfect) deterrent. In deterrence, actions speak louder than words. Since plagiarism substantially harms honest students' grades involvement of anti plagiarism teams headed by students who oppose this may go a long way in combating the negative impact on the whole class as such.

CONCLUSION

It can be interpreted from the analysis of the results that the attitudes of respondents from three different streams like business, Information Technology and Tourism, towards the issue of Internet plagiarism is reflected in terms of the six factors like Internet Browsers, Peer Group Help Seekers, Laggards, Library Visitors, Plagiarism Seekers and Deliberate Plagiarists. It can also be inferred from the above analysis that the extracted six factors together account for 65.60 of the total variance (information contained in the original 35 variables) and this demonstrates the efficacy of the survey instrument. It can also be inferred that the survey has economized on the number of variables from 35 to 6 factors which looks simple to interpret and easy to understand with respect to the attitudes towards internet plagiarism. It is interesting to note that there is no significant difference between the respondents' attitude with regard to internet plagiarism from the three selected streams like business, Information Technology and Tourism within the six extracted factors. The results further revealed that there is no significant difference between the male and female segments with respect to internet plagiarism within the six extracted factors. This has major implications for institutions and instructors who aim at quality in education. Understanding the students' mindset from the above extracted factors may help

them understand the issue of internet plagiarism better. The present research also revealed that finding a universally valid and all time relevant solution to Internet Plagiarism may not be possible and it is the responsibility of the Instructors to devise strategies to combat the Plagiarism practices. These strategies may change from college to college and for the same college it may change from time to time. But understanding the motives behind the acts of Internet Plagiarism may help Instructors in designing effective deterrent strategies.

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