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Online vs Offline: Experimenting the Belief in Career Exploration Methods of University Students

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Authors' contributions

This work was carried out in collaboration among all authors. Author DKM has designed the study and performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. Author WDNSMT managed the analyses of the study and assisted to develop the research framework. Author WJAJML managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

The beliefs in career exploration methods varying largely between the online and the offline career exploration methods. Among large pool of career explorers, university undergraduates can be considered as one of the most intense and immature group of explorers. At the same time, it is apparent that students are exploring career opportunities through various methods. Therefore, the primary objective of this research was to find out the beliefs in online and offline exploration methods in university undergraduates and decide the most effective method for career exploration. An experimental model was developed based on Stumpf, Colarelli, & Hartman's "Development of the Career Exploration theory. Three treatment groups were formed by the final year university students to denote two main career exploration methods. The sample was selected by randomly assigning an equal number of participants (25). Pre and Post beliefs about each career exploration method were assessed and analyzed to conclude the most effective method. The results found that after the treatment, pre and post believes about career exploration was not been significantly changed by its method. Yet, the amount of information gathered and exploration satisfaction were

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high in the online method. The respondents never had any systematic or planned way when exploring via online sources. The doubt about reliability of information gathered was high in the offline method. Further, the results revealed that there was no impact of stress and satisfaction for exploration belief. Implications are invited for allocating career exploration awareness for the target group in their early career exploration stages to prepare them for successful career decision making by forward-thinking.

Keywords: Career exploration; offline; online; experiment; university students.

1. INTRODUCTION

The career exploration by adolescence is gaining an uprising attention in the face of labour market complexities [1,2] It is a focal point embedded in most career development theories. According to Erikson's [3] under the theory of psychosocial development, university students are falling into the young adult category and considered as prominent explorers and decision makes when comes to matured age period [4,5]. During this period, they develop close relationships in setting career and life goals. Many influential factors can mislead adolescents' career decisions and it is important to spare time for exploration before making any career decision [6,7]. They explore information, in fact, a job-search - any job matches with his/her gualifications, rather than searching careers that are most suitable for their needs, interests and aspirations [8]. A possible exception to the generalization represented by the small minority of exceptional "high-fliers" whose performance in examinations. parental cum social connections or family wealth offer several career prospects, e.g., selfemployment, becoming an employee in the executive ranks of the state sector / private sector, university teaching, proceeding abroad for further career advancement etc.

In the present context individuals tend to adopt numerous career exploration methods. In common context, they can be classified as online and offline methods [9]. Internet-based (Online) career exploration usually takes place as employers' websites, job websites, social media platforms, websites of professional associations and e-publications on job openings. Presently, formal and informal mobile and computer applications (apps) collaborate large group of professionals in one place for successful recruitment. The "LinkedIn", one of the most professional networks were able to targeted advertising technology which offers explorers need to collect on past and present job positions, companies and referrals from various contacts.

At present, it is a known fact that employers are fully digitalized. The recruitment process, particularly during the present pamdemic it is unstoppable that job seekers from all categories and career planers will be more focused towards exploring jobs via online platforms [10]

According to a survey conducted by Pew Research Center [11], the internet considered as a top resource for job hunters. The report says 'Among Americans within last 2 years, 79% consumed online resources and 34% said it was an essential tool for exploration jobs'.

However, rapid focus on Internet-based career exploration has not yet been devalued the methods of non-internet (traditional) career exploration [12].

In the context of non-internet-based (offline) career exploration, a vast number of people who search various career options may find their way from informal contacts and formal contacts. Kuhn Skuterud [13] recognized contacting and employers directly, employment agencies, from friends & relatives, through school /university employment centers, checking union professional registers, and job advertisements in newspapers/magazines as traditional methods of job search. The Finances Online Research Center [14] reported that '84% of companies use social media in recruiting, however, 60% of people look for jobs using social professional networks, 56% people rely on word of mouth'.

It is often reported that even though the internet has changed the face of the job search, the true traditional methods, 21st century so called "Networking" still alive with high success rates [15]. Enache et al. [16] and Galanaki [17] also considered still printed sources as such as newspapers are a good option for the first stage of career exploration. Ranasinghe et al [18]. further stated that it is common that Sri Lankan companies still use newspapers for advertising job vacancies widely.Boston Consulting Group (BCG) and Recruit Works Institute (13,000 respondents,15 countries) candidates were intensely explored online job onboarding sites. However, in specific Asian countries like India, only a few respondents have (8% of total survey population) cited job sites as the most effective channel for finding jobs [19].

The organization's HR function mostly operates based on organizational objectives. Under the function of "job recruitment," job posting is a vital fact adjoining with career or job exploration. In Amidst positive conclusion made on the online source of career exploration some shows offline of career importance exploration. Researches have indicated the use of informal networks speed up the matching process of the candidates to a particular job. Further, jobs through personal contacts obtained were associated with higher wages and lower quit rates [20,13]. Mayer [21] proved that job search by social networks reduces unemployment but not capable enough to substantially affect aggregate unemployment issues arising in the business. These facts have articulated, explorers have different thoughts and beliefs towards these exploration methods due to inherent pros and cons of these two methods.

The online search sessions have been also reported lengthy guarries which may be due to the fact that searchers were not getting the information or they may not locate the right information. These issues have not yet been commonly addressed [22]. In 2000, Breaugh and Starke [23] argued that there are many research questions to be answered in recruitment. In depth research has not addressed the issues like What recruitment sources should be used to reach the desired applicant population? (e.g., the Web versus job fairs), When should the employer begin recruiting? (e.g., at the start of a college student's senior year versus during the second semester), What message should it convey to potential applicants? (e.g., a good deal of jobrelated information versus information on a few key aspects of the job).

Over the last two decades, a growing number of empirical researches have been undertaken in relation to career exploration. However, debates continue as to how career exploration should be conceptualized and measured, which factors influence its development and how and when it affects individuals' career and work outcomes [1].

Like in the general context, developing countries like Sri Lanka may still be combating the same scenario to find the best career exploration method from the explorer's perspective. Vivak [24] has said in Sri Lankn recruiters have not leaned toward the online recruitments than expected. This proves the effectiveness of exploration methods is yet to be answered.

Hence, the research aims at finding the difference between the effectiveness of the online and offline career exploration methods. The findings will address the existing gap of the effectiveness of two broader career exploration methods namely, the online and offline.

1.1 Literature Review

The concept of career exploration refers to "purposive behavior and cognitions that afford access to information about occupations, jobs, organizations that were not previously in the stimulus field" [25,26]. Also, Career exploration facilitates to establish career plans that lead to pursue a meaningful work-life while facing rapid changes happening in individuals' lives [1]. Flum and Blustein[27] define career exploration as discovering different career options and learning about types of work that one can attain. Aligning to above definitions, Super [28] explains "career" as a development choice that process throughout the life span.

This section of the paper addresses the existing theoretical and empirical contribution made by previous scholars to construct key features of this study namely, beliefs of career exploration methods, career exploration process, and the reaction towards career exploration methods. Taveira and Moreno [29] identified four different conceptions of career exploration. The first concept was career exploration as a type of information-seeking behaviour or career problem-solving behaviour. The second concept considered career exploration as an important phase in the process of career decision making whereas the third concept regarded exploration as a major life stage, that of adolescence implementing an occupational choice. Similarly, in the final concept, exploration was described as a life-span process of career learning and development. However, career exploration and job search has a major difference. Career exploration is a much broader concept and involves behaviours aimed at furthering one's career. According to the Nasta [30] job refers to the specific position in which a person is employed (e.g., Chief of Surgery, framing carpenter etc.). Occupation refers to a person's skill set where they are occupied. A person can work athis or her occupation for different employers (e.g., doctor, carpenter, and biotechnologist).

Nevertheless, this research has developed based on the career exploration model presented by Stumpf et al. [25]. The Career Exploration Survey (CES) is one that has indexed the career search behaviors. Stumpf et al. [25] has included several indexes to measure the main components to develop the career exploration process model. The components were the belief about career exploration, the exploration process and the reaction to the exploration process.

The first component, describes the exploration belief. In this research, the beliefs were measured by including the index of "Certainty of exploration outcome". As this research was comparing two exploration methods, certainty of exploration outcome was redefined as "where one think the degree of certainty that explorer will get the desired information from exploration method".

The second component, "the exploration process" has explained by indexes: where one explores, type of information, the way of exploration. exploration how much and directness (number of occupations) of exploration. Stumpf et al. [25] has described "where one explores" as exploring about occupation, jobs and organizations. In addition, self-exploration was included as another ingredient that explains self-related exploration assessment like own strength, weakness, values and suitability for the occupation, job, and organization. [25]. Greenhaus, Parasuraman & Collins [31] have also explained career exploration should cover self-reflection and selfassessment. Self-concept is always persistent and relate with personality [32].Self-exploration helps individuals to reconsider their career goals in the context of the experience and skills acquired to date. Both self-reflections and selfassessments aid individuals in making occupational decisions. То assimilate the indexes to twenty first century, exploring labour market information has added to the index of "where on explore", Grow Careers [33] expressed there is an utmost importance to be knowledgeable on what is happening around the labour market.

The amount of information explored is another factual ingredient that can be included in the

process model [25]. Similar to the type of information explored, the amount of information gathered is also classified based on occupations, jobs, organizations and the labour market.

Further, the way one explores is measured by two indicators; intended and systematic fashion or in a fortuitous and random way [25]. In addition, the directness of the exploration was determined by the number of different occupational areas considered and the degree of focus expressed toward specific career objectives. Individuals who explore few and clearly define career areas were more likely to adhere a different exploration pattern than who explore wide area with less focused career goals [34,35].

The reaction of exploration is expressed by exploration satisfaction and stress. The exploration satisfaction can be expressed as if the process finally breeds useful information that boost confidence in obtaining an appropriate, satisfying outcome than those who have engaged in other exploration processes [36] The satisfaction can also be measured as anyone feels with the information obtained regarding occupations, jobs, and organizations relative to one's interests, abilities, and needs [37]. Further, it has believed in the psychological expectancy theory, attitudes (i.e., satisfaction) are linked to behaviour (i.e., productivity). Moreover, it has believed that satisfied users will be more productive and helpful better decision-making [38,39]. March & Simon [40] too confirmed that information availability and acquisition might affect the subsequent exploration processes.

The other component of the reaction phase is the career exploration stress. Bradlev [41]: Mendonca and Siess [42] argued that stress or anxiety was another reaction to career exploration. Stress can be defined as to the extent one perceives uncertainty about obtaining the desired outcome. Stress or anxiety might occur in individuals when exploration methods produce and overloaded career information. However, contextual anxiety, or situational stress is likely to inhibit decision-making and change exploratory behavior. One general, type of situation will typically cause anxiety when it is novel, poorly understood, and problematic [43]. It was believed that acquiring more information from those sources related to positive outcomes and gaining more knowledge about domains over time will increase satisfaction, commitment,

adjustment, and lower stress [44]. However, if exploration does not provide much helpful information, then dissatisfaction will stimulate the intention to engage in additional exploration [45].

The career exploration theory has proved that individuals were acting based on a set of beliefs at any given time point regardless of their realistic nature. Over the past 20 years, have consistently researchers revealed significant career decision-making benefits associated with beliefs which are internally caused and controllable [46]. The effectiveness of career exploration methods are largely vested on exploration methods [47,48]. With regard to changes in belief as a measurement of evaluation, it has been defined as "changed responses". This is either a change in behavior or a change in the attitude towards the behavior In addition, this demonstrates [39]. the persuasiveness of a system. Hence, changing beliefs about career exploration methods are expected to reflect the difference between pre and post beliefs of career exploration method.

Based on the above theoretical argument, following hypotheses are formed to achieve the research objectives.

H1: The type of information explored significantly differs between offline and online career exploration methods.

H2: The amount of information explored significantly differs between offline and online career exploration methods.

H3: The way of career exploration process significantly differs between offline and online career exploration methods.

H4: The satisfaction of the career exploration process significantly differs between offline and online career exploration methods.

H5: The stress of the career exploration process significantly differs between offline and online career exploration methods.

H6: There is a significant relationship between the reaction of career exploration and change in the belief about career exploration method

H7: The effectiveness of online and offline career exploration methods differ significantly

2. MATERIALS AND METHODS-EXPERIMENTAL PROCEDURE

As the objective was to compare the belief about different career exploration methods, a field experiment was staged as recommended by Stumpf et al. [25].

The participants were undergraduates (level 4) of the Faculty of Business Studies and Finance of Wayamba University; a state-owned university in Sri Lanka. The undergraduates were chosen as the participants of the experiment considering the convenience to access and monitoring of the experiment. Further, level 4 undergraduates deemed to be the best match to achieve the research objectives due to their readiness to explore career information and to make the future career decision.

The current research has tested three exploration methods which fall under (newspaper exploration, peer/parents/professionals' exploration and web-based exploration) two broader categories namely the online and offline.

2.1 The Participants

The study has followed and mainly developed based on Stumpf et al. [25] preliminary career exploration model. The sample consisted of 75 management undergraduates out of 364, falling 25 for each treatment group. The sample was selected in a completely randomized manner. The research was developed in a form of pre and post experiment design where post belief about the exploration method was tested after the treatment.

2.2 The Treatments

As the treatment, participants were asked to search online job advertisements, weekly printed parents newspapers and contact peer, job/internship professionals for various opportunities. The participants' beliefs about each career exploration method was checked in two-time phrases, where (t1) pre-belief, before the treatment and post- belief (t2) after the treatment. An instruction series and action plan were given to each group. This ensures that participants would not get confused and in fully controlled environment during the experiment process. In order to maintain the maximum attrition, the researchers first communicated the benefit of participating to the experiment process.

Strict control environment and observation methods were incorporated to the experiment process to maintain the maximum external validity level.

2.3 The Data Collection

An agreement was signed by each participant after completing the pre- questionnaire for making sure of their continuous participation throughout the process. The newspaper group was asked to visit the library on an agreed date for a 1 hour duration. Each participant was given only the job columns of newspapers so that it ensures participants only explore career related information in all weekly newspapers in Sri Lanka. The online groups of undergraduates were requested to present to the computer laboratory once a week (agreed days in the contract) for one month of the period for 1 hour. Each student has received links to demanding career sites in Sri Lanka. They were asked to explore career information through given sites. The laboratory staff monitored the students. Peers/Parents/Professional Networking group was asked to contact 3 -5 people whom they can get career related information. Those should be /parents/professionals. their peers The participants were allowed for one month of period to explore career information. During the discussion, the students should record the conversation and mandated to submit the recording to the researchers.

2.4 Data Analysis Method

resembled The experiment а complete randomized block design (3 x 2). There were 150 responses, including pre and post responses of all three groups (3 x 25 x 2). An equal sample size was randomly selected for each category. The questionnaire contains 42 items. (Cronbach's alpha = 0.751) items. This was developed to measure the student's behavior and beliefs of exploring information through the online and offline methods. Further, the questionnaire was separated in to two parts (t1 and t2) to align to the experiment design.

During the t1 period, students were provided with a questionnaire to test the belief (certainty) of the given career exploration method will help to make sure a successful career exploration outcome. This contains five Items (5): belief of obtaining information about Job, occupation, organizations, self and Labour market information. Likert Scale was use to quantify the data. 1- Strongly disagree, 6 strongly agree, 3-Neither disagree/agree.

After the experiment t2 period, the questionnaire tested "What Career Information Explored". To get a broader idea of what information explored, the questionnaire included sub items. What information explored about the occupation was by three items (3): Number tested of occupational opportunities, prestige, and occupational fit for the educational background? Information about Job exploration was tested by nine items (9): Job prestige, rank, working hours, promotion, salary, fringe benefits, required professional experience, required academic explored experience. Information about organization was tested by two items (2): The prestige of the company and the nature of the company (private / public). Self-exploration was measured by five items (5): personality fit, skill fit, qualification fit, interest fi and how the company culture may fit. The labour market information was explored by four items (3): market changes, future job trends and potential professional examination/skill acquisition programs available in the market for career progression [49].

"The way of Exploration" tested by two items (2): intended and systematic exploration. Further, stress of exploration was measured by three items (3): updating, sorting and reliability of the information gathered.

To test "How much Information Explored" did not contain separate items as above. This was directly measured by five items (5): How much Information explored about occupation, job, self, organization and the labour market related information. The same method applies for measuring satisfaction when exploring information (5).

As the second step of the t2 period, the same set of questionnaire was used to check the students' pre belief was again given to check their postbelief. The difference between pre and post belief assumed how students' beliefs have changed after the treatment. This difference was used to conclude the most effective method of career exploration. As explained in the latter part, Qualitative analysis- "member checking" also used to make sure the validity [50]. Immediately after filling out the post questionnaire, the pre questionnaire was once more handed over to the students. Afterward, requested them to compare the accuracy of their pre and post answers to check whether the change of belief about the exploration method after the experiment was correctly reflected by the given answers. If not, a second chance was offered to alter the answers in the post questionnaire. This ensures the experience they had after the treatment was correctly reflected by their answers.

Non-parametric analysis was used as the sample selection was in the form of categorical data. Normality was checked by Shapiro-Wilk and results showed that the deepened variables were not normally distributed (Pre-belief p = .000, post-belief = 0.000). Hence, Wilcoxon sign rank test used to explore the paid difference (pre and post) of each exploration category to justify the most effective career exploration method.

The Kruskal Wallis Test used to determine if there are any statistical significant differences in items that were tested between three independent groups.

The Speciaman correlation was used to test the relationship between exploration reaction towards post belief of the exploration method.

The experiment process along with the theoretical assumptions are depicted by following Fig.1.

3. RESULTS AND DISCUSSION

3.1 What is Exploring?

In order to infer the findings, Kruskal Wallis test was used to find out the independent differences in variables obtained by each exploration category. The findings are reflected as follows:

Out of given three occupational information check what is exploring about occupations,

Number of occupational opportunities available in the market mostly obtained by offline methods (Mean rank 59.14, p = .00). Whereas the prestige of a particular occupation was wellexplored through the online channels (Mean Rank=47.00, p = .00). However, it was found that respondents have been keenly exploring information about "occupation fit for educational background" from both methods (Offline mean Rank=36.50, Online Mean Rank=38.00, p = .78).

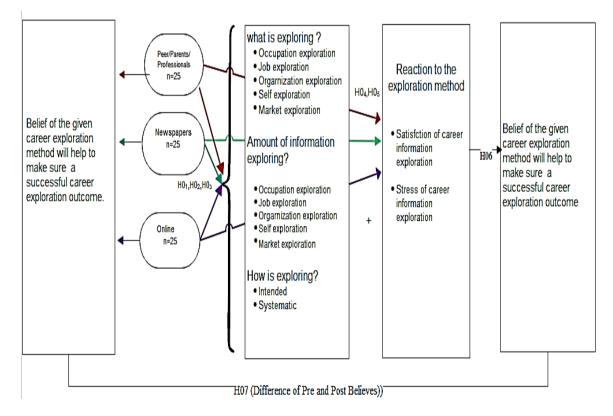


Fig. 1. The experiment process source: developed by the authors based on Stumpf et al. [25]

Nine items were given to explain what information explored about jobs during the process. Out of nine items, 5 items reported a significant difference in obtaining information through the offline and online methods. The significant items were, working hours (Mean rank = 48, p=.003), promotion (Mean rank = 48, p=.003), salary (Mean rank = 47, p=.001), other fringe benefits (Mean rank = 50, p=.000), and academic experiences (Mean rank = 46, p=.004). They were explored through offline sources than the online method. This obviously validates since these items are considered as confidential and negotiable information, which would companies unlikely be exposed to the public unless otherwise required. Conversely, respondents seem to be given relatively identical attention for both searching sources when exploring job prestige and required professional experience before choosing a career.

Two items were given to explain what information explored about the orgernization during the process (nature of the company & prestige), There was no significant difference reported that any method was exclusively helped the respondents to discover organizational information (p >.05). Even though there was no significant difference found between two methods, mean ranks denoted that the online method slightly helped explorers to find more information about organizations than offline method.

Three items were given to explain what information explored about own-self during the exploration process. Students were able to concern more of their interest when gathering information through offline methods (Mean Rank=44.50, p=0.04). Conversely, there was no statistical evidence to support that information explored through the offline or online methods helped students' to get an idea whether their skill or personality matches to various career areas explored. In other words, information obtained through online method slightly helped students to review whether their skill matches to different offline but not significantly than (mean rank=41.60, p=0.52). Offline methods helped students to review whether their personality matches to different career areas marginally but not significantly (mean rank=41.16, p=0.59)

The test results indicated most of the labour market information significantly found through the online category. Those were job trends (Mean rank = 521.16, p = .00) and information about

potential career progression programs academic/ professional (Mean rank = 51.84, p = .00). Students were able to gather labour market information mostly by the online source but offline methods too were assisted in gathering information (Mean Rank=41.36, p=0.13)

3.2 The Amount of Information Explored

The paired differences were confirmed great amount of career information were able to gather through the online method (Mean rank= 45.00, p=0.048). A detailed analysis has shown information about jobs (Mean rank 43.24, p=0.002) and organizations (Mean rank =50.70, p=0.004) gathered more through offline than the online method. Eventually, explorers were selfassessed their skills, personality and qualifications when exploring through the online method (mean rank=47.84, p=0.006). The bundle of information gathered about labour market and occupations was not been able to shown a significant difference between online and offline method.

3.3 How is Exploring?

As the literature depicts, respondents may have used either systematic or unplanned ways in career exploration. As to get a formal idea, the indicators have been measured through descriptive statistics. It has been shown most of the respondents have initiated their exploration process exploring without having a systematic or planned approach. This was mostly seen in the online method. Conversely, respondents had clearly demonstrated a systematic way of exploring information through their peers / parents / professionals' network.

3.4 Reaction to the Exploration Method

3.4.1 Satisfaction of career information exploration

The Kruskal Wallis test has confirmed respondent's overall feeling of satisfaction reported very high when exploring through the online than offline method (Mean Rank =46.60, p=0.005). Especially occupation job and labour market related information through online method (Mean rank= 49.26, p = .003/Mean rank= 43.98 p=0.015/ Mean rank 46.44, p=.038).

Exploring about organizations and self-reviewing did not reported a significant difference between online and offline methods. Explorers have given equal consideration for both methods.

3.4.2 Stress of career information exploration

The stress indicators: difficult in sorting information & receiving updated information was reported to be significantly different between online and offline method. The explorers felt more stress when sorting and receiving updated information via offline methods and least was reported in the online method. (Mean rank 54.20, p=.0.00). Receiving reliable information reported to be high in offline method but did not show a significant difference based on the exploration method.

However, overall career exploration stress was higher in offline than the online method (50.66, p=0.000)

3.4.3 Relationship between the reaction of career exploration and belief about career exploration method

The Spearman Correlation Analysis has been used to determine the relationship between the reaction of career exploration towards and postcareer exploration belief. of each method. The test results have found that reaction of career exploration has a significant positive effect for post belief of career exploration method. The research has reported a significant correlation coefficient of .458 (p = .000)

3.5 Effectiveness of the Online and Offline Career Exploration

Wilcoxon ranking method was used to test the direction of change in paired samples and their dependency on one another. This concludes that changes from pre- belief to post-belief of offline methods were swill to the negative side but not significantly. The treatment had nine positive changes, fourteen negative changes and two ties (p = .207) with a small effect size of 0.17. The effect size concludes the negative belief was negligible. The same has been tested for the online networks. This method too was not shown any significant difference in changing the belief from pre to post. Although most of the scores were swilled to the positive side (six positives, five negatives, fourteen ties, p = .830) with a very less effect size of .000. Any way the explorers' pre belief was somewhat at a high level (mean =4.24). The fourteen ties show explorers' belief about the online method has not highly changed but had at higher level than offline expiation group.

This concludes that in paired wise less significant effect reported in explorers mind that these methods will help them for generating successful exploration outcome.

4. CONCLUSION

The study has covered theoretical gaps in career exploration literature. The experiment has uncovered the effectiveness of the online and the offline methods in broader view considering many items (Indexes). Also, the research has extended the Stumpf et al. [25] model to measure how modern exploration methods influence exploration beliefs.

By considering the backdrop of research outcome, many effective offline exploration methods can develop in countries like Sri Lanka which has limited resources. The offline methods like newspapers can focus on digital presentation while being digitally loyal. The publishers of newspapers can create a viable platform by introducing a digital funnel. As a suggestion, the content of the job advertisement section can be sent (presenting digitally) via email or to the phone who's only having interest in exploring jobs and related market information. This facility can be offered by requesting a very cheap monthly subscription. A person can halt buying printed newspapers if their buying intention is only focused on one particular section of the newspapers. These were still not been found as a very trending practice in some developing countries like Sri Lanka

The amount of information gathered about "jobs and organizations were reported significantly lesser than the offline methods. In this case, the job advertisers could be more careful before publishing their vacancies. They can be more attractive while revealing more information where students can carefully select the right career decision. In other way around, company will be benefited by maintaining a high employee retention rate.

To get more understanding of exploring career information, university career advisers can play a vital role by directing students to correct exploring paths. Directing how to filter reliable information is also can be processed under a specialized guidance. For future action, it is important to show the prominence of allocating "Career Exploration Lessons" in to the time table to get a brief idea about different career areas available outside, where students can prepare themselves by forward-thinking.

5. LIMITATION OF THE STUDY

The study findings are limited by the participants to the experiment as they were undergraduates of a university within whom career indecisiveness is reported to be very high [51]. Future studies would be useful to focus on either qualitative or mix research approaches to analyze the relationship between career decision making difficulties and career exploration methods to infer whether exploration methods and the way of exploring will help to overcome the career indecisiveness.

CONSENT

As per international standard or university standard, Participants' written consent has been collected and preserved by the authors.

ETHICAL APPROVAL

It is not applicable.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- 1. Jiang Z, Newman A, Le H, Presbitero A, Zheng C. Career exploration: A review and future research agenda. Journal of Vocational Behavior. 2019;110:338-356.
- Lent RW, Brown SD. Social cognitive model of career self-management: toward a unifying view of adaptive career behavior across the life span. Journal of Counseling Psychology. 2013;60(4):557. Available:https://doi.org/10.1037/a0033446

- 3. Erikson EH. Identity and the life cycle. Psychological Issues. 1959;1:1-171.
- 4. Sharf RS. Applying career development theory to counseling. Cengage Learning. 6th Edition Belmond USA; 2016.
- Halimi M, Davis SN, Consuegra E. The Power of Peers? Early Adolescent Gender Typicality, Peer Relations, and Gender Role Attitudes in Belgium. Gender Issues. 2021;38(2):210-237.
- 6. Golde CM. The role of the department and discipline in doctoral student attrition: Lessons from four departments. The Journal of Higher Education, 2005;76 (6):669-700.
- Ali SR, Loh Garrison Y, Cervantes ZM, Dawson DA. Sociopolitical development and healthcare career interest, selfefficacy, and outcome expectations among rural youth. The Counseling Psychologist; 2021.

DOI.org/10.1177/00110000211007440.

- Orthner DK, Jones-Sanpei H, Akos P, Rose RA. Improving middle school student engagement through career-relevant instruction in the core curriculum. The Journal of Educational Research. 2013;106(1):27-38.
- Chin MY, Blackburn Cohen CA, Hora MT. Examining US business undergraduates' use of career information sources during career exploration. Education + Training. 2020;62(1):15-30. Available:https://doi.org/10.1108/ET-05-2019-0103
- World Economic Forum (WEF). The Future of Jobs Report;2020. Available:https://www.weforum.org/reports/ the-future-of-jobs-report-2020.
- 11. Perrin A. Social media usage. Pew Research Center. 2015;125:52-68.
- 12. Howard BE. The Motivated Job Search: 2nd Edition: A Proven Method to Help You Stand Out. BQB Publishing;2018.
- Kuhn P, Skuterud M. Job search methods: Internet versus traditional. Monthly Lab. Rev., 2000;123:3.
- 14. Finances Online Research Center;2021. Available at: https://financesonline.com/. Accessed on 10th September 2021
- Hayashi R, Matsuda N. COVID-19 Impact on job postings: Real-time assessment using Bangladesh and Sri Lanka Online Job Portals; 2020.

Available:https://dx.doi.org/10.22617/BRF2 00162-2 (Accessed on 10th September 2021).

- Enache M, González I, Castillo D, Lordan O. Protean and boundaryless career attitudes scales: Spanish translation and validation. Intangible Capital. 2012;8(1): 1-16.
- Galanaki E. The decision to recruit online: A descriptive study. Career Development International. 2002;7(4):243-251. Available:https://doi.org/10.1108/13620430 210431325
- Ranasinghe A, Madurawala S, Su JJ, Senadeera T. An empirical investigation of labor shortage in the manufacturing sector in Sri Lanka. Griffith Business School;2016.
- 19. Sakurai K. Job Seeker Trends 2015: Channels, Search Time, and Income;2015. Available:https://www.bcg.com/publications /2015/human-resources-mediaentertainment-job-seeker-trends-2015 (accessed 10.08.2021).
- Pellizzari M. Do friends and relatives really help in getting a good job? ILR Review. 2010;63(3): 494-510.
- 21. Mayer A. Quantifying the effects of job matching through social networks, united nations conference on trade and development. Journal of Applied Economics. 2010;14(1):35-59.
- 22. Jansen JJ, Van Den Bosch FA, Volberda HW. Managing potential and realized absorptive capacity: How do organizational antecedents' matter? Academy of Management Journal. 2005;48(6):999-1015.
- 23. Breaugh JA, Starke M. Research on employee recruitment: So many studies, so many remaining questions. Journal of Management. 2000;26(3):405-434.
- Vivek R. A Study of conceptual framework of blind recruitment in current business scenario;2018. Available:http://repo.lib.jfn.ac.lk/ujrr/handle/ 123456789/2465. Accessed on 10th September 2021
- 25. Stumpf SA, Colarelli SM, Hartman K. Development of the career exploration survey (CES). Journal of Vocational Behavior. 1983;22(2):191-226.
- 26. Blustein DL. The role of goal instability and career self-efficacy in the career

exploration process. Journal of vocational behavior. 1989;35(2):194-203.

- 27. Flum H, Blustein DL. Reinvigorating the study of vocational exploration: A framework for research. Journal of Vocational Behavior. 2000;56:380–404.
- 28. Super DE. A life-span, life-space approach to career development. Journal of vocational behavior. 1980;16(3):282-298.
- 29. Taveira MDC, Moreno MLR. Guidance theory and practice: The status of career exploration. British Journal of Guidance and Counselling. 2003;31(2):189-208.
- 30. Nasta KA. Influence of career self-efficacy beliefs on career exploration behavior (Doctoral dissertation);2007.
- 31. Greenhaus JH, Parasuraman S, Collins KM. Career involvement and family involvement as moderators of relationships between work–family conflict and withdrawal from a profession. Journal of Occupational Health Psychology. 2001;6(2).
- 32. Rosenberg M. The self-concept: Social product and social force. Routledge;2017.
- Grow Careers. This Labour Market Information; 2020. Available:https://www.growcareers.com.au. Accessed , Accessed on 07th October 2021
- 34. Stephen PJ. Career patterns of women medical graduates 1974–84. Medical education. 1987;21(3):255-259.
- 35. Koen J, Klehe UC, Van Vianen AE, Zikic J, Nauta A. Job-search strategies and reemployment quality: The impact of career adaptability. Journal of Vocational Behavior. 2010;77(1):126-139.
- 36. Greenhaus JH, Sklarew ND. Some sources and consequences of career exploration. Journal of Vocational Behavior. 1981;18(1):1-12.
- 37. Henis R. Career exploration and career decision-making self-efficacy amongst adolescents: individual and contextual factors (Doctoral dissertation, Massey University);2000.
- Gatian AW. Is user satisfaction a valid measure of system effectiveness? Information & management. 1994;26(3):119-131.
- Blustein DL. The relationship between motivational processes and career exploration. Journal of Vocational Behavior. 1988;32(3):345-357.

- 40. March JG, Simon HA. Organizations, Second edition (1993), Oxford: Blackwell. Miles; 1958.
- 41. Bradley CJ. Edward N. Waters: notes of a career. Notes. 1993;50(2):485-501.
- 42. Mendonca JD, Siess TF. Counseling for indecisiveness: Problem-solving and anxiety-management training. Journal of Counseling Psychology. 1976;23(4): 339.
- 43. Tohill JM, Holyoak KJ. The impact of anxiety on analogical reasoning. Thinking & Reasoning, 2000;6(1):27–40. Available:https://doi.org/10.1080/13546780 0393911
- 44. Ostroff C, Kozlowski SW. Organizational socialization as a learning process: The role of information acquisition. Personnel psychology. 1992;45(4):849-874.
- 45. Greenhaus JH, Kossek EE. The contemporary career: A work-home perspective. Annual Review of Organizational Psychology. Organizational Behaviour, 2014;1(1):361-388.
- 46. Rottinghaus PJ, Buelow KL, Matyja A, Schneider MR. The career futures inventory–revised: Measuring dimensions

of career adaptability. Journal of Career Assessment, 2012;20(2):123-139.

- 47. Mishra RK, Iyer JS, Mohanty K. Conversion of waste biomass and waste nitrile gloves into renewable fuel. Waste Management. 2019;89:397-407.
- 48. Liu Y, Zhao G, Ma G, Bo Y. The effect of mind mapping on teaching and learning: A meta-analysis. Standard Journal of Education and Essay, 2014;2(1):17–31.
- 49. Gore Jr PA, Bobek BL, Robbins SB, Shayne L. Computer-based career exploration: Usage patterns and a typology of users. Journal of Career Assessment. 2006;14(4):421-436.
- 50. Birt L, Scott S, Cavers D, Campbell C, Walter F. Member checking: a tool to enhance trustworthiness or merely a nod to validation? Qualitative Health Research. 2016;26(13):1802-1811. Available:
- https://doi.org/10.1177/1049732316654870 51. Esters LT. Career Indecision Levels of Students Enrolled in a College of Agriculture and Life Sciences. Journal of Agricultural Education, 2007;48(4):130-146.

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