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Westcliff International Journal of Applied Research

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ABOUT WIJAR

Westcliff International Journal of Applied Research (WIJAR) is a multidisciplinary, peer-reviewed, open access journal, pioneered by the faculty at Westcliff University. Westcliff University is a regionally accredited institution focused on educating, inspiring, and empowering students from around the world through innovative, high-quality distance and on-campus programs.

The fundamental objective of the Westcliff International Journal of Applied Research is to create a platform for the publication of quality research which will inevitably contribute to various professional fields. The journal seeks to offer students and professionals the opportunity to collaborate, share, and work together toward enhancing academia and our engagement with it.

CALL FOR ARTICLES

Westcliff International Journal of Applied Research (WIJAR) is proudly published annually by Westcliff University. The purpose of the University journal is to highlight contributions of quality research and scholarly insights. Individuals from any academic discipline may submit an article to WIJAR for review and potential publication. Please review WIJAR's submission guidelines prior to submitting your article. Articles that do not adhere to the guidelines will not be considered for publication. Should you require assistance in compiling your journal article or seek advice on grammatics and format, please reach out to Westcliff University's Writing Center at writinghelp@westcliff.edu.

A call for articles will be sent two months prior to publication and submissions will be accepted until the deadline listed. We encourage early submission of each article to allow for ample time for revisions and necessary adjustments prior to the date of publication.

If you have any questions about the process of submitting your article for potential publication in the Westcliff International Journal of Applied Research, please email wjournal@westcliff.edu.

We look forward to your contributions.

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Dear Readers,

They say that time passes quickly with each year that one gets older. While that may be true, I am beginning to think that time flies with each copy of the university journal. No sooner do we publish one issue, when it is time to put out a call for articles for the next one. Working simultaneously with several faculty, student, and external authors and the Writing Center makes the months feel that much shorter.

This year, we integrated the assistance of Subject Matter Experts (SMEs) for select articles, increasing the quality of the articles published and the overall quality of the journal. The WIJAR Committee has been diligently offering their perspective, expertise, and creativity as it pertains to documentation of our processes, our webpage, and refinement of wording. We continue dialogue on how to maintain regional diversity of our authors, who represent various countries from around the globe; United States, Nepal, Korea, and the Philippines, to name a few.

We hope you enjoy this year's issue of Westcliff International Journal of Applied Research. We would like to thank all of the contributors who have put forth the time and effort required to provide high-quality articles for others to read. We hope these articles inspire others to contribute their great ideas and research to future WIJAR publications.



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OUR 2019 SUBJECT MATTER EXPERTS



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Debtor's and creditor's stronghold: Bankruptcy chapter 7, 11 & 13

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ABSTRACT

Bankruptcy law is created to protect debtors from the hands of creditors. This law ensures creditors repay loans by engaging in a particular process. The United States Congress has enacted a decree governing bankruptcy in the form of the Bankruptcy Code. The different types of bankruptcy will be referred to in this article by their chapters: Chapter 7, 11 and 13 (Justia, 2019). This article will identify the differences between these three chapters, their objectives, as well as the advantages and repercussions of each. Further, the non-dischargeable debts, recommendable actions for the filers, numbers of petitioners who have undergone bankruptcy cases, the financial ratio of the petitioners, the common denominator on the filers, and the methodology performed by the chief executive officer (CEO) of the four companies, Coldwater Creek, Kmart, SEARS and Toys "R" Us, will be analyzed. Additionally, the design and methodology for reviving each company that were implemented and applied by each CEO will be examined, and the reasons they were proven ineffective will be offered. By investing more, borrowing can become essential and, liabilities can grow beyond what could be repaid. This results in the filing of bankruptcy for protection from creditors.

Introduction

Bankruptcy is a state that refers to the lack of funds to repay an outstanding debt. When filing for bankruptcy, two major factors are taken into consideration: control and time. At a certain point, debts can compound until the repayment of that debt is beyond control. According to Mikhed (2013), 60% of bankruptcy reports are due to the overuse of credit; however, they have also been attributed to incorrect projections or overcalculations of lifetime earnings (Overton, 2008). Other causes for bankruptcy include extreme borrowing, mishandling of finances and catastrophes in life (Konish, 2019). It has been reported that two-thirds of individuals who filed for bankruptcy in the United States had medical issues (Konish, 2019). These are only some of the ways in which bankruptcy can occur without notice, necessitating a bankruptcy code. Other ways include unemployment, credit card debt (Byrne, 2012), poor investments and economic downfall (Jefferson, 2009).

It is important to realize that bankruptcy may not be the end for a debtor but a beginning to revive an organization; post-bankruptcy, individuals or organizations should reach out to their local court and become familiar with the three major US Bankruptcy Codes. Survival of debtors' liabilities can come through an understanding of the provisions of each code and realizing that there is hope for those who filed for bankruptcy protection. If a debtor is aware of his rights, a court can arbitrate and defend the debtor from creditors.

Discussion

Bankruptcy is a legal process handled by a court to mediate between a debtor who is unable to repay debts to creditors. In the United States, the congress has legislated laws governing bankruptcy in the form of the Bankruptcy Code. There are different types of bankruptcy filings available under the Bankruptcy Code. This information is published under Title 11 of the United States Code and is represented by chapters (Justia, 2019). This section will define three Bankruptcy Chapters: Chapter 7, Chapter 11, and Chapter 13.

Three Major Types of Bankruptcy

Chapter 7. Chapter 7 bankruptcy refers to liquidation. Liquidation is the process where a debtor's assets are converted into cash and the money is used to pay the creditors and shareholders (Dulin, 2018). This type of bankruptcy is common and ideal for debtors who need a fresh start since all debts except for the non-dischargeable debts can be wiped out. After filing, the debtor would be free from any obligation to further repay debt. Individuals and business owners avail this protection to pursue orderly resolution. Chapter 7 bankruptcy was created to help low-income debtors to release general unsecured debts such as that accumulated through credit cards, medical bills, personal and payday loans (Irby, 2019). However, once a Chapter 7 is filed, the debtor's nonexempt assets will be gathered by a trustee who will liquidate these assets sell any property and convert that amount into cash to repay the creditors (Bankruptcy Directory, 2017). Liquidation takes three to five months before a creditor is to be discharged from repayment obligations. Moreover, with Chapter 7, the debtor is unable to recover properties after foreclosure. On the other hand, for those who do not have non-exempt assets, creditors cannot claim any debtor's property as payment for debts (O'Neill, 2017).

Additionally, with Chapter 7 bankruptcy, creditors are classified into two categories: secured creditors and unsecured creditors (Irby, 2019). Repayment for secured creditors are prioritized and paid through the debtor's collateral, provided that the claim is lower than the value of the collateral. The secured creditor has the option of receiving either the collateral or the claim. Conversely, the unsecured creditor can be protected through the trustee whose role is to sell a secured creditor's collateral in the case that the value of the debtor's properties and possessions are higher than the collateral interest (Salzman & Hibscheiler, 2012). Furthermore, court rulings dictate the order of payment; hence, debts for domestic support, obligations, administrative costs, salaries and benefit plan contributions of employees are given priority. After the aforementioned, the

unsecured creditor will then be paid (Salzman & Hibscheweiler, 2012). It is to the disadvantage of unsecured creditors when a debtor files for Chapter 7 Bankruptcy as the unsecured creditors cannot expect repayment from the debtors, unless they hire a debt collector or file for a lawsuit (Irby, 2019). This is why lienholder, or a secured creditor, is in a better position when compared to an unsecured creditor.

Chapter 11. Chapter 11 bankruptcy refers to reorganization. This type of bankruptcy is designed for corporations or commercial organizations which intend to operate their business throughout the process of bankruptcy (Battersby, 2005). With this filing, the debtor would create a reorganization plan for how to repay debts, and the debtor's assets will be evaluated by the creditor. After the order of relief, within a period of 120 days, a reconstruction repayment plan is finalized by the debtor (Bankruptcy Directory, 2017). Chapter 11 Bankruptcy is not limited to business debtors but also accommodates individual debtors who earn a fixed income as repayment is not through liquidation of assets but through the deduction of salary or revenue of the organization. Proof of continuous income is required to enable a lighter payment scheme. The amount deemed affordable to be repaid for a specified period is agreed upon by the creditor and generally falls between three to five years. This time frame could be adjusted dependent upon the state. The debtors who fail to meet the requirements of Chapter 7 or Chapter 13 bankruptcy laws are required to file for Chapter 11 (DeSellier & Tomlinson, 2016).

Chapter 13. With Chapter 13 bankruptcy, the debtor has to repay debt on an installment basis. In contrast with Chapter 7 and 11, Chapter 13 bankruptcy allows for the integration of an adjustment plan to repay an individual's debts. This chapter is designed for an individual with regular earnings who has the intention to repay debts within three to five years. The advantage of Chapter 13 is that it allows a debtor to keep his valuable assets. This characteristic is what differentiates it from Chapter 7. In Chapter 7, the properties are liquidated for non-exempt assets. Once the court approves the application

plan submitted by the debtor for this particular type of bankruptcy protection, the individual would provide payment to the creditor through a trustee. The trustee would then manage the bankruptcy estate and arrange for the monthly payments.

Chapter 13 is ideal to assist debtors from balance payments of mortgages and to protect debtors' properties from foreclosure. In Chapter 13, since the debt is not entirely annihilated, the assets could be retained if the debtor is able to repay all the debts at an agreed upon time (3-5 years). Exemption amounts are dependent upon each state. Exemption items can include pensions and 401 (k) plans (Holmes, 2005). This is a provision of the federal law which protects retirement accounts from creditors and bankruptcy trustees. Chapter 13 is a type of bankruptcy which can be filed on the condition that the debtor owes under \$419,275 of unsecured debt or below \$1,257,850 of secured debt. For unsecured debts, the interest is waived, and the court offers a discount on the principal amount (O'Neill, 2017). Furthermore, the Chapter 13 code discharges tax penalties and debts related to non-dischargeable tax payments (Weil, 2010). Nevertheless, it is up to the court to approve the all aforementioned bankruptcy chapters.

Implications

Chapter 7 bankruptcy provides a lighter load for the debtor who wishes to wipe its liabilities by a discontinuation on repayment of debts. In contrast, Chapter 11 and 13 allow a debtor to rearrange finances and work to repay the debts within a specified period of time provided by the court. This leaves an overall impression that the debtor is not running from commitments. A debtor can apply for a loan immediately after the debt is discharged or after a specified number of years post the last filing of bankruptcy. Loan application is dependent upon the debtor's needs since the filing of bankruptcy results in unfavorable circumstances. As per Chapter 7 and Chapter 11, the credit record will reflect bankruptcy for up to ten years, while for Chapter 13, the time allotted is seven years. Thus, the bankruptcy record will manifest on a debtor's

credit report in that duration of time (Marquit, 2019). In addition, the debtor regains trust of their creditors who know that these individuals will not be able to submit another bankruptcy application for the coming years (Weber, 2014). In Chapter 7, only after eight years can refiling be done, while in Chapter 13, a period of two years is required. For Chapter 11, there is no specified time frame to wait to refile after a previous filing (Bulkat, 2019).

On the other hand, the aforementioned could be grounds for refusal when applying for future loans. Bankruptcy has the potential to leave an impression that a debtor is unreliable and lacks credibility. Therefore, filing for bankruptcy must be the final resort after every other attempt (Berdsman, 1992). In other words, if an individual chooses the path of bankruptcy, the debtor must reintroduce themselves as a changed person, as a responsible borrower to creditors. Since the debtor has to rebuild a better image, there is a higher need to handle finances wisely the second time around. Filing for bankruptcy has a number of limitations apart from the aforementioned. Not all debts can be discharged. According to the Bankruptcy Directory (2017), the non-dischargeable debts in Chapter 7, 11 and 13 are as follows:

- 1) Debts which are not included in the filing of a bankruptcy
- 2) Debts on alimony and child support
- 3) Debts which occurred due to the effect of drug influence or driving while intoxicated
- 4) Debts acquired from student loans
- 5) Debts due to law violations, including the payments of fines and penalties like traffic tickets and criminal charges
- 6) Debts on federal and state tax payments charged through credit cards
- 7) Any non-dischargeable debts of the previous filed bankruptcy cases that were terminated due to fraud

Non-dischargeable debts are considered exempt from repayment termination. If all debts could be discharged, a debtor would be more prone to deliberately acquire debt without intention to repay.

Bankruptcy Company Petitioners

In this section, the methodologies and design applied by the chief executive officer(CEO) from several companies who filed for bankruptcy are presented and analyzed. The examples given and discussed in this article come from the petitioners, Coldwater Creek, Kmart, SEARS, Ultimate Electronics and Toys “R” Us. They all applied for Chapter 11 Bankruptcy, the chapter which is commonly applied for by large organizations since it will help these companies to position themselves, if they decide to sell their business or assets as part of repayment (Armstrong, 2019). Also, it is advantageous to apply for the reorganization payment of debts knowing that the value of the long-term revenue will be higher compared to the liquidation value of the assets. The aforementioned companies did not qualify for Chapter 7 nor Chapter 13. The latter may only be filed by individuals, not by business partnerships or corporations. The former is ideally filed by a sole proprietor to liquidate the assets without intention to continue operating a business. Unlike the subject petitioners, the companies used within this article decided to remain in business while the reorganization of debt payment was ongoing. Another common denominator which could be noticed from all their cases is that they invested more by borrowing more while their income and assets hardly improved.

Coldwater Creek, a woman’s clothing retailer and women’s catalogs producer, was unstable since 2007. In order to survive in the fashion industry, the president and CEO, Jill Dean, put his concentration on developing an ad merchandising strategy, which was not appealing to the market or to their existing clients. Though they already cost-cut expenses by closing more than 50 stores, which saved the company \$10M in expenses, the company could not meet the target revenue to repay its debts (Popovec, 2014). Coldwater Creek considered the possibility of merging their businesses with other firms by borrowing or trading its business to a private equity (Glazer, 2014). However, they ended up filing for Chapter 11 bankruptcy

protection and closing its 372 stores and liquidating its assets and inventories.

Additionally, Kmart Corporation, filed Chapter 11 bankruptcy protection as well. In 1893, its founder, Sebastian Kresge, sold his business assets for five or ten cents, after which, he managed to multiply his income and built numerous additional stores. In 1912, he received a yearly revenue of more than \$10 million from his 85 stores (Lehavy & Udpa, 2011). He continued expanding his businesses for a number of decades, and the first Kmart discount department was launched in 1962 (Lehavy & Udpa, 2011). For another decade, the company changed its name to Kmart Corporation. This happened the same year Wal-Mart opened its first discount store. However, within the 30-year time-lapse, Wal-Mart had topped the retail business in the United States. Subsequently, Wal-Mart continued managing around 2,700 stores while Kmart had around 2,000 stores. The former was receiving a net income of almost \$7 billion while the latter experienced a net loss of \$1.3 billion.

To overcome this failure, Kmart applied well thought out strategic plans initiated and implemented by the new chairman and CEO, Charles Conway. In 2000, two years before the company filed for Chapter 11 bankruptcy protection, Conway invested more on the supply chain. Consequently, Kmart released \$1.4 billion in investments allocated for technological items, gave priority to customer concern, enhanced marketing strategies with a lower budget for advertising, developed a food division, limited selling, reduced general and administrative costs, and worked on the 250 stores to maximize profits (Lehavy & Udpa, 2011). Even though Kmart adopted several strategies to improve their sales, fighting with more attractive competitors led to Kmart's downfall. Kmart shut down 72 of its stores situated in inactive locations as it attempted to lease out other locations (Scherer & Paulson, 2002).

In January of 2002, Kmart was unable to pay their weekly obligations of around \$78 million to one of the major distributors of food and grocery's supplies. Thus, the distributor cancelled the delivery of goods. In the same

month, Kmart Corporation filed for Chapter 11 bankruptcy (Lehavy & Udpa, 2011). The corporation was purchased by SEARS in 2004, The company's CEO, Edward Lampert, filed for bankruptcy in 2018 (Wahba, 2018). Lampert had focused on e-commerce and upon targeting the improvement of cash flow. He attempted to sell valuable assets and high-quality brands, focused upon the sales of appliances and tools as opposed to clothing and downsized the amount of property while focusing on the online business component (Sullivan, 2018). Despite the strategic changes, SEARS was unable to overcome its debt and filed for Chapter 11 bankruptcy.

Ultimate Electronics, one of the giant electronics retailers in Colorado, filed for Chapter 11 bankruptcy protection in January 2005. Four years prior to filing, the company invested in the expansion of its stores, going from 31 to 65 locations throughout 14 states. However, due to the infrastructure, the economic downturn and tight competition with competitors, the company was unable to repay debts (Wolf, 2004). Furthermore, in the fiscal fourth quarter of 2003, the company hired a specialized consultant, Peter Hanelt, to maximize the company's profit. Unfortunately, the company was already in the middle of battling with many issues like losing many items due to poor inventory, low product demands, ineffective promotion campaigns, competitor's advancements, manpower issues, the needs for installation of new software which made them released \$23.5 million for the management information system (Bernarz, 2004). The company incorrectly projected the profitability of establishing additional stores for product distribution. Even, with the contribution of a specialist, the company still suffered from insolvency. For the fiscal year of 2000, sales were \$385 M while in the fiscal year of 2004, the sales went up to \$712.9 million. The net income of the company, in 2001, was at \$14.6M, \$12M in 2002, and in 2003 it decreased by almost half, resulting in the loss of \$16 million (Paone, 2005). The losses stemmed from an increase in sales that was proportional to the increase of opening up new stores, which augmented the release of

income together with the issues mentioned above.

Lastly, on September 18th, 2017, Toys “R” Us, a toy company founded by Charles Lazarus in 1948, filed for Chapter 11 bankruptcy in Virginia. The company owed its debtors nearly \$7 billion (Tan, 2017). Dave Brandon, chairman and CEO of Toys “R” Us, tried to revive the company from its swelling debt by enhancing sales during the holiday season. He strategically increased inventory and sold items which gained additional profit with a lower cost of production (Bomey, 2018). However, he failed to fight with titans like Amazon, Walmart and Target which offered the same products for lower prices (Bhattarai, 2017). Despite the effort to improve the product structure, there were no viable solution allowed for mitigating the increasing volume of

electronic gadgets replacing the need or desire for toys. The company even hired a financial consultant to fix the capital arrangement (DiNapoli & Rucinski, 2017). Yet, creditors became unwilling to provide more funds to finance the business.

The accumulated debts, resulting in the resistance of the creditors to lend more, limited these companies in their ability to manage their working capital, impeding their ability to produce larger earnings. Higher debts repel investors from providing funds.

With the knowledge of the financial situations for these companies, an analysis will be offered regarding the two-year annual record of their progress. The information displayed in Table 1 will be used to identify if the companies reached the bankruptcy stage when the debtor is no longer capable of repaying debts on a given income; thus, a review of the financial status of each corporation will be used to determine if filing for bankruptcy could resolve the issue. In

Company	USD	Total Assets		Total Current Assets		Total Liabilities		Total Current Liabilities	
		1 Yr Prior to Filing For Bankruptcy	2 Yrs Prior to Filing for Bankruptcy	1 Yr Prior to Filing For Bankruptcy	2 Yrs Prior to Filing for Bankruptcy	1 Yr Prior to Filing For Bankruptcy	2 Yrs Prior to Filing for Bankruptcy	1 Yr Prior to Filing For Bankruptcy	2 Yrs Prior to Filing for Bankruptcy
		Feb-13	Jan-12	Feb-13	Jan-12	Feb-13	Jan-12	Feb-13	Jan-12
Cold Water Creek Inc.	In Thousands	345,908	413,115	170,415	203,262	308,772	296,702	146,383	149,040
		Jan-01	Jan-00	Jan-01	Jan-00	Jan-01	Jan-00	Jan-01	Jan-00
Kmart Inc.	In Million	14,630	15,104	7,624	8,160	8,547	8,800	3,799	4,076
		Feb-18	Jan-17	Feb-18	Jan-17	Feb-18	Jan-17	Feb-18	Jan-17
Sears Inc.	In Million	7,262	9,362	3,812	4,996	10,985	13,186	4,915	4,681
		Jan-17	Jan-16	Jan-17	Jan-16	Jan-17	Jan-16	Jan-17	Jan-16
Toys "R" Us Inc.	In Million	6,908	6,910	3,389	3,288	8,068	8,064	2,738	2,798

Company	USD	Total Stockholder Equity		Debt to Equity Ratio		Current Ratio	
		1 Yr Prior to Filing For Bankruptcy	2 Yrs Prior to Filing for Bankruptcy	Total Liabilities/Shareholders Equity		Current Asset/Current Liability	
		Feb-13	Jan-12	Feb-13	Jan-12	Feb-13	Jan-12
Cold Water Creek Inc.	In Thousands	37,136	116,413	8.3	2.5	0.6	1.4
		Jan-01	Jan-00	Jan-01	Jan-00	Jan-01	Jan-00
Kmart Inc.	In Million	6,083	6,304	1.4	1.4	0.9	2.0
		Feb-18	Jan-17	Feb-18	Jan-17	Feb-18	Jan-17
Sears Inc.	In Million	3,723	3,824	3.0	3.4	0.3	0.4
		Jan-17	Jan-16	Jan-17	Jan-16	Jan-17	Jan-16
Toys "R" Us Inc.	In Million	1,292	1,265	6.2	6.4	0.4	1.2

Table 1. Company’s Assets/Liabilities.

Note. Total assets, total current assets, total liabilities, and total current liabilities were all taken from the financial records of Coldwater Creek (2012-2013), Kmart (2002), Sears Holding Corporation (2018) and Toys

analyzing the figures presented in Table 1, debt to equity ratio and current ratio will be used. Debt to equity ratio is used to refer to a quantification of a company's financial control which can be obtained by dividing the total liabilities by the stockholder's equity. This ratio displays the amount of debt and equity availed by the firm to produce its assets. Current ratio is used to refer to a company's current assets over the current liability which is used to estimate the capability of the firm to repay current debts. The higher the ratio, the higher the chance the company will be able to repay the obligated amount to the creditors.

As seen in Table 1, Cold Water Creek had a lower debt to equity ratio in 2012, but it increased by more than half after one year, from 2.5 to 8.3. The remaining companies saw similar decreases, as, Toys "R" Us went from 6.4 to 6.2, SEARS went from 3.4 down to 3.0. However, Kmart had a consistent debt to equity ratio of 1.4, which is an ideal figure since a good debt to equity ratio is between 1-1.5. With a high debt-to-equity ratio, a firm will have difficulty in producing finances to repay debts, since debt to equity ratio is equivalent to the amount of debt to finance the business over the shareholder equity. Wherein the shareholder equity is equivalent to the total assets minus the total liabilities. It is also identified as the net assets. Therefore, the higher the debt to equity ratio, the higher the debts in proportion to the net assets. Investors are not attracted when it is high, as the company is a risk due to higher debt. On the other hand, it is also not ideal to have a low debt to equity ratio since borrowing will gather more finances to support the business. An indication that a company's finances are not being managed properly is seen when the profit is high, leaving debt at a minimum level ("Debt to equity ratio," 2019). Thus, the implication from these figures suggest that Coldwater Creek and Toys "R" Us struggled in repaying debts especially when compared to SEARS and Kmart. Even though Kmart's debt-to-equity ratio was consistent, at 1.4 ratio, this does not automatically mean that Kmart would be entirely capable of repaying its debt. The relationship between current assets and current

liabilities must be analyzed to determine the current ratio. A satisfactory number is a 2:1 ratio which means that the current asset is double of the amount of the current liability. As seen in Table 1, the companies' current ratios over the last two years before filing for bankruptcy are as follows: Coldwater Creek went from 1.4 to 0.6, Kmart went from 2 to 0.9, SEARS went from 0.4 to 0.3, and Toys "R" Us went from 1.2 to 0.4. Considering all the current ratios of these companies, all values decreased to less than one, which is a solid indication that these companies do not have the capability to repay their current debts within a year, thus, initiating the bankruptcy filings.

Despite the effort and various strategic initiatives applied by these companies, the income generated did not suffice in covering their excessive liabilities. The failure of handling finances properly was due to the failure to take action when the debt began to accumulate. Additionally, the implementation of the strategies was weak and required verification, which was lacking. When applying a new strategy, there is a demand for more expenses than their income could provide. At this point, each company should have doubled their efforts to produce more revenue. Some of the ways to do this are to concentrate on customer's demands, improve the transaction volume, expand the target market, raise or lower the price of goods, provide deals or promotions, and develop innovative marketing plans. Unless a positive result can be manifested within a short period, the business strategies being attempted are futile. However, the five companies aforementioned perpetually invested and built up their liabilities while their income and assets continued to decrease. At the point when the creditor is no longer lending money to finance the business, suppliers hold the supply of goods, the debt is higher than the operating costs, or the income is lower than the debts, the court's protection becomes essential for the survival of an individual's or an organization's financial standing. Each company filed the appropriate

chapter for their situation and experienced a relief from financial burden.

Conclusion

Bankruptcy, while seen as a failure by some, can also be a path of restoration for others. Coldwater Creek, Kmart, Ultimate Electronics, Sears Inc. and Toys “R” Us exhausted their finances and entered a space of inability to repay debts. Regrettably, the strategies applied to rejuvenate the businesses were ineffective. This led to the foreclosure of their businesses and the filing of bankruptcy in court, specifically Chapter 11 bankruptcy. After filing for Chapter 11, the companies aforementioned were able to continue operating their businesses while they

paid off the debts. Due to the reorganization of debts, their secured debts were restructured, they were able to bargain with the creditors for lower payments of debts, and they received extensions for the duration of the settlement. Though the businesses remained intact through a reconstruction period, all the entities analyzed still chose to sell their companies post-bankruptcy. While filing for bankruptcy can be a tedious and painful process, it is one that is there to enact both justice and a safety net for all involved parties.

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The Formal Deviant: The Innovative Features of E. E. Cummings's 'next to of course god america i'

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ABSTRACT

This article explores the modernist American poet, E. E. Cummings, and his experimentations with the traditional sonnet form in poetry. E. E. Cummings was influenced by cubism and used the principles of this form to stylize his poetry. He changed the nature of the sonnet form, as seen in his political poem and satire, 'Next of course god america i', which this article will explore through close reading and literary analysis.

perfectly beautiful is (Cummings, 1923, p.15)

The poet must become more and more comprehensive, more allusive, more indirect, in order to force, to dislocate if necessary, language into his meaning. (Eliot, 1921, p.6)

The immediately recognisable visual quality of E. E. Cummings's poems is a result of his ingenious decision to transmute the stylistic principles of European modern art movements—predominantly cubism—into poetic practice. The most innovative and distinguishable poetic features—namely, the tendency for lower-case typography, the omission of punctuation, and the syntactical disturbance (by means of grammatical displacement)—have the effect of fracturing the surface of his subject, creating a multifaceted image, in which his reader, in Norman Friedman's (1960) words, "grasps... all at once" (p.10).

The scientific and industrial surge in the nineteenth century in America and Europe, and its further expansion in the early twentieth century, aided Cummings practically. There were now many avant-garde artistic movements available through more efficient methods of production and transportation links; although, paradoxically, the principles of such a surge, namely, the belief in homogeneity, and the loss of confidence in a 'soul' or 'self', were principles Cummings opposed. Ideologically, he is in a traditional lineage of visionary romantics and rebels who retained the importance of feeling at the dawn of the new mechanical age; William Blake, Charles Baudelaire, and John Ruskin all share the principles of Cummings's rebellion. In the poem, 'Next to of course god america i', an almost machine-like monotone juxtaposes with the speaker's *human* feeling of nervousness, exposing the unnatural tension at work between forcibly orchestrated propaganda—represented in the subject's speech—and the human beneath the governmental product of a mechanical and increasingly sterile epoch.

In opposition to rationality and homogeneity—and to realism—various avant-garde movements, such as cubism and futurism, flowered in Europe, and particularly, in Paris. Whilst a student at

Harvard, Cummings befriended S. Foster Damon who introduced him to a number of contemporary European influences not cited on his university reading list, such as Achille-Claude Debussy, Igor Fyodorovich Stravinsky, and the first anthology of imagist poems, Ezra Pound's *Des Imagistes* (1914). In 1913, Damon took Cummings to the Armory Show, which showcased the works of some of the most exciting modernist artists, including Pablo Picasso, Henri Matisse, and the 'father' of cubism, Paul Cézanne, with whom Cummings became obsessed.

In 1918, Cummings became less enthusiastic about cubism, distrusting its "cold and frozen grammar" (Cohen, 1990, p. 60), and eventually yearned for fracturing and fusion, combined with "that precision which creates movement" (Cummings, 1926, p. 1).

His vision of poetry from a painter's perspective, the cubist influence, and a yearning for language to *move*—channelled through traditional form—resulted in a new style; a radical hybridity was forged by utilising an avant-garde mode (cubism) in an historically-established form (the sonnet).

Cummings's disturbance of syntax comprises a large portion of his method. The prism, with its complex spectrum of colours and multiple sides, which fuse together to form a centre of light, or 'truth', is a fair analogy to the principles of modernism and is the poet's "symbol of all art" (Kennedy, 1994, p. 39). Cummings ruptures syntax and dislocates language, predominantly, by morphing adjectives, adverbs and verbs into nouns, rearranging words in a clause, and omitting punctuation. This innovation explodes language into a myriad of potential currents of meaning. For example, one could read the adjective 'early' as a noun, in, "say can you see by the dawn's early" which would give some syntactical sense to the following (theoretical) clause, "my / country 'tis of centuries..."

The lack of punctual markers provides a dissonance, causing a spectrum of potential meaning. The hauntingly idiosyncratic nuances that can be fathomed from this syntactical disturbance is one of Cummings's most sophisticated successes; through it, the reader explores their individuality,

and thus, reaffirms it. By omitting punctuation, the readerly position is one of an *interior* vantage within our most idiosyncratic readerly faculties; we reclaim ‘i’ and press into the text our own intuitive cadence, idiosyncratic rhythms of being, of *is*.

For example, the poem’s lack of punctual address in the first line gives licence for the reader to fathom multiple meanings (Friedman, 1996). The word ‘america’ in “god america i”, for instance, could be construed as a metonymic term, indicating the audience in front of the political speaker. Furthermore, the listing aspect of ‘god america i’ may be representative of the state’s ethically-unsound hierarchy of importance: ‘god’ first, ‘america’ second, and its citizens—the small ‘i’s’ that comprise the country—last. Alternatively, it could indicate state power, on an international political scale, but more so symbolically, representing the untouchable nature of the government itself by its citizens: the ‘god’ that is ‘america’, connoting totalitarianism, and anti-democratic values. Indeed, the ‘god america’ that through a system of propaganda after declaring war on Germany on 6th April 1917 sent its citizens to a mindless, “roaring slaughter”. Cummings’s message, later, is less ambiguously compacted into his subject’s speech, “they did not stop to think they died instead”. Conformity kills; not thinking for oneself, not *growing* into an individual, but instead, succumbing to homogeneity is the most dangerous way for one to live.

Cummings’s fusion of individualism, Platonic dualism, the principle of *growing*, or rather, making, and the childhood vision informs his practice. Friedman (1972) states that Cummings possesses “anarchist beliefs”, and his poetics apply “anarchist techniques” to form (p. 2). Cummings views authority as a live predator, which vanquishes individualism and transforms human potential into homogeneity. In *The Enormous Room* (1922), he observes: “the police... swooped upon their helpless prey with the indescribable courage which is the prerogative of policemen the world over” (Cummings, 1922, p. 104). The enemy to Cummings’s principles of ‘feeling first’ and individualism are manmade socio-political tools that homogenise and institutionalise the

government, the army, and social conformity—his objects of satire.

The acceleration of the speaker’s speech is achieved through omission of punctuation and lower-case typography, portraying the subject’s nerves and hypocrisy. Punctuation is used sparingly to raise questions on the ambivalence of authority, national identity and statehood officialdom. The apostrophe at “land of the pilgrims’...”, for example, not articulated aloud, means Cummings is able to play on the ambiguity of this line, and its two meanings, i.e. ‘america’ is a land in which there are pilgrims and also a land belonging to pilgrims.

Capitalised letters, which are used after a stream of jingoistic clichés (the reference to the American national anthem, to Macbeth, America’s patriotic song, ‘My Country, Tis of Thee’, etc.) at the end of the speech, combined with a countering of terse punctuation, reinforce the figure’s recital speed. Acceleration is also achieved through ‘telescoping’, seen at line 14: “in every language even deaf and dumb” (Ahearn, 1996, p. 17).

Politicians, then, are seen as almost inhuman, antithetical to authenticity and individuality. However, in the poem, the ostensible politician’s nerves are what humanises him. Behind the mask of uniformity and propaganda is a human being in a compromising position, which is finally hopeful. The subject is *not* a tyrannical member of authority, with no faculty for compassion but a fumbling charlatan coerced into a propagandist tool by a dehumanizing system of government. The figure’s nervousness, therefore, innovatively portrayed by, for example, the cubist effect of syntactical fracturing and fusing is finally what makes Cummings’s satirical target, not the speaker, but the system by which even the speaker himself is controlled and exploited. The fact that the political figure is uneasy about what he is saying—nervously requiring a “glass of water” post jingoistic rant—exposes the hypocrisy of the government’s search for new military recruits.

If Pound’s poem, ‘The Return,’ provided Cummings with, in his words, “[the rudiments] of my writing style,” then Dante Gabriel Rossetti’s *House of Life* (1881), provided him with his favourite form (Cummings, 2015, p. 40). The

sonnets in *House of Life* were the reason he'd been, "writing sonnets ever since" (Dickey, 1912, p. 214).

Giacomo da Lentino invented the sonnet during the *duocento*. Cummings's sonnet is also historically bound; he scores the ancient tradition of the sonnet by imposing his anarchist techniques within it. In one sense, Cummings's defacement of such a noble tradition as the sonnet—of which William Shakespeare and William Wordsworth, for example, are major players—is analogous to his allegiance to the avant-garde, over his (lesser) adoration of historical form and even the canon itself, as a symbol of aristocracy, or conservative hierarchy.

That the sonnet, as Oppenheimer states, "is the first lyric of self-consciousness, or of the self in conflict" is fitting—since the authenticity/homogeneity power-struggle in the poem reflects Cummings's anxieties of originality (Oppenheimer, 1989, p. 110).

In his pressing of eccentric experimentation into traditional (sonnet) structure, Cummings's paradoxes become transparent; his classical education and avant-garde influence, his want to please his conservative father, his tendency for radicalism, his belief in the infant's vision, and the concept of *growing*, all work to inform a style that pivots on oppositional forces. Cummings's aporia is seen in his title choice for the Harvard lectures in 1952 as *i:six nonlectures*.

Cummings is also in some respects, *unoriginal*. For example, the meter of the poem, with some ambiguities in the first two lines and metrical inversions to a trochaic rhythm, is predominantly in regular 'heartbeats' of iambic pentameter.

The rhyme scheme during the octave is Shakespearian: *ababcdcd*, and the rhymes themselves are relatively full, e.g. 'i' and 'my', 'oh' and 'go'. Rhyming innovations become apparent during the sestet, however, unless Cummings uses an unusual scheme of *efgfeg*. Furthermore, some rhymes in the sestet are more innovative. The tmesis that occurs at line 9, for example, 'beaut-', sets up an inventive rhyme with 'mute' in the penultimate line. Typographically, this symbolises the government's breaking of the 'beautiful' in half.

The volta at the penultimate line and conclusive line of the narrator's observation, is a unique feature. However, there is also a turn—which structurally subscribes to the sonnet's origin and its observation/response dynamic—between the octave's end, and line nine which begins the sestet and ends in a question, representing authoritarian dangers on personal liberty: "then shall the voice of liberty be mute?"

This anxiety of authenticity is the cause, happily, of his most innovative features: the lower-case typography, the omission of punctuation, and the genuinely radical disturbance of syntax, which comprise Cummings's "literary cubism" (Kennedy, 1923, p. i). His innovation was one of re-appropriation, taking a painterly movement and imposing it on traditional form. Cummings's artistic energies were stylistic. It is through traditional form that he practices poetical stylistic deviance. Indeed, he possesses a strong respect for form, and particularly the sonnet, making Paul Muldoon's comment in 1914, that Cummings is "less iconoclastic than has often been supposed—including by himself" very apt (Muldoon, 2015, p. 7). Technically, however, his ingenious exportation and transmutation of cubism into a literary one by means of stylistic innovation, is highly original. He took a stylistic leap of faith, crossing artistic modes and the Atlantic, and with it, he changed the 'face' of the sonnet. Cummings's experimental risks are something from which a new generation of poets are still learning.

The Black Mountain School, the Beat movement, and the L=A=N=G=U=A=G=E poets, have all taken stylistic elements from Cummings's technical anarchism. Furthermore, his influence can be traced even today, in contemporary British poetry especially. Sam Riviere's collection, *81 Austerities* (2012), for example—winner of the Forward Prize for best first collection—uses hardly any punctuation, is printed in mostly lower-case lettering, and disturbs conventional syntax in similar ways to Cummings, and with similar results.

Stylistically, Cummings is a strong contender for the most innovative poet in the canon—he remains an individual, an 'i'.

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How Small Interest Groups Can Win the Outcome of Elections and Polls: Lessons for Countries with Modern and Developing Democracies

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ABSTRACT

It might sound perfectly obvious that in a real democracy, the majority's interests will always win against the interests of the minority. Unfortunately, in reality, this is not the case. Small interest groups can determine the outcome of elections and enact policies that favor their own interests, rather than those of the majority. This paper identifies how, contrary to the median-voter's model, small interest groups can win, if information asymmetries exist. Additionally, if gains and losses asymmetries are present and opportunity costs are involved for the voter, the same phenomena can occur. This article focuses on the role of interest groups in elections in democratic countries, explaining how they can enact policies that are against the public's will.

Introduction

Many believe that in a real democracy, people would vote for what their needs and wants are, and the majority would win the outcome. The median-voter model explains that since legislators want to stay in office, they would be more likely to maximize their probabilities and enhance their chances of remaining in office (Congleton, 2004). For that reason, they will follow the wills of what the majority of people are asking for, so they can win the next round over the opposing party. However, in reality, this is not what is happening as small interest groups can win against the majority (Appleyard & Field, 2014).

International trade, trade policies, and free trade have always been a matter of debate among the supporters and the opponents (Hill & Hult, 2018). For instance, supporters explain that the overall outcome of trade liberalization policies and free trade have been proven to be for the benefit of society as a whole; whereas, the opponents argue that the free trade policies have caused manufacturing jobs to leave the developed countries and land in less advanced economies instead (Hill & Hult, 2018).

The opponents of free trade believe that liberalization of trade is detrimental for the local industries and workers' wages, and therefore it shall be restricted or even stopped (Bartlett & Steele, 1996). On the other hand, supporters of free trade agreements believe that as a whole, benefits of trade liberalization outweighs the costs (Krugman, 1996). Although more detailed research has shown that the free trade argument is most probably the correct one, the debates are still going on. Each side wants to have their own country's trade policies and governmental legislation support their views on international trade (Appleyard & Field, 2014).

Since in democratic countries voting has been the basis for defining many national and international law and determining major decisions, people might think that each party

would need to work hard to appeal to the majority's opinion in order to sway the vote in their favor (Grossman & Helpman, 2002). Under specific circumstances small interest groups can win against the majority's will, resulting in policies that do not support the majority's benefits nor are consistent with national welfare (Appleyard & Field, 2014; Grossman & Helpman, 2002). This paper will explain why and how this phenomenon happen and discusses possible ways of hindering it from continuing.

Discussion

When president Trump was elected as the 45th president of the United States, he immediately promised to follow-through on his protectionist agenda regarding international trade announced during his presidential campaign (Abdulkareem, 2018). Although president Trump did not win the majority of popular votes over his democrat rival Hillary R. Clinton, he had enough electoral votes to take the election (Barthélémy, Martin & Piggins, 2019). Thus, although the majority of the people in the US, did not support the policies vocalized by Trump, they were going to be enacted regardless.

In this example, it has been argued that electoral systems were the reason behind the minority candidate's success over the majority. However, this is not an isolated example. In the past other small interest groups have determined the outcomes of the democratic political system in the United States. For instance, when tariffs are put on certain industries, products, and countries, only a small group of people stood to benefit, and yet interestingly the majority of people would accept the outcome (Appleyard & Field, 2014). To explain why this is happening Appleyard and Field (2014) have suggested that there are two conditions required to produce such contradictory results in a society.

First Condition: When There are Information-gathering and Opportunity Costs Involved with the Voting

Appleyard and Field (2014) suggest that when there are information gathering and opportunity costs involved with the voting, potential eligible voters might not participate. The reason for this is that since the voters might see the process of information gathering to vote as costly, and would expect small gains for their participation, they may not go to the poll (Appleyard & Field, 2014). Consequently, since the opportunity costs for voting seem to be high, and the voter would calculate the expected net benefit as negative, he/she may not participate.

Second Condition: The Voter Assumes One Vote Will Not Swing the Results

When the voter assumes one vote will not swing the results, he/she would most probably not participate in the voting, due to the belief that his/her vote would not change anything. Therefore, the voter would accept the results, without any direct participation in the voting processes (Appleyard & Field, 2014). This has been termed, the free-rider effect, where individuals accept the results of a vote without spending any time, cost, or effort (Peters, 1998).

The reason that the free-rider effect would be problematic for a democracy since individuals have different incentives based on their asymmetric loss and benefit analysis. It is most rationale to believe that the number of individuals who would participate in voting for personal gain, are larger than those who are participating for the public good (Appleyard & Field, 2014; Peters, 1998). If a voter is going to the poll to vote on a trade policy that supports their own local business, he/she has a greater incentive to vote. On the contrary, someone who would theoretically vote against a trade policy for the collective good, is possibly less incentivized to do so, since the impact of the policy is less visible on his/her life (Appleyard & Field, 2014; Peters, 1998). Therefore, under this condition, democracy would be less effective in supporting the will of the majority and the smaller groups who have a larger incentive to make an effort could win.

How Small Interest Groups Can Influence Political Outcomes

According to Sulock (1990) the free-rider problem will arise when an individual feels that he/she can benefit from a policy without bearing any of the costs. For instance, Sulock (1990) brings up the classic example of a lighthouse, as a public good, where its signal is nonrival and nonexclusive, meaning that all sailors can benefit from the lighthouse's signal and no one could be excluded or denied (Sulock, 1990). He further explains that the nonrivalry and nonexclusive properties of the public good makes the free-rider effect a problem. The problem is that it would affect companies that are making and selling public goods, since they cannot receive enough voluntary contributions from beneficiaries to cover their costs (Sulock, 1990).

Appleyard and Field (2014) have suggested that the same cost and benefit analysis for the small interest groups regarding a policy that is supporting their industries/opinions/views would suggest that a greater benefit for them is expected comparing to what the public majority group has. These greater benefits would more than likely enable small interest groups to overcome their in-group free-rider effect. Therefore, their solidarity, participation, and vote for their candidate would create a small voter turnout to help the solid minority group win (Appleyard & Field, 2014). For instance, as Appleyard and Field (2014) explain, "the same phenomenon can lead to a status quo bias against liberalizing trade policy through lower levels of protection even though doing so carries the promise of improving aggregate welfare" (p. 370).

Additionally, it has been shown that interest or pressure groups can be even more successful in elections and polls if they are "large enough to be visible, but small enough to control the free riding of their members" (Vousden, 1990, p. 198). In this case, these smaller interest groups become more effective and efficient than larger indifferent groups as they have a commonality of interest, per capita organization, and relatively low information gathering costs (Vousden, 1990).

Also, these small interest groups are more likely to fund their supported political campaigns. That would lead to providing better candidate visibility and low cost interest-group-centered information for the small interest group voters to motivate them to overcome the free-rider effect (Appleyard & Field, 2014). Moreover, their campaign funding contributions could attract a candidate's attention in terms of considering supporting the funding groups' views in the future, a rent seeking activity, as the small interest group would bear some costs that could be used for future benefits from a policy (Appleyard & Field, 2014). For instance, the results of such activities have been many protectionist trade policies, such as tariffs and quotas, that have been enacted by politicians to support a small group's interests rather than supporting the public's welfare (Abboushi, 2010; Hill & Hult, 2018). Under such conditions, owners of certain industries would support candidates that had pro-protectionist trade laws (Abboushi, 2010), and the owners would, in turn, fund their political campaigns to win (Appleyard & Field, 2014).

It is worthy to note that such interest groups' investments in funding political campaigns are always less than the expected returns from that policy (Appleyard & Filed, 2014). Therefore, if a party is spending millions of dollars to fund a certain political campaign, an individual may safely assume that the returns are supposed to be greater than what has been spent in support of the campaign. Moreover, the rent seeking activities of such small interest groups can even expand beyond the funding of political campaigns to engagement in corruptive activities such as bribes (Appleyard & Field, 2014). These practices are called "directly unproductive activities," since the funds that are being used by these small interest groups are meant to influence the politicians and rearrange the distribution of income, not to create wealth for a society as a whole (Appleyard & Field, 2014). The rent seeking activities of these small interest and pressure groups could go even farther by supporting other pressure groups in the hope of later reciprocities (Appleyard & Field, 2014). In this scenario, for instance, the

combined support of several trade protectionist groups would finally create enough political critical mass to enable a protectionist candidate to win an election over the majority's trade liberalizing candidate, which would in return, put restrictive trade laws in place. This phenomenon has been referred to as "logrolling" of status quo bias, where small interest and pressure group/s stand to benefit from the policies in expense of the loss of the greater majority group, which would be suffering from the free-rider effect (Appleyard & Field, 2014).

The aforementioned issues are not limited to developing countries with new democracies. Even countries with modern democracies and more experience are facing losses of elections to minority pressure groups (Hashmi, 2018). Therefore, solutions for the matter need to be sought and researched.

Conclusions

People might think that with a democracy, the will of majority would rule the society. Although the definition might sound about right, there are conditions under which small groups can win the outcome of an election as opposed to the majority, resulting in unfavorable rules and regulations that could potentially harm the majority and benefit the minority (Appleyard & Field, 2014). Since such outcomes could most likely be detrimental for the welfare of a nation as a whole, the forces that are able to create such conditions should be identified, analyzed, and remedied to safeguard the elections.

A possible solution for the problem could be to inform people about the phenomenon and make them aware that any individual's participation in an election does matter. This must be reinforced as even though the public opinion or the predictions imply the success of the majority's party over the minority, this is not always the case. In order to do so, the majority party's members should stay away from explanations reliant upon clichés and clearly explain to the public why an incentivized minority, a pressure group, would be able to win an election. Explaining historic instances and the amount of losses that a society has seen previously under similar situations, documenting

the losses during such periods and publishing them before the upcoming elections could be among the suggestions considered.

It has been shown that all countries, with both young and developing democracies, as well as old and developed ones, are likely to suffer from rules and regulations that are passed by the minority who have won the elections (Hashmi, 2018). For instance, it has been shown that free trade agreements are for the profit of all nations, protectionist laws in the US are enacted to further restrict free trade in favor of only some industries and at a loss to the public (Abboushi, 2010).

More studies are required to analyze the same issue for different democratic models cross the world, to measure the susceptibility of each country to such possible unfavorable outcomes. Additionally, research must be done to observe how each political model has considered the issue, including their defensive mechanisms. The findings can be shared with scholars for further analysis, and for possible effective suggestions for how to remedy this situation.

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U.S. National Debt- A Risk Management Approach

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ABSTRACT

The U.S. national debt reached the astounding figure of 22 trillion dollars in 2018 (Gomes & Sinclair, 2019). It splashed onto the headlines of newspapers and became a topic of interest for Nobel laureate economists, dividing opinions on the potential impacts and the necessity of corrective measures. Krugman (2019) advocates that the national debt is trivial for a large economy like the U.S.; whereas, economists, such as Summers (2019), assume a more cautious position in recommending clear restrictions on the never-ending rise in the national debt. Some intriguing questions persist: should measures to restrain or reduce the debt be taken? If so, what is the ideal time to put them into effect? The purpose of this study is to analyze the reasons for the increasing U.S. national debt and to raise a discussion on the ideas of these reputed economists to address these questions. Additionally, the fundamental principles of risk management have been explained to evaluate the national debt from a different perspective (Homan, 2013). The findings of this research show that there are similarities between the theory of risk management and the risk concerns involved in the U.S. national debt. The social impact of this research includes the potential for the risk management tools identified to be used in analyzing the sovereign national debt.

Introduction

Historically, changes in the U.S. national debt and economic growth have moved in opposite directions, reflecting governmental responses to war situations and economic downturns by means of their fiscal policy (Bell, Johnston, & Jones, 2015). Whenever an economy weakens, the government adjusts their fiscal policy and increases government expenditures to foster economic activity. On the contrary, when the economy is in the expansionary conditions, the government reduces expenditures and increases taxes, adopting a contractionary fiscal policy (Elmendorf & Sheiner, 2017). However, there has recently been a disruption in this counter-cyclical fiscal policy, as in this current fully employed and growing economy, the national debt has begun to persistently increase (Elmendorf & Sheiner, 2017). Unravelling this peculiar behavior is pivotal in order to understand the contemporary economic scenario, the position of the U.S. in the world economy, and the potential challenges that will be faced in the future.

In the long run, continuous deficits and large government spending can lead to crowding out of private investments, can increase interest rates, reduce growth, and ultimately, boost the national debt (Matthews & Driver, 2013). As an example, in 2018, the amount of government securities held by domestic private investors hit the startling amount of nearly 6 trillion dollars, which crowded out the money market, attracted by the federal borrowings to support the national debt (National Debt, 2019).

Interestingly though, economists do not gauge the upward trend of national debt as a problem itself as long as its cost remains lower than the rate of growth (Summers & Furman, 2019). The key issue is that interest rates vary depending on factors that may be out of the government and economists' control, making it impossible to predict when fluctuations will occur (Summers & Furman, 2019). This uncertain environment is the focus of risk management principles which help institutions to identify major threats and evaluate the best response to the identified risks (Homan, 2013). In this study,

the risk management perspective was adopted to complement the analysis of the current U.S. debt and evaluate the adequate risk response, underpinned in the qualitative assessment of the most impactful risks.

Literature Review

A historical path of the national debt evolution is pivotal to understand its main drivers, focusing on the major swings observed from the Constitution ratification until present day. The forethought of previous behaviors and impacts can support the appraisal of alternatives and decision-making on the necessary measures to tackle the national debt, if and when they happen to be required.

Throughout the American constitutional history, the national debt has been propelled by wars and economic recessions/depressions and has withered in peaceful, prosperous times, as depicted in Figure 1 (Huntley, 2010). Following this pattern, the period of 1791-1868 ended with a national debt of \$2.6 billion. This was the result of the remnants of the American Revolutionary War and the American Civil War (Catherwood, 2000).

Henceforth, World War I (WWI) added a debt of \$26 billion, equal to 30% of gross domestic product (GDP), which measures the economic growth of a country based on consumption, investments, government expenditures, exports and imports (Dao, 2018). In the 1920's, the national debt was largely reduced due to the repayments of the countries involved in WWI, a fully employed economy, and the performance of the stock market and real estate (Davidson, 2010). The great depression of 1932 left a legacy of 40% debt to GDP (\$34 billion) in 1936, consolidating the role of the federal government and the Federal Reserve Bank (FED) as the safeguard of economic well-being (Davidson, 2010). Soon after, World War II (WWII) spurred the national debt to its highest level in history, at 120 % of GDP in 1946 (Davidson, 2010). After WWII, the dollar emerged as the world reserve currency, ensuring the U.S. supremacy in international trade and the global financial system. In 1944, the Brenton Woods agreement established the dollar-gold

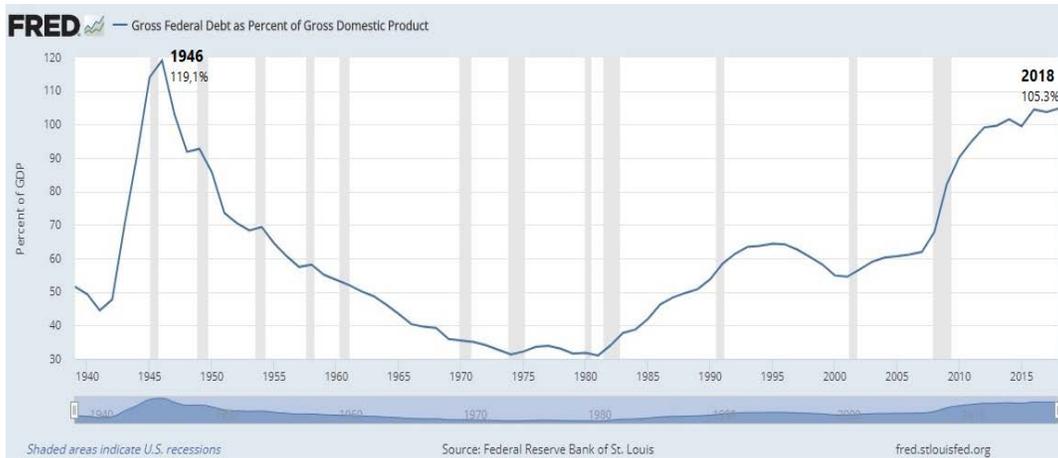


Figure 2. Company's Assets/Liabilities.
Debt as a % of GDP. Reprinted from *FRED Economic Data*, by FRED, 2019, retrieved from <https://fred.stlouisfed.org/series/GFDGDPA188S>

Henceforth, World War I (WWI) added a debt of \$26 billion, equal to 30% of gross domestic product (GDP), which measures the economic growth of a country based on consumption, investments, government expenditures, exports and imports (Dao, 2018). In the 1920's, the national debt was largely reduced due to the repayments of the countries involved in WWI, a fully employed economy, and the performance of the stock market and real estate (Davidson, 2010). The great depression of 1932 left a legacy of 40% debt to GDP (\$34 billion) in 1936, consolidating the role of the federal government and the Federal Reserve Bank (FED) as the safeguard of economic well-being (Davidson, 2010). Soon after, World War II (WWII) spurred the national debt to its highest level in history, at 120 % of GDP in 1946 (Davidson, 2010). After WWII, the dollar emerged as the world reserve currency, ensuring the U.S. supremacy in international trade and the global financial system. In 1944, the Bretton Woods agreement established the dollar-gold connection which meant that other countries could buy and trade dollars based on a fixed gold conversion rate (Costigan, Cottle, & Keys, 2017). U.S. hegemony was strengthened, bringing along capitalistic and free market concepts to international trade that opened new foreign markets to American companies, fostering a

strong long-lasting American economic growth that gradually shrank the national debt (Costigan, Cottle, & Keys, 2017). The “golden” U.S. hegemony endured until 1971 when President Nixon was forced to withdraw the dollar-gold standard because the golden reserves were far below the supply of dollars required to face the ascending national debt. This ascension was due to Korean and Vietnam War expenditures, welfare programs, and liabilities held by European nations, which caused an inflationary effect. Even after the withdrawal, only the U.S. “possessed the necessary political control over financial institutions that would facilitate capital flows”, which is the reason the U.S. dollar persisted as the world reserve currency (Costigan, Cottle, & Keys, 2017, p. 109). Henceforth, the Federal Reserve was able to manage the monetary policy more freely, as the money supply was no longer restricted to the gold correlations imposed by the Bretton Woods agreement (Costigan, Cottle, & Keys, 2017).

Contemporary Surge and Projection of the National Debt

During President Ronald Reagan's era (1982-1989), the national debt entered the \$3 trillion threshold, reaching the ratio of 50% to GDP in 1989 (“FRED gross federal debt,” 2019). This

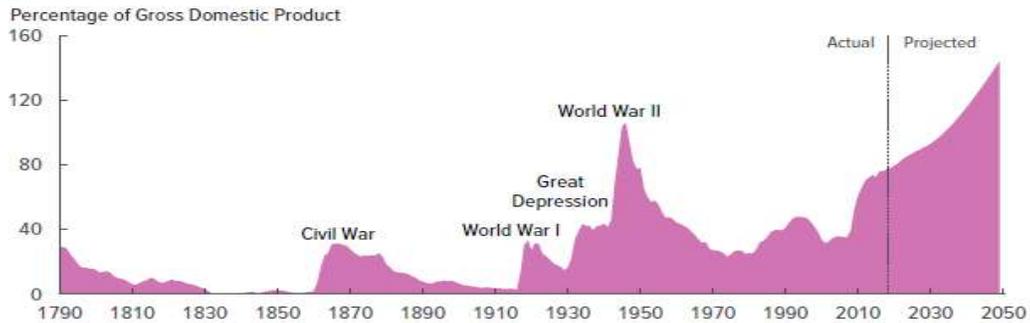


Figure 2. Forecast of Debt Held by the Public.

Reprinted from *The 2019 Long-Term Budget Outlook*, by CBO, 2019, retrieved from <https://www.cbo.gov/system/files/2019-06/55331-LTBO-2.pdf>

upsurge was derived from the tax cuts that were enforced in an attempt to endure the recession caused by the elevation in interest rates, the increase in social programs and the military expenditures used to confront the Cold War (Gilpin, 1987).

Soon after, the administration of President George W. Bush (2002-2009) accumulated \$6 trillion in debt, shifting the ratio to GDP to 82% in 2009 (“FRED gross federal debt,” 2019). A major contributor to this change was the military spending on the War on Terror that was launched after the September 11th attack, and included the proceeding Afghanistan and Iraq war (Leffler, 2011). Additionally, the Bush administration dealt with the early stages of the subprime crisis. President Barack Obama’s mandate between 2010-2017 absorbed the Afghanistan and Iraq wars and the full blow-out of the subprime bubble, which severely undermined the U.S. financial system and economy.

In view of the U.S. financial hegemony, the crisis spread out quickly to global markets in what was named the great recession (Matthews & Driver, 2013). It took a decade and a massive expansionary fiscal policy to recover the U.S. economy, which accumulated to \$8 trillion in debt and skyrocketed 103.4% of GDP (“FRED gross federal debt,” 2019).

A forecast of the U.S. national debt predicts that debt held by the public will reach an astounding 144% of GDP by 2049, which includes the interest payments on accumulated debt as illustrated in Figure 2 (“The 2019 long-term

budget outlook,” 2019). Moreover, the U.S. Treasury has issued securities to finance the national debt of nearly \$21.9 trillion in December 2018, out of which 37% were owned by FED and governments and 63% were privately held (“Treasury bulletin,” 2019). Foreign investors hold 29% of treasury securities that are concentrated in China (5.1%), Japan (4.7%), Brazil (1.4%) and the United Kingdom (1.3%).

Implications

An ever-raising national debt poses a wide variety of threats to the U.S. economy that could substantially affect the country’s growth and the world economy as a whole. The U.S. is the largest economy in the world and, due to the role of U.S. dollar as the world currency, has a special leading position. This study used the enterprise risk management (ERM) principles to evaluate the major threats to the U.S. economy.

The potential impacts of such a roaring national debt are met with divided opinions. Krugman (2018), Nobel Prize economist in 2008, advocates for the fact that the present national debt is “absolutely trivial” when viewed through a Keynesian Model and will not evolve nor spiral as long as the average interest rate on the debt stays below the economic growth plus inflation (p. 2). On the contrary, he believes that, as the GDP is higher than the debt service rate (around 2% for a 10-year bond), the debt to GDP ratio tends to reduce in the long-term (Krugman, 2019). In his view, the gradual increase in national debt during the 2008 great recession was detrimental to speeding up recovery.

Furthermore, Krugman (2019) argues that even in a full employed economy, the U.S. government should increase its spending to invest in ramping up infrastructure and health and education, as this would provide a potential avenue for long-term pay-off. He asserts that in the recessionary era, the private sectors were not confident in investing in production, even at lower interest rates, due to a risk-averse behavior (Krugman, 2019). In fact, statistics confirm a notable declining tendency in national savings and investments (both, private and public sector), as they have plummeted from 10% of GDP in 1969 to nearly 4% of GDP in 2013 (Cole, 2014). The retraction in savings is a matter of concern since savings is one of the determinants of growth that generates investment, according to the Solow growth model (Stein, 2017). Despite his reassuring speech, Krugman (2018) recommends prudence in dealing with debt, “because there may be future contingencies when real interest rates rise and debt becomes an issue,” though nobody knows when this could happen (p. 2).

Summers (2019), former chief economist of the World Bank (1991-93), U.S. Treasury secretary (1999-2001) and President emeritus at Harvard University, agrees with the deficit fundamentalists “that the debt cannot be allowed to grow forever” and the budget policy should comply with constraints (p. 1). On the other hand, budgeters should also not obsess against debt, as long as the interest rates on the debt remain low because reckless cuts in government expenditures could harm the U.S. economy even more than the large national debt (Summers & Furman, 2019). Summers and Furman (2019) argue that a decrease in revenue, rather than augmented expenditures, has propelled deficits and better planning revenues should be a budgetary priority.

Indeed, the economic scenario varies worldwide. During the last 20 years, change was the only certain element in terms of demographics, technology, cultural values, trade, and economics, as noted by Nobel laureate, Spence (2019). The world witnessed the collapse of the Soviet Union, the formation of the European Monetary Union, the

establishment of the euro as a common European currency, the rise of the Asian dragons (Japan and South Korea), the growth of emerging countries (especially China and India), the shift of manufacturing centers, the loom of service activities, and the continuous search for attaining competitive advantage (Spence, 2019). All these changes and the recent digital revolution affected economies, business models, supply chain structures and job profiles in such a way that an underperformance in the global economy was expected in the face of the adjustments to this new reality (Spence, 2019).

This global scenario is a challenge to the U.S. and could explain the slow reaction to the great recession. There are still relevant issues to face, such as the fact that baby boomers are retiring and being replaced by fewer workers, which might deplete the social security fund by 2035, the aging population will increase health expenditures, technological jobs will continue to require investment in education to adapt the labor force, and the deprecated infrastructure will call for the need of investments (Matthews & Driver, 2013).

These crucial issues justify the maintenance of government expenditures that are focused on their solutions. Additionally, the government should restrict spending in other areas and adopt pay-go budgeting, by only proposing costs assigned to the respective revenues (Summers & Furman, 2019). Regarding external policy, the main issues involve the expanded role of China in the world economy and financial markets in addition to the inquiry of China, Russia and the organization of the petroleum exporting countries (OPEC) on the maintenance of the dollar as a world reserve currency (Costigan, Cottle, & Keys, 2017).

Taking all these different views into consideration, we could conclude that new debt accumulation is only worthwhile if it is directed towards productive investments.

Perception of Risk

An accentuated perception of risk related to the U.S. economy and the U.S. institutional capacity to cope with the national debt is pervasive (Homan, 2013). Organization for

Economic Co-operation and Development (OECD) debt to GDP rank in 2015, for example, depicted the U.S. as being close to risky leveraged economies, like Portugal, Spain, Greece and Japan (“General government debt,” 2019). The risk of American treasuries has augmented, as perceived by Standard & Poor’s Financial Services LLC, a rating company, when it downgraded U.S. bonds from AAA to AA- in 2011, affecting the U.S. and the world economy (Matthews & Driver, 2013). Investors may feel reluctant to invest in U.S. bonds, unless higher interest rates compensate their risk, which could direct the country towards a fearful debt spiral that could unleash the negative contingencies mentioned by Krugman (2019).

In this sense, Spence (2019) foresees a long period of uncertainty, when “caution may seem like the best policy for companies, investors and even governments,” but without freezing investments (para. 13). The lack of investment in new technologies and education can leave countries behind in terms of growth (Spence, 2019). This lagged economic position is observed in growing economies in which capital and labor generates great growth at first, and there is much to be done in terms of infrastructure, factories, and so on. However, after a while, those economies are caught in the middle-income trap and get stuck, because they lack innovation to propel productivity and growth, which requires education, technology and solid institutions, amongst other factors (Glawe & Wagner, 2016).

Risk Management Approach

Unsurprisingly, ERM has been largely implemented by companies in the last decades (Homan, 2013). It comprises a set of principles and capabilities to effectively “deal with uncertainty and associated risk and opportunity, enhancing the capacity to build value” and to achieve strategic objectives when considering the risk tolerance thresholds in decision-making, as well as optimizing the use of resources and potential outcomes (“Enterprise risk management,” 2014, p. 1). Likewise, these principles can be of great value to federal and state administration in their struggle to deal with

the challenges of the globalized, volatile and complex economic environment, albeit observing the specifics of public governance and the magnitude of impacts (Homan, 2013). In any case, the stages of risk identification, risk assessment, risk response and monitoring are essential to support the design of alternatives, structuring of policies, decision-making and involvement of stakeholders (Homan, 2013).

As far as the national debt is concerned, a practical application of ERM principles will possibly address two of the significant risks (SR) previously mentioned by the prominent economists: the potential increase in the debt service rate and the burst of social security and health expenses as a result of the population aging (Matthews & Driver, 2013). The staggering impact of these two risks on the national debt is an unusual unanimity among economists, as they could ultimately provoke a sovereign crisis.

Fortunately, the probability of SR occurrence in the short run is fairly low, despite their potential catastrophic impacts (Elmendorf & Sheiner, 2017). The long run scenario is even more challenging due to the massive amount of baby boomers retiring that would dry out social funds and narrow the governmental margin of maneuver (Elmendorf & Sheiner, 2017). As a consequence of their high impact and low likelihood, SR would be positioned in the yellow area of the risk map presented in Figure 3, which points to a timely proper risk response (Elmendorf & Sheiner, 2017). Elmendorf and Sheiner (2017) proposed gradual policy adjustments in the next decade, providing time for people and institutions to adapt, such as a reduction in social security and Medicare calculations, an increase in taxes, and a raise in federal investments in specific areas including social benefits and infrastructure modernization.

Although the debt to GDP should still rise in the next decade, Elmendorf and Sheiner (2017) expect the mitigation of these threats will ultimately create favorable conditions for debt to GDP consistent decline in the long-run. It is worthy of comment that the ERM process aims to reduce the severity of impacts or their likelihood to acceptable levels, yet risks would



Figure 3. Risk and Opportunity Heat Map.

Reprinted from *Coso Documents*, by Coso, 2012, retrieved from <https://www.coso.org/Documents/COSO-ERM%20Risk%20Assessment%20in%20Practice%20Thought%20Paper%20October%202012.pdf>

hardly be completely eliminated (Curtis & Carey, 2012).

Conclusion

Undoubtedly, analyzing the U.S. national debt is far from trivial, as attested by the several Nobel laureate economists referred to in this article. In the opinion of Krugman (2018), the government should liberally increase their indebtedness and national debt, as long as economic issues are addressed to generate long-term values. Spence (2019) contextualized the world scenario and its relentless changes in demographics, technology, cultural values, trade, and economics as potential causes for the country's economic underperformance. This underperformance is due to the expressive bump these changes have caused to business models, institutions and society. The advice of Summers (2019) is that national debt should be examined in a balanced way, creating thresholds for its rise; nevertheless, this must be done without restraining government and FED maneuvers related to fiscal and monetary policies. Despite the economists' different approaches, it is possible to identify a common view, involving the necessity of government investment in infrastructure, health, education and generation of government revenue, as well as a general concern about situations that could increase economic threats like the debt service interest rate and population aging. The increased perception of risk towards the strength of the U.S. economy to repay such a stunning national debt in the face of an uncertain global scenario is also a meaningful unanimity.

The application of the ERM principles unveiled that the staggering impact of the U.S.

sovereign crisis, even though unlikely, would put the American financial hegemony at risk, impairing people's lives and economies worldwide (Matthews & Driver, 2013). The positioning of SR in the yellow area of the heat map equates to a need for a proper risk response, which theoretically, would answer the question of whether some measure to restrain or reduce the national debt should be taken (Curtis & Carey, 2012).

The ERM recommendation is aligned to the cautious policy proposed by Spence (2019) and seems to be a wise way to proceed. Nevertheless, regarding the question about the time-frame for the implementation of measures to reduce the national debt, Elmendorf and Sheiner (2017) suggest a medium to long-term subtle risk response, compliant with the cautious policy advice. This response is composed by gradual policy adjustments in the next decade that would provide time for institutional adaptation.

These conclusions demonstrate that ERM principles could positively contribute to public strategic decision-making and policy development. As suggested by Curtis and Carey (2012), the risk management process should constantly optimize and update to incorporate the changes necessary in a company's business environment, and the same can be applied to sovereign debt. In this sense, it is important to highlight that the risk assessment mentioned in this study is limited to a qualitative analysis of key risk factors. Additional research must be done to further analyze the application of the risk assessment principles in analyzing sovereign debts.

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A Survey on Understanding the Perception and Awareness Towards a Circular Economy: A Comparative Study Between Nepal and the USA

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ABSTRACT

This article offers a comparative analysis of the perception and awareness people have concerning the circular economy (CE) in Nepal and the United States of America (USA). The survey in the form of online questionnaires were distributed through convenience sampling and data was collected from 29 respondents in Nepal and 25 in the USA. The results indicate that, across the sampled countries, though respondents were highly concerned about the environment and resources utilization, their perception and understanding of CE principals and its applicability were limited to the concept of reuse, recycle and remanufacture (3R). Similarly, organizational involvement in CE activities were found to be significantly low in both countries, indicating no structural or operational level support such as creating job positions for CE officers. Additionally, the practice of publishing sustainability and circularity reports to enable the CE were not found during the data analysis procedure. In comparison to Nepal, USA respondents picked inter and intra organizational collaboration and cooperation along with research and development (R&D) as an important enabler of CE. Finally, policy level interventions through mandatory and voluntary regulations, subsidization of CE activities and involvement of governmental and non-governmental agencies were recommended in creating a positive perception and awareness of CE.

Keywords: Circular economy, comparative study, awareness, perception

Research Background

A circular economy (CE) emphasizes re-looping resources back into the production and consumption cycle, aiming to prolong the life of the resources and simultaneously increase their value. This type of economy is a shift from the linear model of consumption which focuses on the take, make and dispose model to instead focus on the take, make and reuse strategy (Upadhyay & Alqassimi, 2018). The application of circularity not only offers environmental advantages but also manifests multiple financial and non-financial benefits for companies, making them competitive. In the European Union (EU), transitioning to CE and shifting to an alternative production material would formulate savings of US \$ 340-380 billion and could eradicate 1.3 million tons of carbon dioxide annually (Ellen MacArthur Foundation, 2013).

The CE is based on the principle of resource preservation through restorative and regenerative approaches; the most widely used ethos is the 3R approach of reuse, recycle and remanufacture. However, CE goes beyond waste management; it focuses on the efficient management of resources from the beginning of the design phase. CE balances the flow and exchange of resources between the environment and industries (Liu, Li, Zuo, Zhang, & Wang, 2009).

Skawinska and Zalewski (2018) show how CE has brought a new paradigm for sustainability. A well-managed reverse logistics, sufficiently developed performance and well-established sharing economy enables the CE. That is the reason the transition from a linear to a circular economy alone presents the opportunity to save \$4.5 trillion globally by 2030 (Houten & Ishii, 2019). The practice of CE fundamentals in the global e-waste market, which is worth \$62.5 billion, will decrease the price of e-products by 7% by 2030 and by 14% by 2040 (World Economic Forum, 2019). Ellen MacArthur Foundation (2013), a UK registered charity which focuses on CE, states if CE concepts were implemented, the cost of remanufacturing mobile phones could be reduced by 50%.

Moreover, when it comes to the formulation and implementation of CE principles, companies

are still lacking a strategic move. Liu and Bai (2014) explain that there is still an existent gap between the awareness of and the actual implementation of CE. Whereas, Liu, Li, Zuo, Zhang, and Wang (2008) inferred that the scarcity and high cost of resources along with supportive government philosophies are factors that fostered the implementation of CE in China.

Furthermore, the European Union (EU) is an initiator in terms of implementing CE through numerous legislations: EU countries like Denmark, the Netherlands, Scotland and Sweden have legally formulated the necessary policies to foster the concepts of reuse and recycling of resources for conservation. And lately, the United States of America is also inclined to incorporate the CE principles. As per research carried by ING, a Dutch multinational banking and financial services corporation, in 2019, twice the number of the US companies in comparison to 2018 says their strategic decision is focused on sustainability through the principles of CE (Peters, 2019). These US companies are focusing more on the sustainable use of resources through an effective reuse and recycle approach. However, this scenario in the least developed countries, like Nepal, is far from the reality.

It is undeniable that the trend of producing and consuming products and services is changing, and countries are becoming more responsible towards the ethical extraction and use of resources. Though the USA was not a trend setter in CE implementation (Davis & Hall, 2006), nowadays, the country has started to practice CE. The Ellen McArthur Foundation plays a pivotal role in bringing globally dispersed C-Suits and companies to manage and broaden their strategy from waste to resource management. In addition, companies like Patagonia, Google and Renault are reworking and redesigning themselves in order to use the close loop strategy, a strategy which aims to reuse resources and keep them in the production and consumption cycle rather than dumping them in landfills. In the context of Nepal, such initiation from regulatory or entrepreneurial dimensions are still minuscule.

To sum up, consumers and producers who are aware of the importance of CE, irrespective of their geographic variations, support CE activities which emphasize ethical and responsible uses of resources which have ramifications in terms of positive economic, social and environmental outcomes. The successful implementation of CE can occur when stakeholders are aware of its concepts and applicability while laws and regulations also support and benefit the transition.

Previous Studies and Need for Further Studies

The perception and awareness of CE plays an important role in the adoption of CE philosophies. Though the significance of CE is something that is noted and understood in developing countries, there is only a limited amount of research regarding the perception in the least developed ones. A plethora of research has been done focusing on environmental awareness, its conservation and resource utilization with the 3R approach, and yet, there is only limited research regarding people's perception and awareness of CE which is exponentially important to formulate and implement CE policies. Adams, Osmani, Thorpe, and Thornback (2017) explain that there has been no significant research executed on the CE from a system level perspective. Similarly, out of the three major domains of CE (economic benefit, environmental impact and resource scarcity), the environmental domain is much more developed than the remaining two (Liakos et al., 2019).

The online survey used in this study provides information regarding the level of awareness and perception of people towards CE in the context of Nepal and United States of America (USA). This comparative research between the two economies, which is distinct in terms of technological, socio-cultural, economic, political and legal aspects, aims to aid regulators and environmentalists in the development of policy level interventions, guidance for students to further introspection in the field, and support for businesspeople to remodel their resource utilization cycles with the CE modality.

Research Design and Data Collection

For this comparative analysis, Nepal and the United States of America (USA) were chosen. The USA is the most economically competitive country among the developed nations with its gross domestic product being worth \$20.5 trillion in 2018 (World Bank, 2019). The country is technologically advanced and has invested tremendously in research and development.

In opposition, as per the World Bank, Nepal falls into the category of the least developed nation in the world with its gross domestic product being worth \$28.81 billion in 2018 (World Bank, 2019). This fact, further coupled with the poverty, high illiteracy rates and lagging and redundant technologies, has reduced Nepal's capacity to bring structural change in order to adopt CE. However, the fiscal policy of Nepal in 2019 has envisioned and desires to create new smart cities which aim to use information communication technologies (ICT) and the creation of eco-friendly cities (Ministry of Finance, 2019). Slowly, companies in Nepal are becoming more aware of how to reduce their carbon footprint which is also one of the domains of CE.

Questionnaire Design

The data collection instrument used for the primary analysis was a questionnaire with pre-selected answers. The question types ranged from single choice to multiple choice questions as well as the integration of Likert scales. The questionnaire was divided into multiple sections, each with sub-questions. Meanwhile, the demographic section collected respondents' information including gender, age, education level, nature of organization and the location of their companies. The subject matter section included the assessment of the respondent's familiarity with the CE terminology and their best description of the approach and methodology of what CE includes ; further, respondents' consciousness and thoughts towards the limitation of resources and their protection were questioned as well as their perception towards CE which included sub-questions on the importance of CE to their

organizations. Similarly, questions relating to organization involvement and approach undertaken by their organizations were asked, as well as the respondent's readiness to participate in ridesharing and renting models were questioned. The final question gathered information regarding the right time to implement CE philosophies in their organization. In total, there were nine sections with sub-questions included in each.

Questionnaire Distribution and Results

The questionnaire distribution and response collection were done through the use of Google Forms. The responses were automatically stored in Google Drive and did not require any researcher intervention to store the responses. The link to the survey questions was sent to each respondent's email address. Respondents with work experiences from Nepal and the USA were selected. Convenience sampling was incorporated for selecting the respondents. But equal caution was maintained to not have responses from the same company as it would not make the sample representative. In order to ensure a representative sample within the population chosen, the questionnaires were distributed to the diverse nature of companies, like banking, manufacturing, aviation, academic institutions et cetera. The responses were collected between February 15th to July 11th, 2019. The use of the online platform eased the data collection process. A small portion of the respondents were neither from the USA nor Nepal, and as these responses were not within the scope of the study, they were excluded.

Research Findings

This segment offers the findings from the descriptive and inferential analysis. It includes sections regarding the demographic's details, the level of perception and awareness of the respondents towards CE, their views on CE approaches and their level of awareness on the

urgency to imply CE activities in their organizations.

Demographics of the Respondents

For the survey, the respondents that had current or previous work experiences were chosen to get an idea regarding the organizational level involvement in CE approaches. A total of 54 responses were collected, 29 from Nepal and 25 from the USA.

	Number	%
Gender		
Male	35	64.8
Female	19	35.2
Education		
High School	1	1.9
Bachelor	10	18.5
Master	40	74.1
Doctorate/PhD	3	5.6
Country		
Nepal	29	53.7
United States	25	46.3
Management		
Entry Level	7	13
Mid- Level	40	74.1
Top Level	7	13
Nature of Organization		
Service Delivery	44	81.5
Manufacturing	10	18.5
Total	54	100

Table 1. The demographics of the samples

Out of the sample, the majority of the respondents were male, had a master's degree, and held mid-level job positions within the service industry (see Table 1).

Knowledge about the Circular Economy

As shown in Table 2, a moderate proportion of the respondents from both countries had basic knowledge of CE terminology but were unclear about its exact purpose. Specifically, 27.6% in Nepal and 40% in the USA were entirely unaware of the concept (see Table 2). Similarly, in each sampled country, a majority of respondents, 67.9% in Nepal and 56% in the USA, specified that they believed the CE was related to the 3R approach which, in reality, is only a small scope of CE. This fact aligns with the findings of Kannan and Hasanagic (2018), which determined that a majority of people are not aware of the CE concepts.

	I could easy define it with its application. (%)	I have heard the term before, but I am not sure. (%)	I am totally unaware about it. (%)	Total
Nepal	10.3	62.1	27.6	100% (29)
U.S.	0.0	60.0	40.0	100% (25)

Table 2. Familiarity with the CE terminology

In regards to methodologies that describe CE, though most respondents marked that it was similar to the 3R approach, Americans outnumbered Nepalese respondents in thinking of CE as a type of resource management; Americans were relatively high in claiming terminology such as sharing economy (32%), symbiosis (32%) and performance economy (16%) which are aligned to the CE domain. This type of finding was low in the context of Nepal where familiarity with the terminology equated to sharing economy (10.3%), symbiosis (6.9%) and performance economy (0.0%)

Organization Involvement Status

One of the major objectives of this research was to determine the respondents' perceptions of their organizational involvement in CE related activities. In this matter, only 48 % of Americans and 34.5% of Nepalese believed their companies were involved in CE activities; whereas, 24.1% of Nepalese and 20% of Americans said they had no idea. Most of the respondents thought their organizations were involved in CE due to 3R activities. Only 4% of respondents from the USA said their organizations implemented CE concepts from the beginning phase of designing their products and services. This finding demonstrates that CE implementation is more focused on waste management than resource management in both of the sampled countries.

Due to the fact that the data collected was inclined towards the service industry, there were no take-back-programs that were applicable to the manufacturing sectors. A higher percent of interdepartmental collaboration was reported in the USA (33.3%) which was 24.1% in Nepal. Further, 16.7% of respondents in the USA and 6.9% in Nepal said their organizations had collaboration between the firms. Furthermore, the internal and external collaboration between departments and firms, which was more notably practiced in American companies, favors

symbiosis. Symbiosis is a state of collaboration and cooperation among the departments where the output from one department, if it is not the final product, is made into an input for another department or firm. The aim of this state is to extend the value of the output rather than dumping it in a landfill or incinerating it (Upadhayay & Alqassimi, 2018). Symbiosis explicitly focuses on the close loop strategy and focuses on increasing the life of products.

Perception Towards CE

As presented in Table 3 below, questions were integrated using a five-point Likert scale, where 1 represented very important and 5 represented not important at all. A statement asking respondents about their perception of the importance of CE for their organization found that 51.7% in Nepal and 41.7% in the USA agreed and strongly agreed of its importance. Whereas 34.5% and 37.5% respectively maintained their neutrality to the statement, and 13.8 % in Nepal and 20.8% in the USA identified that CE is not important, or not important at all to their organizations.

Subsequently, Table 3 also depicts the average score of employee perception towards the importance of CE for their organizations. The average was 2.45 and 2.63 in Nepal and the USA respectively which lies between neutral (3) and important (2) on the Likert scale. Importantly, an inferential analysis was used for the same Likert Scale statement. An independent sample T test was conducted to compare the perception of CE in Nepal and America. The test concluded that there was no significant difference in perception as the scores for Nepal's (M=2.45, SD=1.152) and America's (M=2.63, SD=1.013) conditions, $t(51)$, $p = .560$, did not show a significant difference. This finding could validate, irrespective of the geography or economic level of the countries, that the subjects of this study have moderate to no idea about CE. This could be due to the lack

Location of HQ	N	Mean	Std. Deviation	Std. Error Mean	
How important is circular economy (CE) concept to your organization	Nepal	29	2.45	1.152	0.214
	USA	24	2.63	1.013	0.207

Table 3. How important is CE to your organization?

of awareness about CE in the sampled countries involved in this research. Initiation of CE awareness programs would be an effective intervention to encourage awareness of CE benefits across each country.

Also, respondents of both countries were significantly aware that they have to change their current mode of consumption; on average, 79.2% of respondents aligned with this statement; whereas, 7.5% did not agree and 13.2% were unaware of the issue. All participants identified that the motivation for changing their consumption pattern was to protect resources for the future. Only 14.8% of the respondents chose financial motives for rationale behind changes in consumption patterns. These findings reconcile with the Liakos et al. (2019) in that CE is still thought of as an environment protection strategy.

Readiness for Sharing an Economic Model

It is undeniable that the sharing of resources facilitates the circular economy since it is also one of the business models of the CE; Uber and Lyft follow the same business model. 82.8% of Nepali and 60% of the USA respondents said they would like to use ride sharing to commute. As ridesharing is relatively new in Nepal, the respondents were excited about it. Similarly, in case of integrating a renting model, Nepal slightly outnumbered the USA respondents in terms of a desire to use such a platform; 72.4% and 68% respectively in Nepal and the USA aligned with the renting model. The higher cost of vehicles and household machines in Nepal, in comparison to the USA, might have motivated them to be inclined to use the sharing model. The same was inferred by Liu, Li, Zuo, Zhang, and Wang (2008) in similar research conducted in China.

Enablers of a Circular Economy

Interestingly, in both countries, the respondents ranked market/consumer awareness as the most important factor for inducing the modality of the CE; specifically, 75.9% in Nepal and 72% in the USA. Policy and regulation were chosen as the second enabler for CE in the USA at 60% and was ranked as the third enabler by the Nepalese respondents at 31%. Corporate social responsibility (CSR) was also selected as a factor that prompted CE related activities; USA respondents averaged at 52% and Nepalese respondents averaged at 48.3% for the same. The more collaboration within and outside of an organization, the better the design of the products that support disassembling. The mature end product collection mechanism and investment in R&D were prioritized higher in the USA than in Nepal.

Though a majority of respondents across the countries were unaware of CE, they still thought CE could be an important strategy for sustainability; specifically, 89.3% in Nepal and 72% in the USA agreed and strongly agreed for the same clause. This finding aligns with Witjes and Lozano's (2016) conception of how crucial CE is for sustainability. On the lack of resources forcing companies to adopt a CE modality, 31% in Nepal and 41.7% maintain their neutralism, though this was also skewed towards agreeableness in both countries. On statements like profit motive driving companies into CE and CE being a medium to enter a new market, as aligned with the research findings of Adams, Osmani, Thorpe, and Thornback (2017), the expectation of economic gain was found to motivate companies to incorporate CE. Lastly, on average, 64.7% of the respondents across the countries remain impartial if CE would assist in getting rid of competitors, 19.6 % agreed and

strongly agreed; whereas, the remaining respondents refuted the statement.

Organizational Level Arrangement to Support CE

As per this research, a relatively small percentage of organizations have job positions that are related to managing the CE activities in both countries. In specific, 3.4% of the respondents in Nepal identified that their organizations had an individual in this role; whereas, 24% of respondents indicated the same in the USA. Along with the rise in environmentalism, 86% of the companies listed in Standard and Poor's 500 Index produced a sustainability report in 2018 ("Flash report," 2019). Google, IKEA and Patagonia each have a CE specific report. However, in the case of the researched companies, 96.6% and 72% of the respondents from Nepal and the USA respectively selected that their organizations did not publish reports related to their CE activities. 55.2% respondents from Nepal and 60% from the USA said their organizations were not concerned about minimalistic utilization of resources at all.

Time to Apply CE Concepts

The majority of the respondents across the countries identified that there is no time to wait, and companies should work on implementing CE promptly; specifically, 75.9% in Nepal and 72% in the USA expressed this thought. Whereas, on average, 31.5% of respondents, in total, identified that the CE model should have a cost benefit before implementation. Similarly, 10.3% of respondents in Nepal and 24% in the USA explained that they would initiate CE activities only if they were demanded by the market. Lastly, 14.8% and 18.5%, on average, across the sampled countries identified that they would practice CE only if mandated and subsidized by the government respectively.

Conclusion and Recommendations

Though the respondents in both countries were aware of the importance of environmental conservation, this research found that they had a lack of understanding regarding how CE could

be practically implemented at an individual as well as organizational level. The findings from the research could help in bringing policy level interventions to make the public aware of the importance of CE activities.

Discussion

This comparative study on CE awareness and perception across the USA and Nepal showed that a limited number of respondents have moderate knowledge on CE, and the number of respondents who have expert skills within the field are negligible. Only 48% of the Americans surveyed and 34.5% of the Nepalese surveyed expressed that their companies were involved with CE activities. In a similar type of survey conducted in the Netherlands in 2018, only 9% expressed knowledge of the exact meaning of CE ("Three-quarters of Dutch," 2019). From this, it can be inferred that the concept of CE is muddled. Furthermore, CE is not only related to the 3R approach of waste management, but it unequivocally focuses on the efficient use of resources from the very beginning stage of resource procurement to product design to the final distribution and consumption stage. Yuan, Bi, and Moriguichi (2006) stressed the economic benefit of a CE rather than just the ecological advantages which the respondents of this research were found lacking in knowledge of.

No significant difference in the respondent's perception towards CE across both countries was inferred with the p-value of 0.560 at 95% of the confidence level. The respondents from both countries have little knowledge about the CE activities but have perceived that CE activities were important for their organizations. In comparison to the USA, Nepalese respondents were more positive towards the ridesharing and renting models. This could have been due to the higher cost of vehicles and machines making it unaffordable to buy in Nepal, creating an opportunity for ridesharing companies.

Though contemporarily, in both countries, while the respondents lacked the practical scope of CE, they still deemed awareness of CE activities as an important factor to induce their organizations to caliber their products to be in line with a CE philosophy. CE was also seen as a

tool for corporate social responsibility (CSR); Esken, Franco-Garcia, and Fisscher (2018) in their research, supported a complementing relationship between CSR and CE. In comparison to the Nepalese respondents, the USA respondents focused more on organizational structural effectiveness, like interdepartmental relationships and investment in R&D to promote CE, which in return, has supported symbiosis.

Though a significantly high percentage of respondents in both countries were aware of the need to preserve resources, the organizational level arrangement in researching, designing and developing a CE philosophy were negligible across the sampled countries. Multinational companies like Google and IKEA have started publishing sustainability reports, but almost none of the sampled companies in this research were found to have done so or kept employees responsible for implementing CE philosophies.

Lastly, in both countries, respondents were concerned about resources and their preservation, as 75.9% of respondents in Nepal and 72% in the USA indicated desire to apply CE concepts in their organization as soon as possible. This provides an opportunity and affirms higher support from employees when firms transition from a linear to a circular model of operations. However, equal caution should be made as the transition will pay-off only when the benefit outweighs the cost of transition in terms of financial and non-financial resources.

Recommendations

This research concludes, though the majority of respondents were aware of the need to protect the environment, they lacked a concrete understanding and applicability of CE. A proper understanding of CE is recommended to create a balance of exchange of resources between a company and its environment. Some of the interventions that are deemed beneficial to promote CE in both countries are listed below and should be considered as recommendations derived from the findings of this small-scale study.

Need to connect the gap between environment awareness and CE philosophy. CE activities are interrelated with

environmentalism. CE is the flow and exchange of resources among an organization and the environment. In this research, a significantly higher percentage of respondents were conscious of the need to change their current mode of consumption; whereas, in the meantime, the same sample lacked enough knowledge of CE, as their understandings were limited to the 3R approach. Since there are higher chances of environmentally concerned people supporting the CE philosophy, connecting the gap between these two concepts, i.e. environmentalism and CE, is essential to make people aware of the importance of CE, which indeed, starts from the ethical use of environmental resources. Effective training, workshops and seminars could alleviate this gap and make people aware of CE.

Making CE a mainstream subject matter. The research concluded that a small percentage of the sampled organizations have CE related activities. Until corporate level management brings a CE philosophy when designing corporate strategies, it will be hard to practice it companywide. Firstly, the management should incorporate CE methodologies like well-designed reverse logistics and modular product designs while formulating the corporate strategies, as it enhances the CE capability of the company. Further, appointing a sustainability or CE officer will make the company more involved with CE activities. A separate post/position with responsibility in an organizational structure for how/when to implement CE activities will support the implementation of CE and make people more aware of it.

Develop CE awareness programs. Still, significantly lower proportions of organizations know and are aware of CE along with its applicability. Governmental and non-governmental agencies could help in formulating and implementing the transition from a linear to a circular model of production and consumption. The Ellen Mac Arthur Foundation has been playing a pivotal role in bringing various tools, techniques and methodologies to enact CE. The awareness program could be launched on two levels: i) individual, ii) organizational.

An increased individual level of awareness is essential to generate change in individuals' consumption habits. This would include making people aware of the disadvantages of using plastics, promoting a habit for reusing consumer goods and letting the public know how they can be active parts of the CE value chain.

At an organizational level, organizing workshops and conferences on CE would encourage employee awareness of its importance. Organizations can begin with auditing existing products and process cycles. These types of interactions and trainings will make organizations more aware of the critical points where CE activities could be introduced, i.e. turning waste into material.

Policy interventions. Rules and regulations can make individuals, as well as organizations, aware of CE activities. It was chosen, by the respondents, as one of the enablers for CE activities in this research. Policies could be voluntary or mandatory depending upon the readiness of the market to implement. European Union (EU) directives on CE like the EU Action Plan force corporations to abide by CE procedures. The policies related to subsidies, resource utilization, and 3R approaches should be formulated by the government in order to

attract and make corporations aware. Lieder and Rashid (2016) inferred the importance of joint support from all stakeholders for the successful implementation of CE on a large scale and a policy in place to support collaboration and cooperation. This policy intervention should promote stakeholder engagement in CE activities and provide them with economic incentives to take the leap from a linear to a circular model.

Further Research

Though this study has been a useful comparative investigation across two countries, it does have some limitations. The limited number of samples across the country could be increased in the future, and in the same way, a multi-country model could be tested to make the findings more representative. Furthermore, the questionnaire did not fully focus on symbiosis, sharing or servitization which are also integral components of CE and research topics in future. Moreover, the sample contained the majority of respondents from the service industry, and in the future, research could be conducted with a more diverse range of manufacturing firms to determine the level of awareness of the CE.

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The Quest for Managing Stroke through A Mobile Device Application: A Review Study of Innovative Technologies Related to Cerebrovascular Accident

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ABSTRACT

Stroke, also known as a cerebrovascular accident (CVA), is the fifth leading cause of death for Americans, accounting for 140,000 lives each year (“Stroke facts,” 2017). CVA marks 1 out of every 20 deaths and nearly 75% of all strokes occur in people aged 65 years and above (Centers for disease control,” 2017). As a leading cause of long-term disability, stroke can have devastating effects on patients and their caregivers. Despite a number of emerging technologies that could potentially be helpful in the prevention, evaluation, and rehabilitation of strokes, typically, such technologies are limited and only considered for millennials. Similarly, at the present time, there is not a single platform designed specifically for stroke management. This makes access to relevant CVA information for baby boomers and the elderly challenging and the potential edification process rather inefficient. The key objective of this review is to identify and discuss effective technologies that can assist baby boomers, born between 1946 and 1964 in the United States, to manage CVA and further explore possible concerns of baby boomers associated with awareness and accessibility of the aforementioned technologies.

Introduction

According to the Centers for Disease Control and Prevention ("Stroke facts," 2017), stroke, also known as Cerebrovascular Accident (CVA), is the fifth leading cause of death for Americans. Further, it is the leading cause of long-term disability and nearly 75% of all strokes occur in people 65 years of age or older. Currently, there are a number of ongoing debates about the elderly and baby boomers in relation to their access to emerging technologies that have the potential to help manage stroke rehabilitation. Thus, edification within the context of new digital platforms related to this specific cause is needed. In a recent study targeting primary care physicians (PCPs) in the New York City area, 69% of physicians responded that they do not discuss any options for primary stroke prevention through the aid of mobile applications with patients (Halket, Singer, Balucani, Stefanov, & Levine, 2017). At the present time, there are multiple mobile applications that manage each controllable factor of a stroke, such as weight, hypertension and cholesterol, and yet, there is not a single platform specifically designed for managing a stroke. With a goal of identifying and discussing effective technologies relevant to managing stroke in the United States, this fundamental review study explores possible baby boomers' concerns associated with awareness and accessibility of the aforementioned technologies.

Cerebrovascular Accident

CVA occurs when blood flow to an area of the brain is cut off; therefore, resulting in brain cells being deprived of oxygen. This lack of oxygen equates to the death of the cells coupled with a consequential loss of that area of the brain's ability to control its specific functions ("Stroke facts," 2017). Strokes are either labeled as hemorrhagic or ischemic. Ischemic stroke, the most common type of stroke, occurs when a blood vessel carrying blood to the brain is blocked by a blood clot ("What is stroke," 2019). According to a recent survey ("National center for health statistics," 2019), age-adjusted percentages of having a stroke for ages 18-44 is

0.6 with a standard error of 0.09. This percentage increases for ages 45-64 to 3.2 with a standard error of 0.23 and increases further for ages 65-74 to 6.6 with a standard error of 0.23. The largest age-adjusted percentage of stroke is recorded at 11.1 with a standard error of 0.66 for ages 75 and over. Therefore, it is crucial for the aging population, which essentially encompasses society as a whole, to learn about the symptoms of CVA and to utilize the technology available to manage the rehabilitation process in the wake of a stroke. Since 2013, overall induced deaths by stroke fatality rates have declined in the United States ("Stroke facts," 2017). Nonetheless, the decline in stroke fatality rates has stalled in 3 out of every 4 states and has even reversed in 22 states ("Preventing stroke deaths," 2017). The baby boomer generation is one of the age groups that are affected by CVA.

Baby Boomers

In the United States, baby boomers refer to those born between 1946 and 1964, or post-World War II (Colby & Ortman, 2014). As of 2019, baby boomers range from 55 to 73 years old. Baby boomers represent a population size and a specific market segment for a risk group associated with stroke. Nonetheless, Generation Y or Millennials are larger in population size, and therefore, specific factors influencing Millennials and their purchasing attitudes and patterns have become much more of an important focus for consumer research than the other age groups (Belleau, Summers, Xu, & Pinel, 2007; Martin & Bush, 2000, as cited in Ordun, 2015). Moreover, even if inequities in internet availability and accessibility have gradually diminished due to technological advances, compared to younger counterparts, baby boomers are more likely to have lower health literacy, which in turn, negatively impacts their understanding of health care access and chronic disease management (Tennant, 2015). Even if baby boomers are able to access the internet, searching through and understanding the state-of-the-art technologies could be a rather arduous and complex process. Consequently, the lingering question is whether

or not baby boomers, a large population affected by CVA, should be the ones managing their health-related conditions or simply remain unaware of the benefits of having access to emerging technologies such as virtual reality and telehealth as rehabilitation possibilities.

Selected Health Care Technologies

Health care technologies are instrumental in enhancing healthcare services. Many of these advances are brought to life through innovation (Schilling, 2020). By improving outcomes and reducing costs, innovative technologies pave the path for addressing health care issues both in terms of stroke prevention or rehabilitation and enable new opportunities for reaching a larger number of stroke patients (Barbash & Glied, 2010; Chandra & Skinner, 2012; Drummond, et al., 2008; Miller, 2011; Safi, 2018). A number of relevant technologies currently available for assisting stroke rehabilitation and other methods of increasing the accessibility of baby boomers to reach web portals and mobile internet platforms are presented in the subsequent sections.

Mobile Applications

Mobile applications are increasingly becoming a gateway for a number of services and products on the internet. These applications refer to software installed on most cell phones, tablets, and hand-held electronic devices. Throughout this section, a number of technologies linked to mobile applications that could have potential impacts on stroke prevention or rehabilitation are explored.

According to a case-controlled study with 6,000 individuals within the United States, 90% of strokes can be attributed to just 9 modifiable risk factors (Halket, Singer, Balucani, Stefanov, & Levine, 2017). Halket et al. (2017) also studied targeted interventions to reduce blood pressure and cigarette smoking as well as to promote physical activity and a healthy diet which could substantially reduce the risk of stroke. There are multiple health-related mobile applications curated specifically to manage such vascular risk factors (Boateng, Batsis, Halter, & Kotz, 2017). One of these is *ActivityAware* that monitors a

person's daily activity level for providing deeper insight into hypertension and obesity. Thus far, there is not a single platform specifically designed for stroke rehabilitation and most platforms are limited in stroke prevention. This could be an underlying reason for why physicians hesitate to discuss such applications.

In a recent study, 69% of primary care physicians (PCPs) responded that they do not discuss any mobile applications for any kind for primary stroke prevention with patients (Halket et al., 2017). In the same study, however, 77% of PCPs, expressed interest in a mobile application that targeted primary stroke prevention. According to Cleveland Clinic (2018), there are nine controllable risk factors for stroke. One of these factors is weight management. In an exemplary case of utilizing technology as a means of risk reduction, the use of a mobile application for weight management has proven to be efficient in terms of aiding significant changes in body weight (Mateo, Granado-Font, Ferré-Grau, & Montaña-Carreras, 2015). Specifically, for each MET-h/week, a common method of expressing exercise dose is the calculation of metabolic equivalents (METs) per week, was associated with a 0.13 kg/m² and 0.33 kg decrease in Body Mass Index and body weight, respectively (Stoner, Beets, Brazendale, & Moore, 2018). As of March 2019, the iOS Application Store (IOS, 2019), hosts a range of mobile applications for CVA awareness, pocket cards, and puzzle games all targeted at bringing different levels of information. In spite of these applications, a comprehensive and reliable mobile application that would assist a user in managing all the controllable factors associated with stroke, as well as an ability to evaluate and recognize stroke symptoms and offer tools for rehabilitation purposes is non-existent.

Virtual Reality (VR)

Virtual reality (VR) provides users with a three-dimensional interaction experience with the virtual world, engaging the mirror-neuron system (Saposnik, Teasell, Mamdani, Hall, McIlroy, Cheung, Thorpe, Cohen, & Bayley, 2010). EVREST is an illustrative example of the first randomized clinical trial whose results

attested to the fact that VRWii is a feasible, safe, and potentially effective intervention method to enhance motor function recovery in stroke patients (Sinclair & Saposnik, 2010).

The gaming industry has developed a variety of VR systems for home use, making this technology both affordable and accessible with potential to be applied within community settings (Saposnik et al., 2010). Furthermore, VR is already being used for a variety of medical applications including acute inpatient medical settings, investigations of Alzheimer's disease, and surgery (Dascal, Reid, IsHak, Spiegel, Recacho, Rosen, & Danovitch, 2017; García-Betances, Arredondo-Waldmeyer, Fico, & Cabrera-Umpiérrez, 2015; Vávra, Roman, Zonča, Ilnát, Němec, Kumar, Habib, & El-Gendi, 2017).

While proven to be effective, the use of VR systems or gaming devices is a hurdle for many organizations due to legal aspects (Karl, Soderquist, Farhi, Grant, Krohn, Murphy, & Straughan, 2018). It is debatable if stroke patients who rarely fall into a millennial generation, or their caregivers are aware of such technologies and could use them effectively. Further research into these areas are needed. Despite these deliberations, there is an increasing interest amongst researchers to focus on stroke prevention and rehabilitation through use of VR methods that highlight fitness and exercise programs (Proffitt et al., 2015; Proffitt & Lange, 2015; Proffitt & Lange, 2013).

Telehealth

According to the World Health Organization (WHO), telehealth involves the use of telecommunications and virtual technology to deliver healthcare advice outside traditional health facilities ("Health and sustainable development," 2016). Guidance and advice by health professionals is not the only challenge for patients. According to a study performed by the Helsinki University Central Hospital, CVA not only emotionally distresses a patient but equally leads to depression in 30% to 33% of all caregivers during the acute phase and during subsequent periods of 6 months and 18 months' following the acute phase (Berg et al., 2005). As caregivers experience physical and emotional

distress, any means of assistance or clarification regarding stroke management and the perceived tangible and effective support mechanisms available are crucial in preventing caregiver burnout (Buckley et al., 2004). Telehealth provides access to guidance remotely and provides a robust mode of caring for patients and caregivers in a dynamic and flexible manner. This service could possibly increase a survivor rate amongst victims of stroke.

Conclusions

Through this literature review, the effectiveness of a selected number of technologies such as mobile applications, virtual reality, and telehealth have been explored for the prevention and rehabilitation of CVA. In effect, the need for reaching patients through robust and remote ways have been exhibited for their well-being. Conversely, despite the displayed efficiencies of these technologies, awareness and accessibility of baby boomers and caregivers to such technologies still, remain rather unexplored. Throughout the course of this literature study, a number of challenges have been unveiled.

When it comes to mobile applications, millennials are typically prioritized as potential customers in comparison to baby boomers. Hence, such strategic efforts could possibly result in fewer companies targeting baby boomers for marketing campaigns of emerging technologies useful for CVA management. Consequentially, these measures would result in a limited awareness amongst baby boomers about the technologies available even if technologies such as telehealth and VR have their own limitations. Furthermore, a lack of a single, all-inclusive mobile platform that addresses patient concerns for stroke management prevents physicians from discussing mobile applications of any kind with patients. Thus, chances of patients utilizing affordable technologies for prevention of another stroke and rehabilitation is reduced.

Conclusively, in the wake of these findings, a future study that clearly identifies baby boomers' awareness of the discussed technologies, in addition to their interest in

accessing technological means useful for CVA management is hereby suggested. In the wake of this study, follow-up research study among baby boomers that equally identify the best learning practices for familiarization with the aforementioned technologies can be initiated to fill a potential unawareness gap. Moreover, discussions that shed light on technical and business challenges associated with the integration of different technologies into one platform for stroke patients is of particular interest. Such an integrated platform could potentially facilitate the edification process regarding recent technologies and the engagement of baby boomers in seeking potential solutions and information regarding their current health situations.

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Entrepreneurial Intention Among Business Students: The Effect of Entrepreneurship Education

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ABSTRACT

In Nepal, the history of entrepreneurship education is emerging and only few higher educational institutions, such as King's College, Kathmandu University School of Management, Presidential Business School, DAV Business School and Apex College are offering entrepreneurship related courses. Entrepreneurship education is emerging as a subject matter, and institutions are establishing entrepreneurship curriculum and incubation centers to support future entrepreneurs. Research is needed to further explore this subject in terms of its theory and practice in Nepal educational institutes. The purpose of this study is to explore the relationship between entrepreneurship education and entrepreneurial intention considering the theory derived from the planned behavior model (Ajzen, 1991). A stratified random sampling technique was used to select respondents and a standard Likert item questionnaire was distributed amongst 280 business management students who were in their final year at selected colleges. The colleges selected were those who offered entrepreneurship related courses. A total of 181 responses were recorded and used for the analysis. Descriptive analysis, Cronbach's alpha reliability analysis, a multiple linear regression, an ordinary least square test, a correlation matrix, an independent sample T-test and the ANOVA test were implemented in SPSS 20 to determine the relationship between entrepreneurship education and entrepreneurial intention. After analyzing the responses, it was found that entrepreneurship education had a positive but insignificant relationship with entrepreneurial intention. In specific, entrepreneurship education improves the attitude of behavior towards entrepreneurial intention and the perceived behavioral control of students but was found to have insignificant impact on the subjective norm.

Keywords: Entrepreneurship education, theory of planned behavior, attitude, perceived behavior control, subjective norm, entrepreneurial intention

Introduction

Entrepreneurs solve problems within the market by creating new sustainable business entities. Entrepreneurship is about exploring opportunity, seizing it, and helping entrepreneurs to generate new business opportunities. Integration of entrepreneurship education is an opportunity for universities and colleges to motivate their students to create new ventures which could offer a common value among the individual entrepreneurs and the wider community of Nepal. To a certain extent, entrepreneurship education aids in the unemployment rates of new graduates through helping them to establish new ventures instead of relying on outside sources for employment opportunities. . This type of education promotes an entrepreneurial spirit and culture among potential entrepreneurs and motivates the desire to pursue this career path in the future (Rae, 2010; Dutta, Li, & Merenda, 2011; Dogan, 2015).

The term, entrepreneurship education, in this study will refer to dynamic processes which positively influence student behavior, norms, and attitudes toward entrepreneurial intention by creating a supportive environment and disseminating information about entrepreneurial traits and behaviors through different academic courses. These courses include but are not limited to innovation management, entrepreneurship and new venture creation, business design, entrepreneurial marketing, and strategic thinking. According to Dogan (2015), this type of education promotes the,

“feeling of independence and self-confidence to individuals, enables the recognition of alternative career options, broadens the individuals’ horizons by enabling them to better perceive the opportunities and provides the knowledge that individuals will use in developing new business opportunities” (p. 92)

In Nepal, a developing country, government and private organizations are encouraging entrepreneurial activities through education to promote the value of entrepreneurship[CB1][P2] (Karki, 2014). Awareness of the need for entrepreneurship education in Nepal is growing, but a limited amount of research has been

conducted in how these courses impact the entrepreneurial field. Thus, entrepreneurship education needs to be explored in terms of theory and practice in Nepal. In Nepal, the history of entrepreneurship education is emerging and only a few higher education institutions such as King’s College, Kathmandu University School of Management, Nepal School of Entrepreneurship, Apex College and DAV Business School are offering entrepreneurship courses currently. The subject matter is gaining popularity amongst management students; however, there is a lack of relevant and contextual literature which explores the effect of entrepreneurship education on entrepreneurial intentions. According to the International Labor Organization (2016), the unemployment rate among higher education graduates in Nepal is 26.1% and is expected to grow even higher in the coming years as there continues to be a mismatch of skills among graduates and employers. Most higher education graduates in Nepal either opt for a job or choose to stay unemployed while they are searching for a job that fits. Only a few graduates choose to enter into self-employment via entrepreneurial venture.

The success or failure of an entrepreneurial venture relies upon not only prior education, but the personal traits of the potential entrepreneur. Timmons (1994) explains that the characteristics of successful entrepreneurs include commitment and determination, creativity, adaptability, risk-taking, leadership quality and opportunity seizing (as cited in Rahman & Singh, 2013). Rahman and Singh (2013) prove that innovation, a futuristic mindset, risk-taking ability, adaptability and commitment motivate entrepreneurs to create new ventures. Additionally, entrepreneurs are generally those who look for opportunities, are goal oriented, display creativity, confidence, trustworthiness and ambition, and have an internal locus of control (Nandram & Samsom, 2007). This study will explore whether these traits can be developed through education and if education can help to develop entrepreneurship intention within a student.

This study is following the entrepreneurial intention model of Ajzen’s (1991) theory of planned behavior model which explains that attitude towards entrepreneurial behavior,

perceived social norms and perceived behavior control influence entrepreneurial intention. In this study, entrepreneurial intention is defined as an individual's personal orientation like desire, attitude, and how orientation influences a student's decision to become self-employed.

Literature Review

A significant amount of research has been conducted to explain the effect of entrepreneurship education on entrepreneurial intention among a student. This literature review section explains the concepts of entrepreneurial intentions as response variables. A detailed discussion about entrepreneurship education and its relationship with the theory of planned behavior model and entrepreneurial intentions will be elaborated upon. A study of scholarly articles in the literature review section introduces entrepreneurial intention, concepts and different entrepreneurial theory which has been considered to explain entrepreneurial intention. In consecutive sections, concepts of entrepreneurship educations were defined and elaborated its relationship with the attitude towards the action, social norms and perceived behavioral control. A research paper which explains the effects of entrepreneurship education in entrepreneurial intention has been reviewed and considered to explain research scope.

Entrepreneurial intention can be described as an individual desire to establish and run one's own startup company (Krueger, Reilly, & Carsrud, 2000). In the education process, entrepreneurial attitudes, behaviors and perception towards viability and success of innovative ideas have an impact on students' intentions to become entrepreneurs. The entrepreneurial event model (EEM), curated by Shapero and Sokol (1982), demonstrates how entrepreneurial intent is an individual mindset used to establish a new venture, attain viability and prosper in the market (as cited in Carsrud, Krueger, & Reilly, 2000). An entrepreneurial intent is derived from individual beliefs and norms. The theory of planned behavior (TPB), offered by Ajzen (1991), theorizes that intention is defined by an entrepreneur's attitude, subjective norms, and controllable behavior. Lastly, the entrepreneurial potential model (EPM),

proposed by Brazeal and Krueger (1994), explains how entrepreneurial intention refers to the perceptions, desirability and the feasibility of a new idea or new venture. Convenience, need for achievement, the viability of an idea, and attitude are the key intents of entrepreneurship among university students (Velasquez, Arias, Hernandez, Diez-Echavarria, Marin, & Perez, 2018).

Souitaris, Zerbinati, and Al-Laham (2007) explained that entrepreneurship education positively influences individuals' attitudes towards behavior, subjective norms, and perceived behavioral control and entrepreneurial intentions. The European Commission analyzed the significance of entrepreneurship programs in higher education institutions through the use of a study and control group (European Commission, 2012). In this research, a total of 851 entrepreneurship alumni, 1,482 control group alumni and 288 JADE alumni of 43 higher education institutions participated by completing an online questionnaire. The results showed that entrepreneurship education is vital to the development of entrepreneurial skills and attitudes as well as improved intention towards entrepreneurship and individual employability (European Commission, 2012). Specifically, Balaban and Ozdemir (2008) believe that entrepreneurship education plays a vital role in creating self-awareness within an individual regarding entrepreneurship characteristics. It was also found to positively impact an individual's determination and perseverance, help them to deal with challenges and motivate individuals to start their own businesses (Izedonmi & Okafor, 2010; Kuttim, Kallaste, Venesaar, & Kiis, 2014; Kalyoncuoglu, Aydintan, & Goksel, 2017).

Overall, research supports the fact that entrepreneurship education plays a positive role in the development of entrepreneurship intention (Maresch, Harms, Kailer, & Wimmer-Wurm, 2016; Dohse & Walter, 2010; Alain & Gailly, 2004; McStay, 2008; Gelard & Saleh, 2011). However, Goksel and Aydintan's (2011) sampled 175 business administration students in Turkey and concluded that education does not have a significant relationship with entrepreneurial intentions. Abdullahi, Zainol, Daud, and Yazid, (2017) implemented a random sampling method

among final year university students and analyzed data using the structural equation modeling approach, which found that entrepreneurship education has a negative relationship with entrepreneurial intentions. Specifically, this explained that entrepreneurship education also shows the physical and mental pain resulted from limited resources, lack of supportive environment, environmental changes and failure in early career etc. and struggle required to be an entrepreneur and highlighted the risk associated with entrepreneurship (Abdullahi, Zainol, Daud, and Yazid, 2017; Abdullahi et.al, 2017). Thus, students might opt to pursue a salaried job that is determined to have a lower risk. Additional research done by Efrata, Hadiwidjojo, Solimun, & Aisjah (2016) among 209 Management and Business Students in Indonesia Universities; Oosterbeek, Van Praag, and Ijsselstein (2008) research confirmed that entrepreneurship education has a negative relationship with entrepreneurial intention. Tsordia and Papadimitriou (2015) research showed that final year studenta who completed business courses expressed lower entrepreneurial intention than that of first-year students.

According to the theory of planned behavior, in general, individual attitudes towards behavior, subjective norms, and perceived behavioral control influence an individual's behavioral intentions (Ajzen,1991). It is an individual's beliefs and attitude which inform their mindset to desire self-employment. There has been a confirmed positive relationship between attitude towards behavior and entrepreneurial intention and it has a strong influence on developing positive intention (Dohse & Walter, 2010; Frazier & Niehm, 2006; Keong, 2008; Tsordia & Papadimitriou, 2015).

Subjective norm refers to individual views about social pressure which influence individuals to behave in a certain way. Linan and Chen (2006) show the influence of family, friends and other important people have a great impact on the formation of intention. However, subjective norm is not the strongest influencer in developing positive entrepreneurial intention (Krueger, Reilly, & Carsrud, 2000; Tsordia & Papadimitriou 2015; Kalyoncuoglu, Aydintan, & Goksel 2017; Linan & Chen 2009; Mohammed, Fethi, & Djaoued 2017).

While a majority of the literature found supports this conclusion, Yordanova and Tarrazon's (2010) research shows the subjective norm has a significant role in defining intention.

Perceived behavioral control refers to an individual's self-esteem and confidence to perform desired work. Ajzen (1991) analyzed an entrepreneur's past experience to evaluate whether a task could be performed or not. Dohse and Walter (2010); Frazier and Niehm (2006); Keong (2008); Krueger, Reilly, and Carsrud (2000); Tsordia and Papadimitriou (2015), Kristiansen and Indarti (2004) explain that there is a positive and significant relationship between perceived behavioral control and entrepreneurial intention.

A different research on the area of entrepreneurship education resulted different impact on the student's behavior, attitude, subjective norms and finally in entrepreneurial intentions. While entrepreneurship studies have gained popularity and considered as an important factor to develop positive entrepreneurial intention among students, there is no empirical evidence among management students of Kathmandu, Nepal. A lot of research was done to explain the direct relationship between entrepreneurship education, theory of planned behavior with entrepreneurial intention. A literature does not explain how entrepreneurship education impact on the theory of planned behavior and its effect on entrepreneurial intention. This research explains the effect on entrepreneurship education on the attitude towards the action, social norms and perceived behavioral control and its effects on entrepreneurial intention. Entrepreneurial intention is situational factor. Thus, a research should be explored in the context to conclude its relationship.

Objectives of the Study

The objective of this study is to analyze the relationship between entrepreneurship education and entrepreneurial intentions among management students of selected colleges located in Kathmandu, Nepal. This study will explore how entrepreneurship education impacts the development of entrepreneurial attitude, how it effects the subjective norm and how it impacts the

behavior towards pursuing entrepreneurship as a career.

Conceptual Framework and Hypotheses

This research will follow the theory of planned behavior framework proposed by Ajzen (1991). Attitude toward behavior, subjective norms, and perceived behavioral control are the building blocks of behavioral intention. Ajzen's (1991) theory of planned behavior is a strong predictor of entrepreneurial intention, and a lot of research has been conducted to measure its effects in impacting entrepreneurial intention among college students in a western context. However, research is still needed to determine this connection within an eastern context, specifically in Nepal. Therefore, this research will analyze how, following the theory of planned behavior, entrepreneurship education affects entrepreneurial intention within the context of Kathmandu, Nepal.

This research will use the theory of planned behavior as a basis for determining entrepreneurial education's effect on entrepreneurial intention due to the determination that the theory of planned behavior can be applied to predict entrepreneurial intention in different cultural contexts (Davids, 2017). Further, this research adheres to Ajzen's (1991) finding that the attitudes toward behavior, subjective norms, and perceived behavioral control can predict intention to describe different kinds of behavior with high accuracy. Based on this, the motivational level of people engaging in certain behavior for development and growth of entrepreneurial intentions can be ascertained. A positive feeling towards own intention encourages engagement in that behavior. Thus, in this study three factors of theory of planned behavior has been considered.

Figure 1 is the intention model derived for this research and shows the relationship between entrepreneurship education, theory of planned behavior and entrepreneurial intention. The intention model will be used to explain students' intentions to choose their career as an entrepreneur. The effect of entrepreneurship education on the theory of planned behavior and entrepreneurial intention and effect of the theory of planned behavior of entrepreneurial intention were considered.

The intention model will be used to the explain relationship between entrepreneurship education, theory of planned behavior and entrepreneurial intention. Subjective norms represent external environment influence on other to pursue an entrepreneurial career. This research measure influence and impact of friends, family person on student's decision. In this research perceived behavior control explain students believe to perform entrepreneurial activities. It analyzes student reflection of the past experience impact on his/her behavior in the future. An individual will evaluate whether an activity/task is simple, or complex, based on available resources and skills. A reaction of students of an entrepreneurship education influence on development of intentions.

Based upon the information determined by the literature review, the following hypotheses have been formulated.

- H1: There is a statistically significant relationship between entrepreneurship education and entrepreneurial intention among students in Kathmandu, Nepal.
- H2: There is a statistically significant relationship between attitude to behavior, perceived behavioral control subjective norms and entrepreneurial intention in Kathmandu, Nepal.
- H3: There is a statistically significant relationship between entrepreneurship education and attitude to behavior, perceived behavioral control and subjective norms in Kathmandu, Nepal.

Research Methodology

Populations and Sample Size. Final year students who were currently enrolled in management education at King's College,

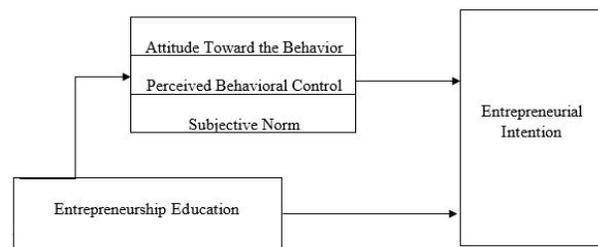


Figure 1. Entrepreneur intention model.

were selected to conduct the research. A total of 8 education institutions replied to our inquiry of being involved in the study. These 8 educational institutions agreed to share our questionnaire with their final year management students. A total of 181 responses were received from final year students of the aforementioned higher education institutions.

Table 1 summarizes the demographical profile of the respondents. A total 181 respondent responses were used for this research. Out of 181 respondents, 89 (49.2%) were female and 92 (50.8%) were male. 82 (45.3%) were from graduate (MBA) programs and 99 (54.7%) were from undergraduate (BBA) programs. 60 (33.1%) were aged below 25 and 121 (66.9%) were aged above 25. 91 (50.3%) students were running family businesses and 90 (49.7%) students were not associated with any family business.

Research instrument. A standard questionnaire was used to measure attitude of the sample group of students toward behavior, social norms, perceived behavior control, and entrepreneurial intention. Items were adopted from Linan (2009). To measure student perception towards entrepreneurship education, a seven-point three-item Likert scale, developed by Utami (2017), was used.

	Frequency	Percent	Cumulative Percent
Gender			
Male	89	49.2	49.2
Female	92	50.8	100.0
Total	181	100.0	
Age			
Below 20 yrs.	60	33.1	33.1
20-25 yrs.	59	32.6	65.7
25-30 yrs.	58	32.0	97.8
30-35 yrs.	2	1.1	98.9
35 yrs. above	2	1.1	100.0
Total	181	100.0	
Enrolled Program			
Graduate	82	45.3	45.3
Undergraduate	99	54.7	100.0
Total	181	100.0	
Family Background			
Business Family	91	50.3	50.3
Non- Business Family	90	49.7	100.0
Total	181	100.0	

Table 1. Demographics profile of 181 respondents

Data analysis. This research used SPSS 20.0 software to perform the analysis of the data collected. Cronbach's alpha was tested in each dimension. Descriptive statistics, linear regression, Independent T- test and a correlation analysis were used to test the stated derived hypotheses.

Scale of Measurement

Reliability test. Table 2 shows the reliability statistics, or Cronbach's values, for the variables used throughout this research. The reliability of the independent and dependent variables was greater for each item than the threshold value of 0.7. Thus, this confirms internal consistency.

Test of Ordinary Least Square (OLS) Assumption

Normality test. The linearity of the data set was examined by plotting ZRESID and ZPRED as shown in Figure 2. The graph shows that there are not any identifiable nonlinear relationships with the dependent variable, or entrepreneurial intention. The Kolmogorov-Smirnov test ($p=0.200$) and Shapiro-Wilk test ($p= 0.573$), as it is greater than 0.05 in value, confirm that the data was normally distributed. As cited in Asghar and Zahediast (2012), normality assumptions for a sample size greater than 30 are always valid, and anything greater than this will not cause any major problems in the analysis. The sampling distribution for a large sample size is always normally distributed.

Construct	Cronbach's Alpha	Number of Items
Entrepreneurship Education	.765	3
Attitude Toward The Behavior	.799	5
Subjective Norm	.773	4
Perceived Behavioral Control	.886	6
Entrepreneurial Intention	.912	8

Table 2. Reliability analysis

Multicollinearity test. To test the presence of multicollinearity issues in the regression, the model variance inflation factor (VIF) was performed. The VIF value lies between 1.092 to 1.345, which indicates that there is not a multicollinearity problem (Sekaran & Bougie, 2010).

Heteroscedasticity test. The heteroscedasticity test was examined through a graphical plot of standardized predicted values (ZPRED)and standardized residuals (ZRESID) in the SPSS. This test examines an important assumption of the linear regression model, the residuals are homogeneously distributed. The nature of graph determine whether there is heteroscedasticity or not. This test did not show a heteroscedasticity problem in the datasheet, which is proven in Figure 2.

Normal P-P Plot of Regression Standardized Residual

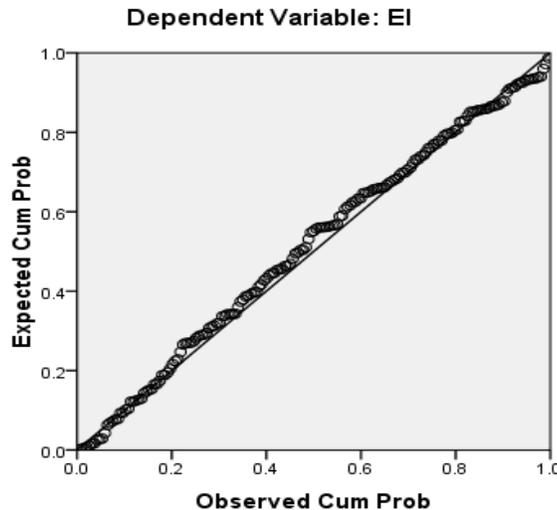


Figure 2. Regression standardized residual plot.

Autocorrelation test. The Durbin Watson test was being performed to check the autocorrelation in residuals from a regression analysis. With reference to the standard Durbin Watson table, a value of $d_l = 1.633$ and $d_u = 1.715$ (for nearest value $n=200$ and $k=4$), and a calculated p -value ($p=1.987$) lies between $1.715(d_u)$ and $2.285 (4-d_u)$. The conclusion drawn from this test was that there was no autocorrelation in the given data.

Multiple Linear Regression Analysis

The multiple linear regression model summary, as seen in Table 3, shows the 56.8% of variation found in the dependent variable is explained by an attitude toward behavior, subjective norm, perceived behavioral control, and entrepreneurship education. A relationship between entrepreneurial intention and the predictor was found to be statistically significant ($F=57.847$, $P= 0.000<0.05$).

Table 4.1 shows the equation used to describe the relationship between attitudes toward behavior, subjective norms, perceived behavioral control, and entrepreneurship education with entrepreneurial intention. Standardized beta coefficients measured an effect in the dependent variable for one unit of change in the independent variable while holding other independent variables constant.

Based on the regression analysis coefficient results listed in Table 4.1, the relationship among

dependent and independent variables can be explained through the following formula:

$$EI = (1.535) + .003 EE + .909 ATB + (.037) SN + .355 PBC$$

Where,

EI = Entrepreneurial Intention

EE = Entrepreneurship Education

ATB = Attitude toward the Behavior

SN = Subjective Norms

PBC = Perceived Behavioral Control

Thus, it has been determined that there is a positive relationship between entrepreneurial intention and entrepreneurial education, attitude towards behavior and perceived behavior control. There was an identified negative relationship with the subjective norm.

While holding other independent variables in the model constant, if there was a one-unit increase in attitude towards behavior, there would be a subsequent increase of 0.909 units in entrepreneurial intention. This shows EI is strongly dependent upon individual beliefs regarding the outcome of behavior. It indicates that when students feel that their behavior will lead to the creation of a new startup, they will be more motivated to work on that project. The more they believe in their own ideas and are able to forecast a future where they could potentially start their own startup, they will display higher levels of entrepreneurial intention.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.754 ^a	.568	.558	.86263

Table 3. Multiple regression model summary.

Note. The predictors variables used in the regression model were attitudes toward behavior, subjective norms, perceived behavioral control, entrepreneurship education and dependent variables to determine entrepreneurial Intention.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.535	.566		-2.713	.007
	EE	.003	.077	.002	.042	.966
	ATB	.909	.084	.623	10.834	.000
	SN	-.037	.068	-.027	-.538	.591
	PBC	.355	.060	.306	5.915	.000

a. Dependent Variable: EI

Table 4.1. Regression coefficient

Similarly, if there was one-unit increase in PBC, EI would subsequently increase by 0.355. This means that students who show higher perceived behavior control exhibit higher levels of entrepreneurship intention. Self-assessment and self-belief when performing entrepreneurial activities improves intention to start a new venture.

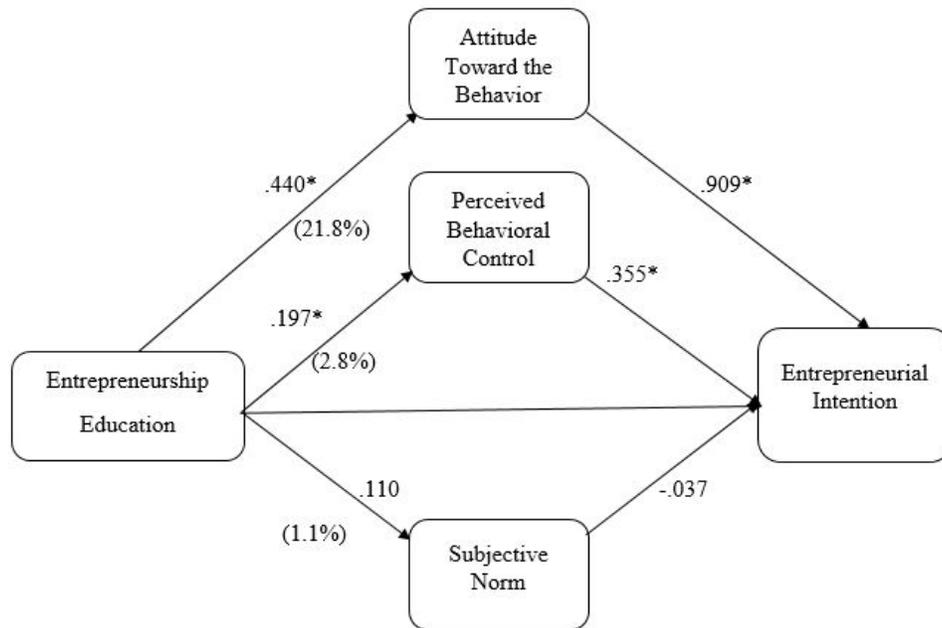
The relationship between perception towards entrepreneurship education and their entrepreneurial intention is minutely positive. If there is a one-unit increase in EE, there is only a subsequent increase of 0.003 in EI. This shows that EE is not a strong predictor of EI directly. Entrepreneurship education provides theoretical as well as practical knowledge to students. It influences students' career decisions regarding if they will eventually become entrepreneurs. However, EE also explains the hard work, sacrifice, pain and strong dedication needed to become a successful entrepreneur in the future, which might generate negative thoughts amongst students

regarding running their own ventures. Thus, the results show a weak relationship between EE and EI.

For every unit of increase in the subjective norm, EI decreases by 0.037 units as the other factors remain constant. The social pressure has a negative impact on EI. Entrepreneurial intention is more dependent on an individual's own experience and is highly influenced by the availability of a support system in the individual's ecosystem.

Figure 3 summarizes the influence of entrepreneurship education on attitude to behavior, perceived behavioral control and subjective norm individually. The regression coefficients are represented in Figure 3.

Entrepreneurship education has a significant impact on the development of a positive attitude toward entrepreneurial behavior, and it accounted for the 21.8% variation in attitude toward the behaviors. When a student is familiar with an entrepreneurial ecosystem and connects with the entrepreneurial network system, they become



* Significant regression coefficients, $p < 0.05$

Figure 3. Model summary.

more confident in their ideas and are more willing to try and become an entrepreneur. EE has a significant positive impact on perceived behavior control as can be seen by the 2.8% variation. When viewed through the regression model, entrepreneurship education contributes only 2.8% to make changes in perceived behavior control of an entrepreneur. It was found that EE has an insignificant and weak relationship with SN as can be seen by the 1.1% variation. It can be concluded that EE has a high impact on EI, thus indirectly influencing the attitude of potential entrepreneurs.

Functional Form Specification Test

Ramsey's RESET (regression specification error test) test was performed to determine the presence of nonlinear relationship in the regression model (Ramsey 1969). To test the nonlinear relationship, two new variables, the square and cube of the predicated EI value, were created. The test was run considering the square and cube of the predicated EI, EE, ATB, PBC, SN as explanatory variables and EI as the dependent variable. The coefficients of higher predicated

value are significant concluding a linear relationship between the dependent and independent variables.

Correlation Analysis

According to the correlation matrix, as seen in Table 5, a correlation coefficient between entrepreneurial intention and attitude toward a behavior is 0.694, significant at the level of 0.01 ($p=0.000$). This indicates a high positive relationship among EI and ATB. The correlation coefficient between entrepreneurial intention and entrepreneurship education is 0.341, significant at 0.01 level ($p=0.000$), which indicates a weak positive relationship between EI and EE. The correlation coefficient between entrepreneurial intention and subjective norm is .140, insignificant at the level of 0.01 ($p=0.06$). It shows a very weak positive relationship and is not statistically significant. The correlation coefficient between entrepreneurial intention and perceived behavioral control is 0.454, significant at the level of 0.05 ($p=0.00$), which indicates a moderate relationship between PBC and EI.

Correlations						
		EE	ATB	SN	PBC	EI
EE	Pearson Correlation	1	.467**	.107	.167*	.341**
	Sig. (2-tailed)		.000	.152	.025	.000
	N		181	181	181	181
ATB	Pearson Correlation		1	.176*	.245**	.694**
	Sig. (2-tailed)			.018	.001	.000
	N			181	181	181
SN	Pearson Correlation			1	.188*	.140
	Sig. (2-tailed)				.011	.060
	N				181	181
PBC	Pearson Correlation				1	.454**
	Sig. (2-tailed)					.000
	N					181
EI	Pearson Correlation					1
	Sig. (2-tailed)					
	N					

Table 5. Correlation matrix

Relationship between Demographic Variables and Entrepreneurial Intention

This research further analyzed the relationship between the demographic variables of gender, age, program, and family background with entrepreneurial intention. According to T-statistics, it has been shown that there is no significant relationship between gender and program with a student's entrepreneurial intention. However, there was significant relationship determined among family background and entrepreneurial intention. The mean value shows that students who were a part of a family business showed more entrepreneurial intention than those who did not have a family business in their background. These results can be seen in Table 6 below.

The ANOVA test results, represented in Table 7, showed that there is no statistically significant relationship between the age of students and their entrepreneurial intentions. It signifies that development of entrepreneurial intention is not dependent upon the age of students.

Implications

Entrepreneurship education offered in the higher education institution has a positive impact on developing entrepreneurial intention, but not in greater intensity as it should be. Also, entrepreneurship education offered in higher

education might not change the behavior of students so quickly. It required time to change attitude and behavior. Thus, to develop the entrepreneurial intention among student government and educational institution should collaborate. As entrepreneurship education was determined to have a significant impact on entrepreneurship intention, the government and policy makers in Nepal should work together to begin introducing the concepts of entrepreneurship education and training starting at the secondary educational level. They should work with existing schools to create a conducive environment for entrepreneurship. By integrating entrepreneurship in the curriculum at an early age, student's perceived behavior could be changed positively towards higher entrepreneurship intention.

Higher education institutions should introduce entrepreneurship specialization courses in their curriculums. This addition will not only increase awareness about entrepreneurship, but it will also motivate students to start a new venture. An entrepreneurship environment in higher education, such as through the inclusion of a business incubation center, could curate seed funding for students. This could, in turn, instill a sense of belief amongst students that embarking on a new venture is possible. Workshops,

Entrepreneurial Intention	Gender	N	Mean	Std. Error Mean	t-value	Sig. (p) (2-tailed)
	Male	89	5.2275	.12718	1.508	.133
	Female	92	4.9375	.14361		
	Program					
	Undergraduate	82	4.9832	.14854	-.914	.362
	Graduate	99	5.1604	.12647		
	Family Background					
	Business Family	91	5.3255	.11880	2.599	0.010
Non Business Family	90	4.8319	.14846			

Table 6. T-test Result: Gender, program and family background with entrepreneurial intention

Entrepreneurial Intention	Age	N	Mean	Std. Error	F- value	Sig. (p)
	Below 20 Yrs.	60	5.0833	.17255	1.657	.178
	20-25 yrs.	59	4.8305	.17690		
	25-30 yrs.	58	5.2780	.15477		
	30-35 yrs.	4	5.8438	.51633		
	Total	181	5.0801	.09646		

Table 7. One-way ANOVA analysis: Age and entrepreneurial intention

conferences, networking sessions, idea pitching, and boot camp programs should be initiated by higher education institutions to develop an environment conducive to encouraging entrepreneurship practices.

Limitations and Areas of Further Research

This data has been collected from select management colleges located in the Kathmandu, Nepal, and thus, we cannot generalize the results for other institutions or locations. The limited sample number was due to the scope of the target audience, which was final semester students of undergraduate and graduate management programs located in Kathmandu, Nepal.

This research indicated a positive relationship between entrepreneurship education and intention among students without considering a control group. Thus, further research can be done to analyze entrepreneurial intention with the integration of a control group and treatment group. It can be done by comparing entrepreneurial intention levels among graduate students who are already enrolled within entrepreneurship courses and those who have yet to start an entrepreneurship program. This

research did not consider the intensity of entrepreneurship education, such as the number of entrepreneurship related courses taken, length of courses, student participation in entrepreneurship related workshops, etc. Thus, further research is needed to explore what impact intensity of entrepreneurship education has on entrepreneurial intention.

Second, the current study revealed that entrepreneurship education has more of an impact on developing positive student attitudes toward behavior than its direct effect on entrepreneurial intention. Thus, further research needs to be conducted regarding entrepreneurial attitude as a mediating variable.

Third, this current study was conducted without consideration of teaching methods. Thus, in future research, it will be interesting to analyze how teaching methods implemented to facilitate entrepreneurship education impacts student entrepreneurial intention.

Future research is recommended to study entrepreneurship intention amongst students using a larger sample size.

Conclusion

This study has analyzed the relationship between attitude and behavior, perceived behavioral control and subjective norm, as well as entrepreneurship education and entrepreneurial intention among management students of the selected colleges in Kathmandu, Nepal.

The following conclusions can be drawn from the analysis:

- Attitude toward the behavior has a positive and significant relationship with entrepreneurial intention.
- Perceived behavior control has a positive and significant relationship with entrepreneurial intention.
- Subjective norm has a negative but insignificant relationship with entrepreneurial intention.
- Entrepreneurship education has a positive but insignificant relationship with entrepreneurial intention.
- Entrepreneurship education has a positive and significant impact on attitude to behavior and perceived behavioral control.
- Entrepreneurship education has a positive but insignificant impact on a subjective norm.

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