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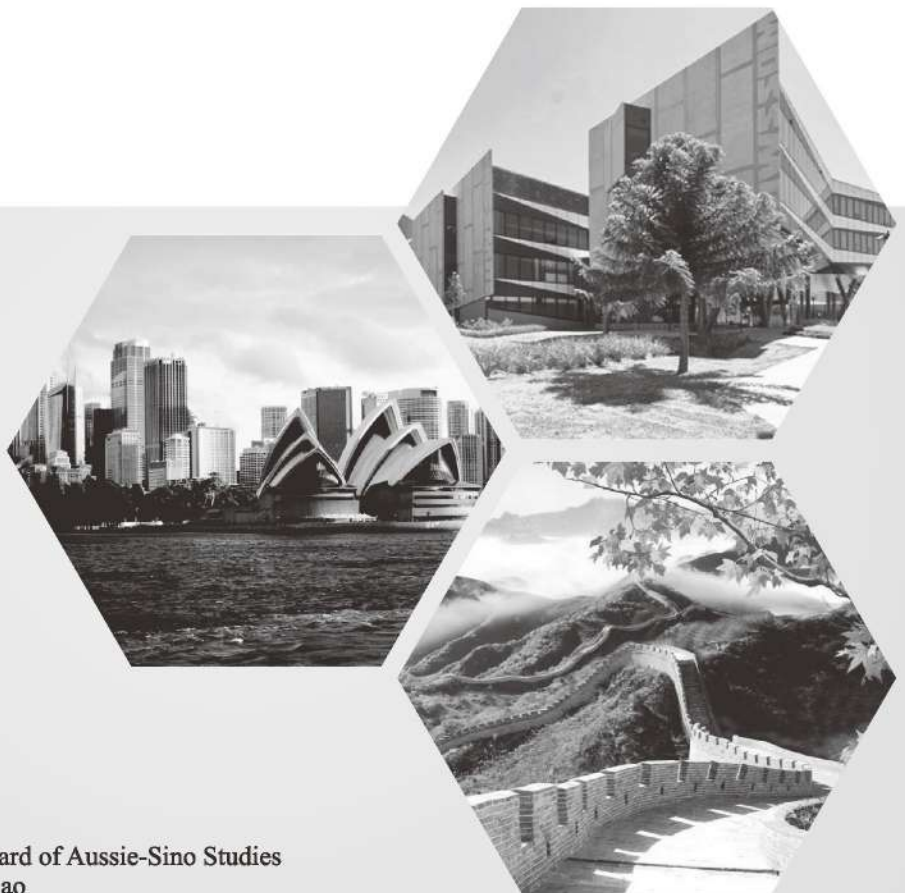
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The Redeployment of the Financial distraught Project

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Abstract: The recent paradigm shift in financing capital intensive projects by private and public entities from traditional corporate finance schemes with project finance schemes has witnessed massive surge in the corporate world. However, a number of such projects are either plunged into financial distress at preliminary phases or operational phases. To address this issue, this paper examined the general overview of financially distressed project by reviewing adequate literature regarding project finance and financial distress, outlining the major signs of financial distress associated with projects and recommend suitable solution to projects engulfed in financial distress. To achieve this goal, capital structural reforms in the area of increasing equity capital requirement is advisable in view of the existing arrangement which allows equity investment of 10% to 20% in most cases. Ascertaining optimal capital structure that would enable the avoidance of finance distress requires further research.

Key words: Financial, distress, Restructuring, Capital Structure

Introduction

Project distress refers to a situation in which a project becomes enmeshed in myriad problems, placing its timely completion in doubt. The reasons for this can vary, spanning from non-financial factors to those causes that have a financial bearing. In this regard, a project that is distressed non-financially is likely to experience problems in meeting deadlines set, due to shortages in raw materials, labour, or other resources. On the other hand, a financially distressed project is likely to have problems paying off its short-term obligations as they become due (Fight, 2006).

Redeployment of the Financial Distraught Project

Similarly, a project might be distressed because the value of its debt exceeds its total assets, meaning that it is highly leveraged, putting its long-term solvency in jeopardy. Being overly leveraged means that, eventually, a project might start finding it difficult to secure financing because of various reasons, such as restrictive covenants and lack of unencumbered assets to be used as collateral (Fight, 2006).

Due to developments in the financial services sector, new forms of project financing options have been developed in recent years. One such financing method is called the project finance initiative, under which large-scale projects are sponsored by a consortium of private sector organizations. The concept started in the United Kingdom in 1992 (Fight, 2006), and the main objective for its development was to remove conditions which were viewed as impeding economic efficiency.

Financial Distraught

Financial distress is a state in which promises to creditors of a company are broken or honoured with difficulty, a situation that can lead to bankruptcy. In addition, financial distress in projects can lead

to problems that contribute to management inefficiency. Consequences of project distress include the loss of a project's economic value as well as deterioration in shareholder value. As these consequences emerge, project managers might try to transfer value from creditors to shareholders, resulting in conflict of interest between creditors and shareholders. Under these conditions, a project would be quite risky. Risky projects are not in the interest of creditors, since they lead to deterioration in the project value attributable to them, leaving them with a minor stake in the special purpose vehicle (Sarkar, 1999).

Essentially, financial distress could occur under two conditions: when the value of a project's assets falls below the value of outstanding assets, and when a project is not able to meet its short-term obligations from current earnings. When this becomes apparent, it is necessary for the project to be restructured to avoid further deterioration in performance (Sarkar, 1999).

Redeployment

When there is a clear indication that a project is in distress, it is important to keep a daily log of what is happening. Waiting until the project has failed is not useful since it is difficult to remember everything that happened earlier. In this regard, a project file would be important, and it is expected to detail everything that happens to the project so that the information can be used to support the loss of labour efficiency claims, if this is required. This file should contain estimating and bidding files, contractual documents, schedules, cost records, correspondence and similar communications, as-built information, standard form correspondences, photographs, other subcontractors' files, and completion documents (Mitchell, 2009).

Falling performance has been linked with how a project is managed and the strategies adopted. To illustrate, management might decide to do nothing drastic to bring performance to normalcy in the hope that the situation will turn for the better. Alternatively, a project

could be restructured as a way of ensuring that recovery occurs much quicker (Lai & Sudarsanam, 2001). Lai and Sudarsanam(2001) indicate that restructuring can take many forms, such as managerial, operational, asset, and financial.

Problem Statement

Lenders will also seek to have trigger events, which allow lenders additional rights and powers in the event of their occurrence (for instance, if certain ratios such as debt to equity ratios or debt service cover ratios are breached by the company) (Lia & Sudarsanam, 2001).

Given the priority of lenders to ensuring security of the project revenue stream, a number of financial ratios will be key to the analysis of a project financed transaction. Financial ratios can quantify different aspects of the project company's business and operations and are an integral part of analyzing its financial position. During due diligence, before financial close, lenders will run these ratios using various sensitivities, for example testing the financial ratios in the event construction costs increase by 20%, or revenues fall by 10%. After financial close, the lenders will use these ratios as part of the project monitoring and control functions ((Lia & Sudarsanam, 2001).

Research Framework and Methodology

Data on financial distressed projects was collected from Secondary sources like Articles, Journals, empirical literatures, Textbooks and Internet sources for analysis on restructuring of financial distressed projects. Qualitative methodology was applied for this research paper. Descriptive research design and analysis on restructuring financial distressed projects were employed to investigate the financial distressed projects. For the purpose of analysis, a secondary data was used to analysed the various literature on financial distressed and restructuring of financial distress projects.

The researcher obtained both primary and secondary data from the various case studies for the analysis of the financial distress projects. The primary data was in the form of interviews with the concern officials. Secondary data was in the form of documents obtained from the internet, literatures reviewed and other articles for the analysis of the financial distressed projects.

The research used qualitative data analysis methods, and trend analysis was also used in analyzing the financial distressed projects. Trend analysis refers to the an analysis of the financial distressed projects for some conservative years, comparing the differences years within those stipulated periods and an analysis was performed to evaluate the financial distressed projects.

Research Framework

The considerable surge in the application of project finance schemes to develop and execute large-scale projects in recent times leaves much to be desired in contemporary corporate governance

(Igor, 2012). Over the years project finance has been the panacea for developing capital intensive projects in western and developing countries (Yescombe, 2002). In 2001 alone, whopping \$217 million was spent on project finance culminating from a cumulative surge of 20% in the 1990s (Esty, 2004). In the US, over \$500 million spent on capital intensive projects annually are project finance schemes (Farrell, 2003).

The year 2010 witnessed the signing of over 200 project finance schemes worth \$130 billion across China, Russia, Brazil and other emerging economies in Africa, Asia, Europe, Latin America and the Gulf (Thompson, 2010). Eventually, project finance is emerging as the major source of funding capital-intensive projects. The only occasion project finance recorded a reduction was in the mid 2000 due to the downturn in global economy activities. It was estimated that, total project finance reduced by approximately 40% in the year 2002 (Esty, 2005).

Financial restructuring involves reworking a project's capital structure in order to alleviate the strains of interest and debt repayment. It can be categorized into equity-based and debt-based strategies. Equity-based strategies involve cuts in dividends, dividends omission, and adopting equity-related strategies. That is, projects in distress might have to reduce or forego dividends due to constraints in liquidity and constraints imposed by debt covenants combined with strategic considerations (Lia & Sudarsanam, 2001).

On the other hand, debt-based strategies might mean that a project has to restructure its debt extensively in order to avoid financial distress or deal with an existing financial distress. The restructuring could entail a reduction in finance charges, reduction in the principal amount, extension of the maturity period, and swapping debt for equity (Lia & Sudarsanam, 2001).

Main Findings of the Study

The empirical data analysis from the primary, secondary sources and the other literature reviewed sources has shown the financial distressed and restructuring of financial distress and this was possible due to results from the study enumerated as below:

Restructuring Financially Distressed Projects

Empirical evidence shows that some projects under project finance schemes have failed due to financial distressed however; most of these distressed firms are either restructured or disposed of. In the study on restructuring distressed projects, Brown, Carlyle, Harney, Skroch, and Wood (2004) revealed that in the event of a default by borrowers, lenders will either decide on restructure or foreclosure.

Project Restructuring or Liquidation

In view of their findings, it is eminent to note that project restructuring can be conducted at the construction stage and operational stage. In any of these instances, the decision to restructure or liquidate in the event of default will depend on the position of the stakeholders (Altman, 2000; Finnerty, 2007). A

decision on exercising the lenders' foreclosure on the project assets will require that the assets are disposed of immediately or at a later date (Brown et al., 2004). According Hoffman (2001) liquidating a distressed company is only favourable in the event the stakeholders are better-off than restructuring.

Again, if all the stakeholders/lenders can recover all or substantial portion of their investments, and debts then it is reasonable to decide on selling the foreclosure of the project's assets: This will depend on the situation where the pool of the buyer is very strong. In their study Brown et al., (2004) revealed that a substantial number of distressed companies are sold when the pool of the outside buyer is very strong. The study further revealed that during the period 1993 to 1994, the real estate lenders sold 12% of their foreclosure assets in their quest to recover from the downturn that had engulfed the industry. In critical analysis of project foreclosure and project restructuring in the event of default, foreclosure loans normally occur sharply in the era of serious downturn (Brown et al., 2004).

Reorganizations

The choice to restructure financially distressed project depends on numerous factors other than just considering the pool of the outside buyer (Hoffman, 2001). In most cases where the fortunes project is financially stressed up that it will be very difficult for the lenders to recover their debt in the event of liquidation, the final resort is to reorganize the operations of the project (Brown et al., 2004). In the case of the Eurotunnel project, the position of the lenders was far worse off in liquidation than restructuring judging from the volume of debts committed to the project at the time of distressed (Vilanova, 2006). According to Mensah (2013), restructuring distressed project involves the adoption of strategy (s) transform the dwindling fortunes of the project.

Strategies and Capital Reconstruction

His strategy could either involve merger strategies, capital reconstruction strategies and internal capital reconstruction (Hoffman, 2001). If a company decides on mergers, it will involve the combination of additional resources from another company to turnaround the fortunes of the distressed company. However, capital construction entails the total reorganization of the company's capital structure thus total overhaul of the project's capital composition (Altman, 2000). In the case of internal reconstruction, structuring entails the decision by the lenders and shareholders to transform the operations of the business without selling the assets of the business.

Altman (2000) identified that for an internal restructuring to be successful, there ought to be scheme of arrangement that are fair and equitable among the various stakeholders; adequate provision must be made for additional capital from the existing lenders and or the shareholders; lenders and shareholders are willing to waive losses to put the project on sound footing. In addition to these, the company must further conduct feasibility studies to project cash flows to be

generated after restructuring. Paramount among these strategies is the determination of optimal capital composition after reorganization (Finnerty, 2007).

The Substitution of Capital Structure

Gatti, Rigamonti, Saita and Senate (2007) identified that the substitution of existing capital structure with another structure is one of the effective arrangements of restructuring distressed projects that can operate into the foreseeable future. This approach to project restructuring has been considered by numerous academic authors as very advantageous for borrowers with many lenders (Yescombe, 2002)

Under this structure, capital composition of the project is varied where a number of existing short-term loans are replaced with long term debts to prolong cash outflows (Tebogo, 2011). The approach will offer the borrower to generate enough cash flows from the project as a result of the moratorium that this structure offers (Vilanova, 2006). This is evidenced in the Eurotunnel case where a number of junior debts were suspended and later replaced with long term debts.

Capital Waiver

In his study Vilanova (2006) discovered that the restructuring of non-financial crisis such as managerial, and project re-engineering must be considered. A financially distressed company cannot restructure without a realistic scheme of arrangement. According to Vilanova (2006) a scheme of arrangement entails a strategy to vary the interest and liabilities shareholders, debt holders and creditors. This scheme requires some amount of capital waiver by providers of capital in restructuring the operation of the project. This can effectively be designed by ascertaining the total loss of the company. After ascertaining the total loss, the lenders and other stakeholders must accept a reduction in their waiver in proportion to those losses to put the prospect of the project on sound footing.

In the case of Eurotunnel, their action resulted in the suspension of interest on junior loans (Dechow, 2004). In the event of requiring additional funds to meet the working capital requirement of the restructured project, the project company can float additional shares and debts to the existing stakeholders (Gilson, 1989). The project managers of Eurotunnel ensured that additional equity was raised from existing shareholders to meet their capital requirement of \$10.1 billion before completing the project.

The Net Present Value

The critical stage in restructuring financially distressed project is the ability to project realistic cash flows and decide on the optimal capital mix Igor (2011) identified the two main forms of financial distress as negative NPV and negative cash flow. It was argued that negative cash flows and negative NPV's can be rectified by the additional influx of cash flows at the construction and operational phases of the restructuring. At the initial phases of the restructuring exercise, the projects generate negative cash flows however, the

situation improves as a result of the positive cash flows until the desired NPV and cash flow is achieved.

Discussion the Implication of the Study

This section forms the conclusion of this study and aims of the study as well as what has been discussed in the literature was discussed in relation to the secondary and primary research that has been carried out. The section is going to take a conclusion view on the study based on the analysis, information and result that has evolved during the course of the study. Recommendations are also given at the end along with a proposal of areas that will need further development and attention.

The end of this research has been to generally fit the aims and objectives of this study. Recommendation for the future is however made to further improvement upon the findings of this research. Based on the findings of the research, it is recommended that:

To achieve this goal, capital structural reforms in the area of increasing equity capital requirement is advisable in view of the existing arrangement which allows equity investment of 10% to 20% in most cases.

Ascertaining optimal capital structure that would enable the avoidance of finance distress requires further research.

On the whole, the research feels that the objectives of this research have been met and have provided more insight into the financial distress and restructuring of financial distress. It is also hoped that the findings of this research will assist future studies that examines activities that pertain to the financial distress and restructuring of financial distress.

References

- Altman, A., Chen, Y., & Weston, J. (1994). *Financial distress and restructuring models: WPS, finance department; Stern School of Business, NYU*.
- Brown, G. G., Carlyle, W. M., Harney, R. C., Skrock, E. M. & Wood, R. K., (2004) *Interdicting a nuclear weapons projects, May 9*.
- Dechow, P.M. (2004). *Discussion of 'operational restructuring charges and post restructuring performance'*. *Contemporary Accounting Research; Vol. 21* No. 3, pp. 523-527.
- Esty, B. C. (2004). *Why Study Large Projects? An introduction to research on project finance; European Financial Management; Vol. 10* No. 2, pp. 213-224.
- Farrell, L.M. (2003). *Principal-Agency risk in project finance. International Journal of Project Management; Vol.21*, pp. 547-561.
- Fight, A. (2006). *Introduction to project finance. Essential capital markets: Elsevier; 1st edition*.
- Finnerty, J. D. (2007). *Project financing: Asset-based financial engineering. Hoboken, New Jersey: John Wiley & Sons, Inc.*
- Gatti, S., A. Rigamonti, F. Saita, & M. Senati (2007). *Measuring value at risk in project finance transactions. European Financial Management; Vol. 13* No. 1, pp. 135- 158.
- Gilson, s.(1989). *Management turnover and financial distress*. In: *Journal of Financial Economics.25*, 241-262.
- Hoffman, S. L., (2001). *The law and business of international project finance, 2nd Ed.*, New York, transnational publishers, Inc. &the Hague, the Netherland, Kluwer law international.
- Igor P. (2012). *Restructuring the financial characteristics of projects financial distress; International Accounting Standard: Availableat: <http://www.iasplus.com>*. Retrieved January 15, 2015.
- Lai, J. & Sudarsanam, S. (2001). *Corporate financial distress and turnaround strategies: An empirical analysis. British Journal of Management; Vol. 12*, pp. 183-199.
- Mitchell, B. (2009). *Electrical contractors learn how to identify the warning signs of pojectdistress before it's too Late. EC&M Electrical Construction & Maintenance: Prism Business. Retrieved; January 15, 2015, from: Paper SSRN.com. cfm ? abstractid= 194591*.
- Mensah, J. (2013). *Restructuring projects in financial distress. Available at SSRN: <http://ssrn.com/abstract=2258812>*. Retrieved January 20, 2015.
- Sarkar, S. (1999). *Illiquidity risk, project characteristics, and the optimal maturity of corporate debt. The Journal of Financial Research; Vol. 22* No. 3, pp. 353-370.
- Tebogo, B. (2011). *Distressed projects and*. Available at SSRN: <http://ssrn.com/abstract=1784766>. Retrieved January 25, 2015.
- Thompson K.N. (2010). *Servant-leadership: an effective model for project management. Dissertation Abstracts International, 66-86*.
- Vilanova L. (2006). *Financial distress, lender passivity and project finance: the case of Eurotunnel*.
- Yebscombe E.R. (2002). *Principles of project finance*. Academic Press USA.

Blue Barriers in International Trade : A Perspective from SA8000 and Labour Standards in the TPP

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Abstract: It is said that blue barriers that hinge upon strict labour standards as well as social accountability are new trade barriers. They force exporters to achieve social accountability and strict labour standards as prerequisites for export orders by inspecting factories on the grounds of human rights. Although these measures do restrict exports, they are not national compulsory standards, and thus do not constitute trade barriers per se. Despite the uncertain future of the TPP, its established rules reflect the latest trends and developments of international trade policies and laws in the new era. Labour standards in the TPP agreement that represent the new generation of regional trade agreements will be national compulsory standards and will have a significant impact on exports of non-TPP members. Once these standards are abused de jure or de facto to restrict exports, they will constitute blue barriers per se. Trade industries and exporters from non-TPP member states, such as China, should pay adequate attention and take necessary measures to handle blue barriers. The international community should also make efforts to render labour standards fairer and more justifiable for all.

Key words: blue barriers; SA8000; TPP; trade barriers

1. Introduction

On 4 February 2016, trade ministers from the 12 Asia-Pacific countries, including the United States, Australia, Japan and Canada, formally signed a final agreement text of a proposed free trade agreement so-called the Trans-Pacific Partnership (TPP). After its text released, it is generally considered to be a model text for the new generation of free trade agreements. In contrast with the previous free trade agreement, the TPP agreement covers new rules and principles in the region for trade and investment beyond what deadlocked in the World Trade Organization trade negotiations. For example, the TPP agreement has a specific chapter to regulate labour standards. By setting up high labour standards and thus connecting it to trade, the TPP agreement became the first regional trade agreement to successfully introduce strict labour standards into large free trade area. Despite the withdrawal of the Trump administration from the TPP, the future of the TPP agreement is pending. However, the value of the TPP agreement as a new model for the new generation of free trade agreements is apparent, in particular that its established high standard labour rules, to a certain extent, represent the latest trends and developments when the TPP member states dealt with this issue in the new era. Moreover, these rules may cause the implementation of blue barriers that hinge upon strict labour standards as well as social accountability in the area of Asia-Pacific.

Because the strict labour standards will have profound impacts on labour-intensive products and industries, international trade of developing countries whose existing exports are concentrated in these industries will be far more optimal in the near future if these standards are implemented.

In recent years, the issue of labour standards and social accountability of enterprises has drawn widespread attention in the area of international trade. This is because on the one hand the international community and international organizations increasingly attach importance to social accountability of enterprises due to global governance, and on the other hand, the international community hopes to strengthen personal rights in trade and thus further extend this advocacy to the protection of human rights in international trade. In practice, the new trend that trade, social accountability of enterprises as well as human rights are interconnected and intertwined has triggered a fierce debate among the international community in the negotiations of multilateral trade agreements and free trade agreements. Developed countries assert that provisions of strict labour standards and social accountability of enterprises shall be incorporated into multilateral and regional trade agreements. Governments shall undertake necessary measures to prevent imports which are identified as products that violate labour standards and social accountability in their processing from other markets. These measures are often considered to be reasonable and

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not trade barriers. Developing countries, however, argue that it is unjustifiable to include provisions on strict labour standards and social accountability into trade agreements because the majority of exports in most developing countries are labour-intensive and this is the most valuable comparative advantage for their development. Once such provisions are incorporated into multilateral or regional trade agreements, it will severely undermine the comparative advantage that developing countries currently possess and will provide an excuse for developed countries to protect their domestic industries and to restrict labour-intensive imports from developing countries. The essence of such provisions or measures is trade barrier. In China, they are called blue barriers.

This article will discuss the issue of blue barriers. It will be divided into four parts. Part II will analyze how the blue barriers form and the various types of blue barriers by discussing the Social Accountability 8000 International Standard (SA8000) as well as the latest labour standards in the TPP agreement. Part III then will move to discuss the legal issues and their impacts on international trade by analyzing the enforcement of blue barrier. Finally some detailed suggestions will be provided to deal with the issue of blue barriers.

2. Blue Barriers in the Rules

According to the Chinese definition, generally speaking, blue barriers refer to trade protection measures that restrict imports and protect domestic markets by the establishment of strict labour standards or social accountability in international trade. However, the author holds that this definition is the broad definition of blue barriers. This is because it covers all trade measures that restrict imports on the grounds of strict labour standards or social accountability, regardless of whether the measures undertaken by enterprises or the compulsory ones undertaken by the importing country (the government). Apparently, such a definition conflicts with the general definition of trade barrier and is easier to garner theoretical challenge because the general definition of trade barriers refers to trade measures undertaken by the importing government to restrict the imports. They are not measures undertaken by enterprises or industry associations. Therefore, the author holds that the definition of blue barriers can be divided into broad definition and narrow definition. The broad definition is the foregoing definition, it covers all trade measures that restrict imports from other countries, regardless of whether they are compulsory undertaken by the importing government or undertaken by importers or industry associations. On the other hand, the narrow definition of blue barriers merely covers trade measures undertaken by the importing countries to restrict imports on the grounds of labour standards or social accountability. These measures are often provided in trade

agreements. And the provisions in the TPP agreement regarding labour standards are typical examples. Nevertheless, considering the existing definition of some developing, in particular the Chinese definition which is the origin of blue barriers, blue barriers defined in this article refer to the broad definition.

Blue barriers originated from the 1980s. The theoretical basis is the theory of social dumping for which developing countries consider that their labour-intensive exports are main targets. Moreover, developing countries also criticized that the SA8000 has been one of the main measures that certain enterprises and industries of some countries restrict imports and protect interests. In addition, some industries and enterprises in the importing countries require that exporters from other countries have to accept various social accountability assessments in order to obtain the qualification of exporters in the importing countries according to the diverse requirements of their respective domestic laws and industries in the importing countries. These assessments are often overly demanding and thus cause obstacles to the exporters. In recent years, some exporters in coastal cities of south-eastern China, such as some enterprises in Zhejiang Province of China have been required to take these assessments for the eligibility as exporters.

Generally speaking, two approaches are often adopted by international community to regulate measures regarding blue barriers. One approach is that individual enterprise or the industry association uses certain standards for certification, *i.e.*, the enterprise or the association implements labour standards and social accountability such as SA8000 and Electronic Industry Code of Conduct (EICC) in exporters from other countries. Once exporters meet these standards, then they will be assigned orders and will be eligible for exporting. Another approach is the importing countries' governments incorporate a special chapter on labour standards and social accountability into regional free trade agreements, such as the provisions in the TPP agreement, *i.e.* the free trade agreements force the member states to implement these standards among their domestic enterprises as well as industry associations and thus bring exporters from other countries to comply with these standards. Once enterprises or industry associations in the member state do not comply with the standards for the imports, other member states will have the right to impose punishments on that specific state according to the provisions of the agreement. The following part of this article will discuss and analyze the issue of blue barriers in international rules by taking SA8000 and the provisions of the TPP agreement as examples.

2.1 SA8000

In the early 1990s, the famous American garment manufacturer Levi's became the subject of criticism after the media exposed and

claimed that the company was a “sweatshop”. This directly promoted the company to introduce the world's first code for social accountability. Since then, some multinational corporations have attempted to enact a uniform code for social accountability. In 2001, the United States’ Council on Economic Priorities was renamed Social Accountability International (SAI) and started to develop uniform socially responsible standards. Some business organizations, non-governmental organizations and trade unions etc. from 11 countries constitute SAI. The uniform international standard for social accountability enacted by SAI was named SA8000. This international standard is a common standard for all types of businesses and industries. Since it was firstly issued by SAI, it has been revised several times and the latest version is the version SA8000:2014 launched in 2014.

SA8000 employs a third-party authentication, that is, authorizes an independent accredited certification body to evaluate whether the enterprise complies with the standard. The latest version SA8000:2014 covers nine various aspects, including child labor, forced and compulsory labor, health and safety, freedom of association and right to collective bargaining, discrimination, disciplinary practices, working hours, remuneration and management systems. The certification body will evaluate whether the enterprise has complied with the standard according to the detailed criteria provided by SA8000:2014. Once the enterprise passes the evaluation, it will get an SA8000 certificate. SAI will publish the list of certified enterprises on its website. Although SA8000 is a voluntary standard for workplaces, many transnational corporations recognize this standard and require their suppliers to ensure that they are SA8000 certified enterprises when they produce the supplied products. This is the precondition for foreign exporters to get orders from these transnational corporations. As a result, SA8000 certificates have been the essential qualification for enterprises to enter into the global industrial chain.

With the development of society, consumers put forward higher social standards for enterprises. This requires enterprises to bear more corresponding social responsibilities. In this regard, SA8000 responds to the public social concern and provides a simple and easy identification, *i.e.*, the SA8000 certificate for consumers and investors. By using the SA8000 certificate, consumers and investors can easily identify whether an enterprise is concerned about labor issues, and enterprises can also show their commitments to social responsibilities, thereby enhancing their public credibility. Transferring the comparative empty theory of corporate social responsibility and human rights into a detailed specific and quantitative standard, SA8000 undoubtedly plays a positive role and has a far-reaching impact on the protection of workers’ rights and

interests. Nevertheless, the implementation of SA8000 may render the evaluated enterprise to be treated unfairly and thus prevent their products from exporting due to some shortcomings and loopholes arising out of the text of SA8000 and its certification procedures.

On the one hand, the standard provided by SA8000 is extremely high for developing countries’ exporters to achieve, in particular for those small and medium exporters. In its first part of the first chapter “Intent and Scope”, SA8000:2014 claims that the standard is based on “national labour laws”, however, many contents of this standard mainly referenced the labour standard of developed countries rather than the standard of developing countries or the standard of small and medium enterprises. For example, in Part III “Definition” Article 12 “Living wages”, it provides that “The remuneration received for a standard work week by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family. Elements of a decent standard of living include food, water, housing, education, health care, transport, clothing, and other essential needs including provision for unexpected events.” This standard of living wage may be achieved in developed countries, but more difficult to be implemented in developing countries. As a result, such excessively high standard essentially excluded the majority of small and medium exporters in developing countries from the SA8000 certification.

On the other hand, the certification process of SA8000:2014 is somewhat cumbersome and costly. It is labour, money and time intensive for enterprises to complete the process and get the certificate. It is a heavy burden for certified enterprises, in particular those small and medium exporters. Generally, the certification process of SA8000 goes as follows: first, the applicant enterprise undertakes an online management system self-assessment, and then it can apply for the certification within one year after the self-assessment. Once SAI accepts the application, the proposed enterprise can choose to undertake a pre-assessment forecast. If the forecast suggests the enterprise improve its management system, the enterprise will be given adequate time for improvement. This process can last up to two years. If the proposed enterprise passes the pre-assessment forecast, it can start the full evaluation process. At this point, it selects and works with one of the independent accredited bodies authorized by SAI. The selected body will undertake an on-site assessment by reviewing documents and interviewing with workers and then provide their comments and suggestions for improvement. In light of these comments and suggestions, the enterprise will improve its system in order to fully meet the SA8000 standards. Once the independent body determines that the enterprise has undertaken necessary measures and improvements to comply with the SA8000 standards, it will grant a

SA8000 certificate. However, such a certificate is valid for three years subject to ongoing surveillance audit evaluations which generally every six months will be held. The certificate is also required to be renewed after it expires. As a result, this certification process of SA8000 is extremely cumbersome and time intensive. Moreover, the ongoing surveillance audit evaluations and other procedures also render more difficulties, in particular the increased cost, to get the certificate. In addition, the enterprise is also required to provide various documents and hundred copies of data, involving all nine aspects of the SA8000 standard. For example, only in one aspect of "health and safety", it requires the enterprise to provide dozens of documents and data regarding business and operating permits, factory buildings, fire safety, electronic safety, machine guards and safety, noise, boiler / generators, chemical and hazardous waste handling and storage, labor insurance supplies, kitchen, cafeteria and canteens, restroom facilities, elevators, fuel and chemical storage tanks, medical care and child care facilities etc. Another example is in Article 9.2 of Chapter 4, it requires the enterprise to establish a social performance team for the implementation of all elements of SA8000. All these requirements will bring high cost to the certified enterprise, and in particular, render small and medium exporters in developing countries to be unaffordable and thus to be in a weaker position for getting orders from their business partners in developed countries.

Both substantive standards and procedural requirements of SA8000 indicate that this standard was designed for developed countries and large enterprises. In contrast, it is difficult to be achieved for exporters in developing countries, in particular small and medium enterprises as well as labour-intensive industries, and thus render them in a worse position in international trade. This is because failure in obtaining a SA8000 certificate means the unavailability of orders from importers. For those enterprises who eventually get the certificate, they will also have to increase the cost of the product. In the past decades, small and medium exporters in developing countries mainly rely on comparative lower labour cost in order to get the cost advantage of product price. Therefore, the increased cost of the product will also eventually render this advantage unavailability and thus in a worse position in the global market competition. As a result, although SA8000 is not a compulsory certification implemented by states or governments and cannot be defined as trade barriers *per se*, it constitutes a hidden barrier in practice because the certification of SA8000 has, *de facto*, driven small and medium enterprises in developing countries out of the exporting market. In addition, this standard that originated from and used in the inner network of large international companies or certain industries has been gradually accepted by more states and has

even been expanded to be a universal standard. The provision regarding labour standards in the TPP agreement is a typical example of this development.

2.1 Labour Standards in the Tpp Agreement

Labor standards in the TPP Agreement are mainly governed by Chapter 19 of the Agreement, which contains 15 articles, including definitions, statement of shared commitment, labor rights, non derogation, enforcement of labor laws, forced or compulsory labor, corporate social responsibility, public awareness and procedural guarantees, public submissions, cooperation, cooperative labor dialogue, labor councils, contact points, public engagement and labor consultations. In addition, Chapter 19 has three attachments, namely, Brunei – United States Labour Consistency Plan, Malaysia - United States Labour Consistency Plan and United States Vietnam Plan for the Enforcement of Trade and Labour Relations.

In addition to confirming certain obligations of labour standards that contacting parties shall comply with in the past international labour agreements, Chapter 19 of the TPP agreement provides some striking and interesting provisions regarding labour standards. In Article 19.7 "Corporate social responsibility", it requires the Contracting Parties "shall endeavour to *encourage* enterprises to *voluntarily* adopt corporate social responsibility initiatives on labour issues that have been endorsed." The wording of this Article indicates that the labour –related requirement of the TPP agreement regarding social accountability is not a mandatory or compulsory obligation for the Contracting Parties. On the contrary, it merely requires that the Parties encourage enterprises to voluntarily adopt. However, in Article 19.6 "Forced or Compulsory Labour", it requires "each Party shall also discourage, through initiatives it considers appropriate, the importation of goods from other sources produced in whole or in part by forced or compulsory labour, including forced or compulsory child labour." According to this provision, the Parties have *de facto* been authorized to impose restrictions on imports or to prohibit imports in order to punish foreign producers who violate forced or compulsory labor. Apparently, it is the marriage of trade and human rights, attempting to expand the application of restrictive measures in trade. As a result, once the TPP Agreement is implemented, the Contracting Parties, by applying Article 19.6, will be able to restrict imports from countries concerned. Moreover, the wording of Article 19.6 also suggests that unlike Article 19.7 which is voluntarily adopted, Article 19.6 is a mandatory or compulsory obligation for the Contracting Parties.

On the other hand, there are also some loopholes and flaws in Article 19.6. First, Article 19.6 does not specify the measures undertaken by the Parties. That is, what are "initiatives it [the Parties] considers appropriate"? Article 19.6 does not provide a clear answer

to this question. The wording of the text merely indicates that the Parties shall undertake some measures. However, the question as to what is and whether it is "appropriate" is contingent upon the interpretation made by the discretion of Contracting Parties. This unrestricted discretion may bring inconsistent standards of implementation and the lack of predictability for legal consequences, and thus further generate trade barriers.

Secondly, the wording of Article 19.6 implies that it is a mandatory or compulsory obligation for Contracting Parties to undertake appropriate measures and impede the relevant imports. However, it does not provide the legal responsibility and legal consequences that Contracting Parties should bear when they fully or partially fail to comply with the obligation in Article 19.6 or even abuse Article 19.6 to arbitrarily restrict imports and thus brings trade barriers.

Finally, despite the text of Article 19.6, there is a footnote accompanied by the Article, providing that "For greater certainty, nothing in this Article authorizes a Party to take initiatives that would be inconsistent with its obligations under other provisions of this Agreement, the WTO Agreement or other international trade agreements". According to the wording of this footnote, the legal validity and status of this Article is not higher than other articles of the TPP Agreement or the obligations under the WTO Agreement and other international trade agreements. Put another way, Article 19.6 does not give priority to the application. Moreover, it should be noted that the footnote itself does not clarify the specific scope of the obligations under the WTO Agreement and other international trade agreements. As a result, it may merely refer to the relevant obligations under those agreements regarding labour standards, and/or it may also refer to all obligations under those agreements. Strikingly, if it merely refers to the former scope, the application of this footnote will be restricted. This is up to date the WTO has not reached an agreement on labor standards, and thereby impossibility of conflicts in the application between Article 19.6 of the TPP and the relevant articles under the WTO agreement. However, if it refers to the latter scope, the footnote would be interpreted as that the legal validity and status for the mandatory obligation of labour standards in the TPP Agreement is less than all other international obligations of Contracting Parties. Apparently, this interpretation runs counter to the original intention of the TPP Agreement to incorporate labor standards for protecting labour rights.

The foregoing analysis indicates that there are some normative loopholes and deficiencies in Article 19.6 of the TPP agreement and its footnote, which needs to be further clarified and interpreted in practice. Otherwise, it will be readily abused and thus generate blue barriers in the rules.

3. Blue Barriers in Practice

As indicated earlier, both provisions of international treaties and standards of international customary laws are likely to generate blue barriers in the rules. On the other hand, these provisions and standards are also more likely to be abused in practice, thereby creating blue barrier *de facto*.

3.1 The Implementation of Sa8000

First of all, in practice SA8000 may be abused, which will render strict labor standards unimplemented. For example, in order to pass the certification of SA8000, some enterprises hire consultants to take use of loopholes in SA8000 so that the enterprises will be re-shaped and thereby avoiding the implementation of strict labour standards. In the case of SA8000 certification, in addition to checking materials provided by the enterprise, the certification body may also interview with the employees of the enterprise to find out whether the enterprise has complied with SA8000. As a result, some consultants help the enterprise to prepare for a pre-defined list in which the attendants of interview have been pre-decided and then instructed or trained by the consultants to answer the questions that the certification body may propose in the certification interview. Such a way will prevent the employees from telling the truth of the enterprise as to whether the enterprise has complied with SA8000. Moreover, with the help of consultants, large enterprises with sufficient funds will be easier to pass the certification than small and medium enterprises even if they have not complied with the standard. This is because the lack of sufficient funds will render small and medium enterprises to unable to hire consultants. Therefore, on the one hand, the existing SA8000 certification *de facto* deprives of the right of small and medium enterprises as exporters, and on the other hand, it does not achieve the original intention of SA8000 certification, *i.e.*, to effectively protect labour rights.

Secondly, some standards of SA8000 are completely divorced from reality. For example, one Article of SA8000 provides that "[t]he normal work week, not including overtime, shall be defined by law but shall not exceed 48 hours." Frankly, the original intention of this standard is to protect the workers' right to rest. However, in some labor-intensive industries, such as clothing and textiles industry, it is almost impossible for many enterprises to achieve it during certain period of time, in particular with the busy season that strict criteria are required for orders and shipping. Consequently, in order to pass the SA8000 certification, enterprises would have to find consultant to help and cheat.

Thirdly, the current majority of enterprises that apply for the SA8000 certification are from developing countries, such as India and China. It seems that such a certification is mainly required for

enterprises from developing countries. And enterprises from developed countries are rarely required to pass such a certification in order to get orders. However, according to SA8000, it should be applicable to all industries and various enterprises around the world. If this is the case, it is doubted that whether SA8000 is a universal standard to all industries and all enterprises. This is because it is apparent that enterprises from developing countries are more anxious to get a SA8000 certificate than suppliers from developed countries even if certain industry chain suppliers remain in developed countries. In addition, the existing standards of SA8000 have not been global uniform standards for labour rights. Simultaneously, there are other labour standards adopted by different countries and regions as well as various industries around the world. This is the case even occurred in the United States which is generally recognized as the country that standards of SA8000 are originated from. Some enterprises in the United States use other labour standards rather than SA8000. This may increase enterprises the heavy burden, in particular small and medium enterprises, because they have to pass various certifications in order to be eligible and qualified as exporters or suppliers for different countries and regions.

Finally, as indicated earlier, SA8000 employs a third-party authentication. That is, certification bodies authorized by SAI will undertake SA8000 audits. As of May 2017, although SAI has merely authorized twenty-three independent accredited certification bodies for the SA8000 certification and SAI itself is a nonprofit organization, some of these certification bodies are profitable business organizations. These business organizations, combined with consultants as well as large multinational corporations who require their suppliers to get SA8000 certificates as prerequisites for orders, have rendered the certification of SA8000 a lucrative industry. As a result, this authentication system of SA8000 may bring potential risks to the implementation of SA8000.

3.2 The Implementation of Labour Standards in the Tpp Agreement

Currently, as the future of the TPP agreement is unknown, this article merely discusses the potential impacts on labour standards of the TPP agreement in practice, in particular the possible impact on exporters from non-TPP member states.

Firstly, it is the first time that the implementation of labor standards has been brought to the national level. During the past decades, labour standards were implemented merely in large multinational corporations, business alliances or industry associations. They have never been enforced as national mandatory or compulsory standards. Theoretically, if labour standards are not national mandatory or compulsory standards, and in the case that exporters are not given orders because they fail to pass the

certification, these standards even abused cannot yet be defined as trade barriers. The reason is that trade barriers should generally be implemented by a state or by a government who acts on behalf of the state. Therefore, either SA8000 or the ICTI standard which is generally recognized in the toy industry etc. is essentially not a trade barrier from the perspective of narrow definition as indicated earlier in this article. However, once labour standards of the TPP agreement are implemented, member states of the TPP agreement will have the obligation to implement. As a result, labour standards of the TPP agreement will be transformed into a mandatory obligation to all member states, and thus further render the potential trade barriers to come into being. On the one hand, these standards should be implemented among enterprises of the TPP member states. If they do not or are unwilling to implement, they will be subject to the punishment of their governments in order to ensure that the national obligation is not breached as the TPP member. On the other hand, if the member state of the TPP agreement does not or unwilling to implement these standards, they will also be subject to the punishment imposed by other TPP member states, such as measures on exports restriction etc. As indicated earlier, provisions regarding labour standards of the TPP agreement are ambiguous and leave greater discretion to member states. Therefore, once they are implemented, it will most likely abuse those provisions and further become trade barriers.

Secondly, although labour standards of the TPP agreement are merely valid for TPP member states, it does not mean that they have not any impact on non-members and exporters concerned. For example, China has not yet joined the TPP agreement, but once labour standards of the TPP agreement are implemented, it will have a significant impact on Chinese exporters. This is because some TPP member states, such as Japan, Canada, Australia etc., are China's major partners in international trade. And others, such as Singapore, Vietnam, Malaysia etc., are China's neighboring countries in the Asia-Pacific region with close economy partnerships. Consequently, if these countries have to implement labor standards of the TPP agreement at the national level, these standards shall be incorporated into their domestic laws which will not only target at exporters from TPP member states but also target at all exports from all countries. Therefore, once these strict labour standards of the TPP agreement are introduced to the domestic laws of TPP member states, they will apply to all exports from all countries, both members and non-members, to the importing country.

Finally, the implementation of the TPP agreement will bring closer economic relationship among member states. Compared with labour standards provided by most of bilateral trade agreements, labour standards of the TPP agreement are less arbitrary and thus

many exporters from non-member states of the TPP have difficulties in complying with these standards currently. As a result, if these standards are implemented, more orders of exports from TPP member states will be given to exporters among TPP members rather than exporters among non-members. This will, to a certain extent, contribute to the trade diversion effects, triggering non-TPP members' less investment, less orders, increased labour cost and eventually more barriers to enter into the TPP members' markets.

Therefore, the above discussion implies that the implementation of TPP labor standards will not only have an impact on TPP member states and their exporters, but will severely affect exporters from non-members as well, and eventually it will turn out be potential trade barriers that specifically affect exporters from non-members.

4. Conclusion

Blue barriers that hinge upon strict labour standards as well as social accountability are new trade barriers. Exporters are forced to achieve social accountability and strict labour standards as prerequisites for export orders based upon their human rights records. As analyzed in this article, although these standards restrict exports, they are not real trade barrier *per se*. This is because they are not compulsorily implemented by the state, but by the large corporation and the industry association voluntarily. However, once labour standards provided by the new generation of free trade agreements have upgraded to mandatory or compulsory standards for member states, they will have a significant impact on exporters from non-members of free trade agreements. Simultaneously, these standards will be blue barriers *per se* if they are abused *de facto* or *de jure* in practice to restrict imports.

As the future of the TPP is unknown, questions as to who will fill the leadership of the TPP after the withdrawal of the United States and who will be invited to join the TPP negotiations have not been discussed and resolved. However, labour standards of the TPP agreement will have a severe impact on exporters from non-TPP members. Therefore, it is suggested that non-TPP member states, such as China, should pay adequate attention and undertake necessary measures to handle blue barriers. The potential measures may include the participation in the TPP negotiation and renegotiation on the existing labour standards of the TPP, the promotion of the establishment of a new regional comprehensive economic partnership agreement (RCEP) and introduction of new labour standards which will be consistent with the interests of labour-intensive industries in the region. In the long run, blue barriers will be one of the new challenges in international trade for exporters from labour-intensive industries and countries. The justifiable standards of labour rights protection and controlling blue barriers are not easy tasks in international trading regime. The

international community should make efforts to render labour standards fairer and more justifiable for all.

References

According to statistics provided by SAI, as of 18 May 2017, there are only 2 enterprises from the US that get the SA8000 certificates. This implies that even in the US, the SA8000 certification is not a general one.

According to statistics provided by SAI, as of 29 March 2017, there are 3857 enterprises from 72 countries that pass the SA8000 certification. For nationalities of 3857 enterprises, Italian enterprises rank 1 st. However, among 72 countries, most of them are developing countries, among which 953 Indian enterprises and 654 Chinese enterprises get the SA8000 certificates. India ranks 2 nd and China ranks 3 rd. For more details, see SAI website, available at < <http://www.saasaccreditation.org/certifacilitieslist>> (18 May 2017 last accessed)

After the withdrawal of the US from the TPP, Australia and New Zealand which are two important members in the TPP discussed about the possibility of proceeding with the TPP without the US by encouraging China and other Asia countries to join. For more details, see Reuters, 'Australia, New Zealand look to China to salvage TPP deal after Donald Trump withdraws US', 24 January 2017, available at < <http://www.newsweek.com/australia-new-zealand-tpp-china-japan-donald-trump-547309>> (30 April 2017 last accessed) In March 2017, invited by Chile, China and South Korea which are not members of the TPP attended the TPP meeting held in Chile after the withdrawal of the US. See Chen Weihua, 'China to attend TPP negotiations in Chile this week.' 3 March 2017, available at < http://usa.chinadaily.com.cn/world/2017-03/13/content_28526712.htm> (30 April 2017 last accessed).

Brunei – United States Labour Consistency Plan, November 2015; Malaysia – United States Labour Consistency Plan, November 2015; United States – Vietnam Plan for the Enhancement of Trade and Labour Relations, 4 February 2016.

Electronic Industry Code of Conduct (EICC) are corporate social responsibility norms initiated and developed by IBM, Microsoft, Hewlett-Packard, Dell, Sony and other global electronics industry giants in the electronics industry supply chain to establish.

For details about the certification process of SA8000, see the official website of SAI, available at <<http://www.saasaccreditation.org/certification.htm>> (8 May 2017 last accessed).

For example, the definition that Chinese Scholar Yuxia Ma

- provides: "Compared with green trade barriers that target the environmental protection, people always consider that blue barriers target the protection of 'blue collars' workers' rights and cover the content of international labour standards. These barriers are also called as labour standards trade barriers or social accountability trade barriers". See Yuxia Ma, 'A Rational Examination of Blue Barriers in the Shadow of Economic' (*Jing Ji Shuai Tui Yin Ying Xia De Lan Se Bi Lei Li Xing Shen Shi*), *Journal of International Trade*, 2009:7, p. 79; Another Chinese scholar Xingyu Wang defined blue barriers as "Blue Barriers are trade protection measures adopted under the name of labour environment and the right to life." See Xingyu Wang, 'The Influence of Blue Barriers on China and their Countermeasures' (*Lan Se Bi Lei Dui Wo Guo De Ying Xiang He Dui Ce Yan Jiu*), *Journal of Foreign Trade and Management*, August 2006: 16, p. 92.
- For the debate about labour standards in the negotiation of international trade agreements, several journal articles in China discussed. For example, Fengsheng Wu, 'International Labour Standards and the 'Blue Provision' of the WTO' (*Guo Ji Lao Gong Biao Zhun Yu WTO "Lan Se Tiao Kuan"*), *Journal of Tianjin Administrative Institute of Political Science & Law*, 2006:2, pp.48-52.
- For the list of independent accredited certification bodies recognized by SAI, see SAAS official website, available at <<http://www.saasaccreditation.org/accredcertbodies.htm>>, (18 May 2017 last accessed).
- Haiyan Li, 'The Development of SA8000 in The WTO Negotiation and China 's Countermeasures' (*SA8000 Biao Zhun Zai WTO Tan Pan Zhong De Fa Zhan Yi Ji Zhong Guo De Ying Dui Ce Lue*), *Current Economics*, 2008:5 (II), p.12.
- Hanbing Zhang, 'SA8000 and China's Construction enterprises' (*SA8000 Yu Wo Guo Jian Zhu Qi Ye*), *Construction Economy*, 2006:8, p. 52.
- Id.*, at Article 19: 6 Forced or Compulsory Labour.
- Id.*, at I: 1 Intent and Scope.
- Id.*, at III: 12 Living Wage.
- Jiangtian Li & Biquan Gan, 'Blue Barriers – AN Analysis on the Impact of China 's Auto Parts Exports' (*Lan Se Bi Lei – Dui Wo Guo Qi Che Ling Bu Jian Chan Ye De Ying Xiang Xing Fen Xi*), *Automobile & Parts Technology*, 2007:15, p. 18.
- "Social dumping" refers to the low export price and a large quantity of exports dumped at the importing country due to low labour costs and the failure to provide workers with reasonable wages or environment. Developed countries hold that exports of developing countries constitute social dumping and cause their less capacity of the competitiveness of their domestic enterprises and less employment opportunities. See Haiyan Li, 'The Development of SA8000 in The WTO Negotiation and China 's Countermeasures' (*SA8000 Biao Zhun Zai WTO Tan Pan Zhong De Fa Zhan Yi Ji Zhong Guo De Ying Dui Ce Lue*), *Current Economics*, 2008:5 (II), pp.12-3.
- SA8000:2014, Performance Indicator Annex, 3 Health and Safety.
- Social Accountability 8000 International Standard, by Social Accountability International, June 2014, IV: Social Accountability Requirements.
- Supra.* note 11, at IV: 9.2 Social Performance Team.
- Supra.* note 11, at June 2014, IV: 7.1
- Supra.* note 17, at Article 19:7 Corporate Social Responsibility.
- Supra.* note 19.
- Text of The Trans-Pacific Partnership, Chapter 19:Labour, 26 January 2016.
- The ICTI certification is the standard that the International Council of Toy Industry (International Council of Toy Industries) implements in order to ensure that the toys are safe and the environment in the production purports to human rights. Currently, Chinese exporters usually need to get ICTI certificates to obtain orders if the exported toys are produced in China.
- The supervisor in Asia of SAI said that SA8000 is not a trade barrier. For more details, see 'Is SA8000 A Trade Barrier? Interview with The Supervisor of Asian Projects of SAI ' (*SA8000 Bu Shi Mao Yi Bi Lei? SAI Ya Zhou Xiang Mu Zhu Guan Jie Shou Cai Fang*), *Nan Fang Daily*, 6 April 2004, available at <<http://news.sohu.com/2004/04/06/92/news219759221.shtml>> (11 August 2017 last accessed); Some Chinese scholars also questioned that SA8000 are trade barriers. For example, see Jianxia Zhang, 'The Nature of Non-Trade Barriers of SA8000' (*SA8000 De Fei Mao Yi Bi Lei Xing Zhi*), *Research of Finance and Education*, March 2006, pp. 37-9.
- Trade barriers are various restrict measures that one country imposed on products or service of another country. They can be divided into tariff barriers and non- tariff barriers.

The Basic Rules of Judicial Application: Principle of Public Order and Good Customs

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Abstract: The principle of public order and good customs belongs to the regulation of authorization, which aims at realizing the function of overcoming statute law limitation by granting discretion to judge. But the connotation and extension uncertainty of public order and good customs make the abuse of judicial application possible. Thus the concrete application of public order and good customs should follow certain rules. That is: the exhaustion of legal rules, the realization of case justice and stronger reasons.

Key words: the principle of public order and good customs, discretion, substantial justice

1. Introduction

The uncertainty of legal principle makes its application remedy the deficiency of statute law and correct the deviation of formal justice. Thus it is highly praised and even honored as “King of the Legal Empire”¹; but the application of the principle of law will inevitably lead to the uncertainty of the judgment due to its uncertainty, which will endanger the stability of law and suffer disputes. The individual standard of modern civil law is influenced by the absolute tendency of private law autonomy and the prevalence of strict rularism; there is almost no application space for rules of law. With the socialization of rights and the gradual prosperity of the ideas such as prohibition and refusal of referees’ and judges’ law-making, the application of the law principle in the standard of modern civil law is able to wander in the dispute. Although different attitudes are adopted for the application of legal principle in different times and different theories, the “discretion” in the application of legal principle may be used with abandon by judge and the damage to legal stability is consistent. Therefore, even in the period of standard, the people who support the application of the legal principle generally advocate that the application should be restricted strictly to maintain the stability of the law. The premise of applying the principle of public order is set up, which means limiting its application from the source. Its application must mainly aim at realizing the justice of the individual case and should be constrained by the exhaustion of legal rules; and stronger reasons should be provided its application.

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1 Richard A. Posner. *How Judges Think*. Massachusetts: Harvard University Press, 2008:56.

2. Exhaustion of Legal Rules

2.1 Harm of applying the principle of public order to the stability of law

Legal principles and legal rules both belong to the legal norm; law principles are the rules above the law rule.² “Law principles are universal rules to establish, illustrate and integrate many specific norms and applicable laws”.³ The differences between legal principles and legal rules are mainly characterized by the following facts: 1. the former points to an uncertain behavior, and the latter points to relative determined behavior; 2. although the principle is uncertain, it is usually done by many determined behaviors in the implementation; thus principles can prove the legitimacy of rules.⁴ The uncertainty of legal principles poses a potential threat to the stability of law; thus many countries have adopted the continuous efforts of legislation to translate the relations that conform to the values of legal principles to legal rules in time so as to minimize the potential threat. The pursuit of determinism by law rules makes law a relatively closed system, which is the basic reason of the non-comprehensiveness and hysteresis of law while the uncertainty of legal principles makes law an open system, which makes up for the deficiency of statute law. Although legal principles can prove the validity of rules and it can become the basis of the judgment when lacking legal rules, its high abstraction and generality has a role in instructing or evaluating certain uncertain facts, that is to say, it is the dominant criterion for judges to refer to in certain legal systems.”⁵ Due to the lack of legal rules of the facts and the elements of effect, the uncertainty of judgment can be caused, and

2 Robert Alexy. *A Theory of Constitutional*. Translate by Julian Rivers. Oxford: Oxford University Press , 2002:45.

3 David M Walker. *The Oxford Companion to law*. Oxford: Carendon Press, 1980:739.

4 Joseph Raz. *Legal Principle and the Limited of Law*. *Yale Law Journal*, 1972(81):838-839.

5 Julius Stone. *From Principles to Principles*.*The Law Quarterly Review*, 1981(97):228-232.

then the authority of the judges and the stability of law can also be damaged; it is difficult to provide relatively clear behavioral expectations. Thus “in a model of the combination of legal rules and legal principles, it is generally believed that the judge should give priority to the rule of law”.⁶ The essence of applying legal principles to the judgment of a case is to choose and provide reasonable argument according to a certain value judgment for a case in the legal system after the exhaustion of legal rules.⁷

“The civil law that adopts the system of foreign law is the complement of mandatory law due to its abstraction, generality and inclusiveness, which is the principle of public order.”⁸ This concept generalizes incisively the uncertainty of the principle of public order; compared with other uncertain concepts, the uncertainty of the principle of public order is very obvious. “Its specificity of constitutive requirements is relatively low, and its judgment also opens the door to its morality and publicity.”⁹ As Mr. Liang Huixing said that “although most of legal concepts are uncertain, there are at least possible contents providing the basis for the judge to explain them; however, the principle of public order lacks the contents. It only specifies a direction for the judge to judge a case in that direction, but it can only be judged by the judge that how far the direction can extend”.¹⁰ In this regard, “judges in many countries strive to evolve the concept of public policy or good custom into the legal principle as clearly as possible, categorize different cases and develop specific standards and boundaries so as to avoid misunderstanding the principle as a general clause of the contract”.¹¹ In fact, it is impossible to fully realize the clear generalization of the connotation of the principle of public order, and the specific judgment on the violation of this principle will ultimately depend on the discretion of the judge, which causes that the uncertainty of the judgment is never eliminated; its application is bound to endanger the stability of law and the worries of legislation and theories are never end. Mr. Huang Maorong once discussed “as a general term, the principle of public order has a role in limiting people’s private law autonomy. Therefore, its similar provisions in the national

legislation cause considerable anxiety.”¹² The German Civil Code’s legislative rationale worries that “the general provisions of good customs give judges unprecedented discretion and thus there exist unavoidable mistakes in their application.”¹³

2.2 “Exhaustion of legal rules” can alleviate the harm caused by the application of the principle of public order to the stability of law

“Exhaustion of legal rules” help to limit the discretion of judges and coordinate the conflict between their application and the stability of law. Based on the need of the discussion, this paper divides the principle of public order into the concrete public order and the principled public order according to law: the former refers that the law gives it the specified public order in the form of legal rules, which is expressed as specific legal rules with the value concept of public order in the legal norm; the latter refers that the law gives it the specified public order in the form of legal rules, which is expressed as general clauses or basic principles in legal norms. The violation of the specific principle of public order does not necessarily lead to the application of the principle of public order, for example, “fraud behaviors constitute the violation of the principle of public order”¹⁴; most state legislatures stipulate it as the specific legal rule and the legal effects may be removed; thus it is also different from the invalid provision of the violation of the principle of customs. In fact, many state legislatures has never stopped the efforts of translating the principle of public order into legal rules, for example, incest behaviors in the ancient law are embodied as a legal rule where the behaviors are explicitly prohibited, and the rule is adopted widely for later generations. The specific principle of public order is the result of the choice of the specific value standard. It points to the specific behavior, and stipulates the clear legal effect; thus it is supposed to be given the priority to apply. Moreover, compared with the application of the principle of public order, “the application of the legal rules can reduce the dispute in the application of law, and make sure that the dispute arises only in a relatively small range”¹⁵. In general, it can have a determined result on the application of the specific principle of public order, which would make it impossible for the same or similar case to produce a very different or even a contrary judgment because of different standpoints or morals in different regions; thus it is helpful to enhance the authoritativeness of judges and the stability of law and to provide people with relatively definite behavioral expectation, which is conducive to the stability of order. Moreover, the concrete public order is the concretization of the principle of public order, and its application itself is the implementation of the value idea of the principle of public order. Compared with the application of the

6 Aulis Aarnio. *Reason and Authority*. Hampshire: Dartmouth Publishing Company, 1997:186.

7 Chen Linlin. *Judgment based on legal principle*. *Law Study*, 2006 (3): 14.

8 Zeng Shixiong. *Present and Future of General Principles of Civil Law*. Beijing: China University of Political Science Press, 2001: 28.

9 [Japanese] *Shan Ben Jing San. Lecture notes on civil law (1)*. Translated by Xie Heng. Beijing: Peking University Press, 2004:179.

10 Liang Huixing. *Market Economy and Principle of Public Order*. *Journal of Graduate School of Chinese Academy of Social Sciences*, 1993(6):31.

11 [German] *Kang Zweigt, Hai Kates. Comparison of the consequences of legal acts violating law and good customs*. Translated by Sun Jianzhong. *Global Legal Review*, 2003 (Winter): 468.

12 Huang Maorong. *General Civil Law (Updated version)*. Taibei: Sanmin University, 1982:538.

13 [German] *Werner Flaume. On Legal Action*. Translated by Chi Ying. Beijing: Law Press, 2013:431.

14 Huang Maorong. *General Civil Law(Updated version)*. Taibei: Sanmin University, 1982:543.

15 Pang Lin. *Identification and use of legal principles*. *Law of Jurisprudence*, 2004(10):38.

principle of public order, the concrete public order is the full implementation of the value idea of the principle of public order, because it eliminates the potential harm caused by the discretion of the judge to the stability of law as much as possible.

3. Realization of Individual Justice

3.1 Lack of due care for individual justice in statute law and response of modern civil law

Legal rules apply to specific cases in the way of “all or none”,¹⁶ the top priority is the pursuit for the stability of law, so its existence is more important than its justice and purpose.¹⁷ If the statute law itself is perfect, then the “exhaustion of legal rules” can achieve the perfect combination of the stability of law and the individual justice. But the statute law is far from perfect, based on the need of stability; on the one hand, the legislator is trying to define the relation within the scope of legal adjustment in the form of legal rules to set up the behavioral mode and legal effects of the legal subject. It is necessary to provide as many legal rules as possible, but legislative practice has proven that it is difficult to be achieved because of the limit of the view of legislators and the increasing complexity of relations. On the other hand, the formulation and revision of the law must be strictly followed by strict procedures; the development of law usually lags behind the development of the times, which lead to the hysteresis of law. The defects of statute law, such as non-comprehensiveness and hysteresis easily lead to the negligence of the individual justice. In addition, the certainty of the legal rules makes its focus on the adjustment of the object universality and it will inevitably lead to the lack of due attention to the particularity; that is to say, the applicable of legal rules is rigid and individual justice is difficult to obtain effectively. But “a legal system, where justice cannot be met, will be unable to provide order and peace for political entities in the long run.”¹⁸ It is precisely because of the pursuit of individual justice that the statute law needs to be supplemented by the elastic norms because of its non-comprehensiveness and hysteresis; then the application of legal rules is receiving identification. In the process of the application of law, judges apply legal principles or general clauses to judge the circumstances of individual cases of discretion to achieve individual justice according to the change of values.

However, the road to the application of legal principles is extremely difficult. The individual standard of the modern civil law is influenced by the absolute tendency of the autonomy of private law and the prevalence of strict rules doctrine, so legal rules have no space for application. In the standard of modern civil law, along with the socialization of rights, the gradual prosperity of the idea like

forbidding refusing judges and judge’s making law, the application of the legal principle moves on the dispute. “The court has an obligation to judge pending cases within the jurisdiction of the court in the absence of a corresponding provision of law for the existence of the disputed facts.”¹⁹ When the legislatures in various countries generally specify that the court is prohibited from refusing the judgment for the facts with disputes, and the judge plays the function of judge’s making law in the judgment of such cases. Its purpose is to realize the individual justice. Article 12 of the Italian Civil Code, for example, provides that in the case of the application of the applicable law, if the ambiguity cannot be resolved in accordance with a clear provision, it shall be determined in accordance with the rules governing similar areas or similar circumstances, and if there is still an ambiguity, it shall be determined in accordance with the general legal principles; Article 16 of the Civil Code of Argentina provides for similar provisions, that is, when ambiguity is difficult to solve, it is settled in accordance with general legal principles and the specific circumstances of the case; Article 1, paragraph 2 of the Swiss Civil Code provides that in the absence of express provisions, a judge shall judge on the basis of customary law, in the absence of customary law, a judge judge the case in accordance with the rules of his or her own as a legislator; Article 1, paragraph 3 of the Civil Code of Algeria provides that judges can act on the basis of natural law and equity in the absence of express provisions when necessary. But the judge’s function of making law depends on discretion, and discretion is like a double-edged sword; properly disposed, it can be the patron saint of justice. If it is abused, it will become the instrument of the wrongdoer. Therefore, legislatures and theories in various countries shows the supportive and cautious attitude towards the application of discretion, that is, the discretion is accepted and at the same time the strict limits to the discretion is set. For example, Article 4 in the Swiss Civil Code provides that “A judge shall judge a case fairly and reasonably in the important cause or the circumstances of his judgment.” In Anglo-American law, “Public policy became an informal source of the law that judges could have recourse to when positive law is lack of clarity or ambiguity, and judges should have a veto power in the public policy of conflict between implementation and basic standards of justice.”²⁰

3.2 The sole purpose of the principle of public order: realizing the individual justice

In the modern civil law, the application of the principle of public order is designed to realize the individual justice, and its equity also makes it competent for this function. On the one hand, the legislative intention of the principle of public order is to correct the deviation of the form justice caused by the autonomy of the meaning, and then achieve the purpose of pursuing the substantive justice. “Contract Case for Beer Supply” is a typical case mentioned

16 R .Dworkin. *Taking Right Seriously*. Massachusetts: Harvard University Press, 1977:24.

17 [German] G· Radbruch. *Philosophy of law*. Translated by Wang Pu. Beijing: Law Press, 2006:74.

18 [American] E· Bodenheimer. *Jurisprudence - Legal Philosophy and Legal Method*. Translated by Deng Zhenglai. Beijing: China University of Political Science Press, 2010: 330.

19 [German] Bernd Ruthers. *Nomology*. Translated by Ding Xiachun and Wu Yue. Beijing: Law Press, 2005:349.

20 [American] E· Bodenheimer. *Jurisprudence - Legal Philosophy and Legal Method*. Translated by Deng Zhenglai. Beijing: China University of Political Science Press, 2010:488.

frequently in German works;²¹ in the case, a restaurant badly needed a loan and signed a beer supply contract with the brewery. According to the contract, the brewery provided a loan to a restaurant, but the restaurant had to assume the obligation to purchase special expensive beer from brewery within 30 years. Although the contract was made with the agreement of both parties, the restaurant's purchase obligations greatly limited the freedom of the owner of the restaurant and the restaurant's operation; thus the purchase contract violated of the provisions of Article 138 of the German Act. According to the Federal Supreme Court, if there are no other restrictive provisions, the maximum period of obligation of its acquisition is 20 years. The Anglo-American law also attaches great importance to the balance of public policy to the autonomy of the meaning. In *Pearce v Brooks* case in English law, the defendant was a prostitute who rented a carriage from the plaintiff to engage in prostitution and did not pay the rent afterwards; then the plaintiff filed a lawsuit. The jury of the case thought that the defendant used the carriage for an improper purpose and the plaintiff knew the use purpose of the carriage by the defendant; thus the court ruled in favor of the defendant. The plaintiff appealed against him. Judge Pollock held that the principle of the case was that anyone who knew that the subject matter was used for illegal purposes was not entitled to claim the value of the subject matter. In English law, a defined public policy is that a contract cannot be involved in prostitution and cannot be enforced; the contract is effective if it is simply concluded by the parties. However, if the court decides that the rent is payable by a prostitute, the act of leasing such a tenancy would be recognized, thereby promoting the development of prostitution. Therefore, based on the public policy, the lessor cannot enforce the rent. In the above two cases, we have made a trade-off of the autonomy of the meaning from the point of view of substantive justice, and denied the validity of the public order by the mutual consent of both sides and then the individual justice is realized.

On the other hand, the equity law in the continental law mainly refers that the general provisions such as the principle of public order and good faith include a necessary component of value to be filled or leave the space in the legal consequence, so the specific problems are supposed to be analyzed concretely.²² The balance of the principle of public order can make up for the lag of statute law, and then realize the individual justice. Moreover, it is also possible to consider the fitness of the statute law itself, that is to say, the principle of public order weighs whether the application of specific legal rules is fair for an individual case. Although the principle of public order is regarded as the guiding principle of modern civil law, some scholars even equate it with justice,²³ however, many scholars

argue that it should be applied only if that positive law is not prescribe or ambiguous.²⁴ At present, the focus of disputes applied by domestic academic circles on this principle is concentrated here. The case of "Bequest of Luzhou" pushed the application of the principle of public order to the top of the law. The plaintiff in this case had a long-term extramarital cohabitation with the husband of the defendant, and the plaintiff took good care of him during the period of cohabitation with the defendant's husband, especially during the illness. The defendant's husband made a will to give his property to the plaintiff and notarized the will. Later, the plaintiff instituted proceedings since the defendant refused to assign the property to the plaintiff. The first instance of the case rejected the plaintiff's claim and took the case accepting fee of 2300 yuan.²⁵ The plaintiff refused to accept the appeal, then lodged an appeal; the second instance dismissed the appeal and affirmed the original judgment, and charged the plaintiff for 1150 yuan.²⁶ Some scholars think that the application of this principle depends on the discretion of the judge and the concrete provisions of the inheritance law; they advocate that Article 16 of the inheritance law should be adopted directly to maintain the stability of law.²⁷ More scholars argue that the bequest agreement is invalid because of the violation of the principle of public order. Its purpose is to realize the individual justice, on which the first and second instances are based.

Before the analysis of the case, it is necessary to deepen the rational understanding of the principle of public order. In the eyes of most people, the equity law is related naturally to common law, which is a special system in Anglo-American law. But the actual situation is that equity law is not the unique phenomenon in common law. "In any era, there exists the equity principle; only its form, scope and function differ."²⁸ In the law of ancient China, there were cases in which ethic was often used to correct the law.²⁹ In Anglo-American law, the common law originates from the customary law of the royal court, which is gradually developed by the royal judge in the judicial process.³⁰ The equity law exists as the antithesis of the law and its function is to remedy and make up for the defects of common law. Compared to common law, equity law has three characteristics—"the flexibility of the procedure; the

1984:178.

24 Li Xia. *On the Principle of Public Order and Good Custom and Its Application*. *Shandong Social Sciences*, 2008 (5):80.

25 (2001) NCreek I Zi No. 561.

26 (2001) No. 621 in Shanghai.

27 Nie Changjian. *Study on the Moral Strength of the Application of Legal Principle. Morality and Civilization*, 2011(6):108.

28 Wang Zejian. *The Theory of Civil Law and Case Study*(8). Beijing: Peking University Press, 2009:22.

29 Xu Guodong. *Interpretation of Basic Principles of Civil Law: A Jurisprudence Analysis of the Principle of Good Faith*. Beijing: China University of Political Science Press, 2004:27.

30 T. F. T. Plucknett. *A Concise History of the Common on Law*. New York: The Lawyers Co-operative Publishing Company, 1920: 302.

21 Chen Weizuo. *On German Civil Law*. Beijing: Law Press, 2007: 287.

22 [German] Hans Bullocks, Dietrich Warwick. *On German Civil Law*. Translated by Zhangyan. Beijing: China Renmin University Press, 2012: 33.

23 Su Mingshi. *Contract Freedom and Contract Socialization. Published on Collection of Civil Law Debts (I) prepared by Zheng Yubo*. Taipei: South Book Publishing Company,

extensiveness and practicality of relief”.³¹ Compared with common law, equity law focuses more on case scenarios and concrete facts, focusing more on substantive justice. The equity law is also prevalent in the continental law, but the equity law are integrated with the common law in continental law.”³² In fact, Article 4 of the Portuguese Civil Code in the continental law establishes the value of the equity principle as the source of the law; the Civil Code in Macao Region of China reserve it. Article 4 of the Louisiana Civil Code of the Republic provides that “If rules applying certain special circumstances cannot be derived from legislation or custom, the court is obliged to rely on equity. In order to balance that judgment, it is possible to resort to reason, justice and common practice.” For the apportionment of the provisions in Louisiana Civil Code of the Republic, Mr. Palmer thinks this is not the influence product affected by Anglo-American law; if the enactment is softened by the equity rules, then the magistrate of the ancient law in Roman law is the typical equity law.³³ Mr Xu Guodong, taking the essential characteristics of the equity law as the starting point, argues that the basic principle of civil law belongs to the stipulation of equity. He thinks that when the specific provisions deviate from the basic principles of civil law, the basic principle of civil law becomes the basis of the judgment precedence over the specific provisions of the civil law to exclude specific provisions of civil law; this process is equitable, and the basic principle of civil law is equity.³⁴ It is easy to know that the balance of public order not only has the supplement function for the application of the statute law, but also has the correct function for it; both are equally important, and we must devote ourselves to the pursuit of justice.

On the basis of the dialectical analysis of the judgment of the bequest case and the dispute arising therefrom, although the application of the principle of public order had an impact on the stability of law, the judgment of the case actually realized the individual justice. Although the will in this case is undoubtedly justified in its form, formal legality does not mean that it should not accept the equity of “the principle of public order”. On the one hand, the principle of public order belongs to the category of mandatory rules, which is the safety valve for safeguarding the general interests of the national society and the general morality. On the other hand, it is the upper law of the inheritance law whose specific provisions should not violate it. Therefore, although the will of the present case

is the voluntary nature of the inheritor, and the plaintiff took good care of him during the period of illness, the extramarital cohabitation obviously deviated from the sexual ethics of the Marriage Law. The decedent’s “freedom of will” exceeded the general moral established by the inheritance law, thus violating the minimum ethical standards that should be followed by the autonomy of private law, based on which, the will violated the principle of public order and of course is invalid. This is the fundamental reason for the general acceptance of the judgment in the case and the recognition of similar jurisprudence. In 2013, the Intermediate People’s Court of Zhuhai again rejected the claim of mistress in violation of the principle of public order for the bequest agreement.

This paper also supports the judgment in this case. On the one hand, although the stability of law is regarded as the primary task of law, it does not mean the absolute value of stability. Cicero has already pointed that “the extreme of law will lead to evil”, the applicable rules of extreme fossilization inevitably lead to the resurgence of the evil law. In the case, if Article 16 of the inheritance law are applied rigidly, giving the legal effect to the will, it is obvious that it deviates from the general morality maintained by the principle of public order in our country, which ignores the individual justice. As for the different handling of similar cases abroad, for example, in German judicial precedent, the lover, wife and children may be a common heir community,³⁵ which belongs to change and regional problems of the connotation of the principle of public order and is one of the reasons why the principle is difficult to harness. On the other hand, although the judgment in the present case is a realistic case and also accords with the aim of pursuing substantive justice in modern civil law, it actually endangers the stability of law. Thus the opinion of this paper is that any situation that makes the stability of law give way to individual justice must be strictly restricted, including the application of the principle of public order. The application of the principle of public order should be applied only for the purpose of individual justice. At the same time, the method of applying the principle and the subjective and objective factors violating the judgment of the principle should be perfected to coordinate the conflict between the stability of law and the realization of individual justice.

4. Stronger Reasons

4.1 Basic theory with stronger reasons

“Exhaustion of legal rules” focuses on the search of existing legal rules and has a strong operability. “Realization of individual justice” emphasizes that it restricts its application from the purpose theory, and therefore the purpose needs to be justified. “Stronger reasons” is the legal proof of the application of the principle of public order, thus providing proper proof for realizing the case justice. Its strict legal argumentation can effectively limit the judge’s arbitrary use of “discretion” to maintain the stability of law. Its justification can also ensure the legitimacy of judges, and control the

31 Li Honghai. *Self-sufficient Common Law and Non-self-sufficient Equity Law: On the Relation Between English Common Law and Equity*. *Tsinghua Law*, 2010(6): 25.

32 [French] Rene David. *Contemporary Major Legal System*. Translated by Qi Zhusheng. Shanghai: Shanghai Translation Publishing House, 1984:142.

33 V.V. Palmer. *The Many Guises of Equity in a Mixed Jurisdiction: A Functional View of Equit in Louisiana*. In *Tulane Law Review*, 1994(69). Translated by Lou Aihua. *Louisiana Civil Code*. Xiamen: Xiamen University Press, 2010: 2.

34 Xu Guodong. *Interpretation of Basic Principles of Civil Law: A Jurisprudence Analysis of the Principle of Good Faith*. Beijing: China University of Political Science Press, 2004:30.

35 [German] Dieter Schwab. *Civil law*. Translated by Zheng Chong. Beijing: Law Press, 2006:490.

dispute in the application to the minimum extent so that the judges can be widely accepted. In the judicial practice, the disputes arising from the application of the principle of public order can be attributed to the fact that the reasoning of the judge is not enough; therefore, stronger reasons are the focus of judicial practice and theory discussion in many countries.

From the point of meaning autonomy, “the basic position of civil law is to respect private autonomy and freedom of contract”.³⁶ Therefore, in correcting the deviation of formal justice resulting from the autonomy of the meaning, the principle of public order should fully demonstrate that its correction is based on the need of safeguarding the general interests of the national society and the general moral, which is the stronger reason of correction. In terms of the applicable point of view, the judge should provide a stronger reason why the stability of law should give way to the application of the principle of public order, that is, to demonstrate that the dispute is governed by the law, at least in the absence of any provision or ambiguity, because “the judge must not reject the decision without a requirement, only if the legislator does not prescribe the legal issues to be settled”.³⁷ When it is unfair that the case applies the concrete rules, it is necessary to provide the proper justification for its application through value judgment and benefit measurement. The principle of public order is the authority principle in legal texts and the ideal life mode of ethics in the perspective of discretion.³⁸ However, the value of modern society is diversified and its connotation is changing, “especially in the society of modern pluralistic development; it has a certain opinion on the difficult period of the principle of public order, and the individual cognition of the judge in the trial is adopted. But the law is to regulate the life and realize the justice; thus the application of law should overcome the individual’s subjectivity, eliminate the possibility of prejudice and make its judgment physical and chemical”.³⁹ The practical way to regulate discretion lies in making judges justify their free evidence to overcome the judge’s subjectivity, exclude the possibility of individual breaking, make it legitimate, and let the public serve the judge.

4.2 Empirical study with stronger reasons

In Anglo-American law, the principle of complying with the precedent is not rigid; as long as there are more stronger reasons, it is unnecessary to follow the precedent.⁴⁰ We went back to *Pierce v Brooks* where the plaintiff argued that “the price of the contract

should be paid off from the illegal benefit”, which was originally part of the English law; if simply relied on the rule of case law, it was clear that the plaintiff was able to obtain the rent claimed. Judge Pollock put forward a stronger reason. The original rules have been broken through by “Illegal and immoral consideration cannot be appealed against by force”.⁴¹ Therefore, in the present case it is not necessary to distinguish immorality or illegality; whether the acts of facilitating prostitution is illegal or immoral, the result is the same and it shall not be enforced. While this judgment appears to be beneficial to the defendant’s immoral behavior, if it is recognized that the contract is enforceable, it would transform the acts of assistance to prostitution into a legitimate act, which in turn could affect the general order and general moral stability and maintenance of the state’s society. Therefore, the defendant in the case is unable to apply for enforcement. On the whole, the judgment of the case considers the factors of the case more fully, and the relationship between the interests of the society and the society is well balanced, and the negation of the plaintiff’s claim is given a stronger reason. The judgment can not only make the plaintiff friendly to the judge, but also achieve the purpose of the individual justice.

In contrast, the case of “Bequest case of Luzhou” in China did not fully demonstrate the stronger reason. This is one of the reasons why the controversy triggered by the judgment in the case has been arising. In order to obtain the recognition of the parties, the justification of the judgment is of particular importance, because “the authority is not naturally formed, and it does not end up with some sort of obedience or abandonment of the rational behaviors, but originates from the act of being recognized and acknowledged”.⁴² That is to say, the authority of legal judgment depends on the reasoning of justification. However, according to the first and second instances, their judgment only stay in the general exposition of the principle of public order, lack of the value judgment and the balance of interests; the proper proof that can be understood and accepted easily by the public should be provided. Therefore, for the judgment of the similar cases, it is suggested that the proper reason of the principle of public order should be fully reflected in the judgment, and should not only remain at the level of legal or judicial interpretation, or be restrained in deeper jurisprudence (the profound jurisprudence should be translated as much as possible into intelligible language), because an important purpose of announcing the verdict is to make the public convinced. After all, the law’s compliance is not limited to the guarantee of state power, but the identity of law is the more important reason.

36 [Japanese] Shan Ben Jing San. *Lecture notes on civil law(1)*. Translated by Xie Heng. Beijing: Peking University Press, 2004: 78.

37 [German] Reinhold Zippelius. *Methodology of Jurisprudence*. Translated by Jin Zhenbao. Beijing: Law Press, 2012: 121.

38 Hu Yuhong. Timing, *Intermediary and Mode of Application of Legal Principles*. *Journal of Suzhou University*, 2004(6): 27.

39 Wang Zejian. *The Theory of Civil Law and Case Study(8)*. Beijing: Peking University Press, 2011: 232.

40 [American] Michael D. Bayes. *Principle of law*. Translated by Zhang Wenxian, Zhu Weiguo, Huang Wenyi and Song Jinna. Beijing: Encyclopedia of China Publishing House, 1996: 12-14.

41 Prepared by Xie Lin and Zhang Zheng. *A Case Study of Anglo-American Contract Law*. Foreign Economic and Trade Publishing House, 2004: 285.

42 [German] Hans Georg Gadamer. *Truth and Method*. Translated by Xia Zhengping. Shanghai: Shanghai Translation Publishing House, 1999: 358.

A Comparative Study of democratic thought in the Three Principles of the People, The Gettysburg Address and Oceana

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Abstract: Sun Yat-sen's the Three Principles of the People, Abraham Lincoln's The Gettysburg Address and James Harrington's The Commonwealth of Oceana are the famous and influential works all around the world, mainly because of the democratic thought. There is a relationship and consistency about the democracy in three works, which has a potential significant to reality. Nowadays, with the rapid economic growth and increasingly politic development of China, the people, especially Chinese have a strong demand for democracy. In order to provide inspiration for Chinese democratic political development, it has discussed from the perspective of democracy thought reflected in three works, which caters to the needing for democracy by modern Chinese civil. It mainly divides into four parts. The first part is a brief introduction on the significance and theme. The second part is a brief introduction about the three political theorists and their masterpiece. The third part is a specific analysis on democratic thought reflected in the three masterpieces and its relationship and consistency. The last part are conclusions, that is, the democratic thought from the three masterpieces, which are suggested as the potential inspiration for the modern Chinese politicians.

Key words: democratic thought; the Three Principles of the People; Gettysburg Address; Oceana; comparative study

1. Introduction

As one of the Chinese most famous political theorists, Sun Yat-sen's the Three Principles of the People has a profound influence upon China, which was formed under the inspiration of American President Abraham Lincoln's "and that government of the people, by the people, for the people, shall not perish from the earth" and western political thinkers. Abraham Lincoln put out the ideas under the influence of the Western thinkers. As one of the important political theorists, James Harrington's political thought exerts a profound affection on Abraham Lincoln. So, the democratic thought in three works has an inherent relationship, which is significant to the democratic political development. By comparing the democratic thought among the Three Principles of the People, The Gettysburg Address and Oceana, the paper tries to seek the consistent spirit from them and provides more democratic inspiration for modern Chinese political development.

2. A brief introduction on authors and works

2.1 Sun Yat-Sen and the Three Principles of the People

Sun Yat-Sen, the great pioneer of Chinese democratic revolution. He put forward the famous guiding principles--"driving the invaders out of China, restoring the sovereignty of country, establishing a republic and equalizing the land ownership" and the Three Principles of the People--"nationalism, democracy and the people's livelihood." In 1924, he put forward new Three Principles of the People. He also proposed the policies of "making an alliance with Russia and the

Communist Party of China and helping the farmers and workers." Mr. Sun struggled for a promising China during his whole life and overthrew feudalism system which lasted for more than 2000 years, his achievement had gained great respect and praise from both home and abroad.

The Three Principles of the People, also called San-min Doctrine. The three principles are often translated into and summarized as nationalism, democracy, and the livelihood of the people. This philosophy had been claimed as the cornerstone of the Republic of China's policy as carried by the Kuomintang (KMT). The principles also appeared in the first line of the National Anthem of the Republic of China.

2.2 Abraham Lincoln and The Gettysburg Address

Abraham Lincoln was an American politician and lawyer who served as the 16th President of the United States from March, 1861 until he was assassinated in April 1865. Lincoln led the United States during its Civil War--its bloodiest war and perhaps its greatest moral, constitutional, and political crisis. In doing so, he preserved the Union, abolished slavery, strengthened the federal government, and modernized the economy.

On April 12, 1861, as the leader of the moderate faction of the Republican Party, Lincoln confronted Radical Republicans, who demanded harsher treatment of the South, however, war Democrats, who called for more compromise, anti-war Democrats (called Copperheads), who despised him, so irreconcilable secessionists appeared, which plotted his assassination. Politically, by carefully planned political patronage, and by appealing to the

American people with his powers of oratory. Lincoln fought back by pitting his opponents to fight against each other.

On November 19, 1863, the most famous speech Gettysburg Address is given by President Abraham Lincoln. He put out the famous thoughts--“and that government of the people, by the people, for the people, shall not perish from the earth.” His Gettysburg Address became an iconic endorsement of the principles of nationalism, republicanism, equal rights, liberty, and democracy. Lincoln had been consistently ranked both by scholars and the populaces as among the greatest U.S. presidents.

2.3 James Harrington and Oceana

James Harrington was an English political theorist of classical republicanism, best known for controversial work--*The Commonwealth of Oceana* (1656). James Harrington's brief career as a political and historical theorist spanned the last years of the Cromwellian Protectorate and the Restoration of 1660. Harrington was the first theorist to interpret the English Civil Wars as a revolution, the result of a long term process of social change that led to the decay of the old political order.

In the middle of the seventeenth century, when the mess of Britain prompted Hobbes to think about how to achieve national security order, Harrington tried to study driving force behind of the social forces that caused the rapid change of political situation. Based on the thought of Aristotle's research on the relationship between property reform and regime change, he sought to find out the reasons from the influence of economic interests on the political development. He demonstrated his political opinions with the “property factor” and “spiritual factor”.

Harrington's masterpiece *The Commonwealth of Oceana* is an exposition on an ideal constitution, designed to facilitate the development of a Utopian republic, allowing for the existence of a Utopian republic. The details of this ideal governing document were set out from the rights of the state to the salaries of low officials. Its strategies were not implemented at the time.

3. An analyses of democratic thought in the Three Principles of the People, The Gettysburg Address and Oceana

From ancient Greece to modern western democratic practice, the concept of democracy has undergone three stages of evolution, namely ancient Athens representative democracy, liberal democracy and electoral democracy. In modern times, democracy mainly presents as electoral democracy.

3.1 The democratic thought in the Three Principles of the People

Nationalism is one of Sun Yat-sen's the Three Principles of the People. Modern western bourgeois republic, most of them are “separation of the three powers” system, that is, legislative power, judicial power, administrative power are separate, independent, and mutual restraint. In order to oppose personal dictatorship, Sun Yat-sen's “five power constitution” absorbs the western spirit of “separation of the three powers”, but he believes that the western system have some flaws, which must be supplemented and improved

to form Chinese democracy. The “five power constitution” means establishing the system of legislative, judicial and administrative supervision and examination, separating the power of the country. The “five power constitution” regard the national assembly (parliament) as the supreme legislative organs, the president as the head of the executive, the judiciary is independent judicial organs. So, how do people exercise the right to manage the state? Sun Yat-sen put forward the implementation of the “Autonomous County,” Autonomous County officials could be elected or dismissed directly by people. People could create the law or veto the law in Autonomous County .

3.2 The democratic thought in The Gettysburg Address

Happened in July, 1863 Gettysburg war is the most brutal one in American civil war, it is also the turning point in American civil war. On November 19th, 1863, Lincoln visited Gettysburg battlefield on the ceremony of sacrificed soldier's tomb is finished. On this ceremony, Lincoln gives his famous Gettysburg Address.

The Gettysburg Address was an accurate explanation to American democracy and political dream. At the last of the address, Lincoln said: “that we here highly resolve that these dead shall not have died in vain -- that this nation, under God, shall have a new birth of freedom -- and that government of the people, by the people, for the people, shall not perish from the earth.” Just from The Gettysburg Address, Lincoln put out the famous democratic thoughts--“government of the people, by the people, for the people” . In sentence, three preposition reflect the relationship between government and people--“of” means “belong to”, that is, government belongs to people, rather than people belong to government. “by” means “executive”, that is, all the matters of the government, including “executive” and not “executive” political right, it belongs to people, rather than belongs to officials. “for” means destination or aims, the government should regard the purpose of people as their destination, rather than people regard the purpose of the government as their own. In addition, whether government make the right “fraction” or not should at the bases of the people's willing, and government should not make the policy conflict with the principle of “regard the aims of the people as their own”.

Through “that government of the people, by the people, for the people,” Lincoln put out the spirit of the democratic government :”government not governed people but is governed by the people; the officials that are chosen by people are regarded as public servants, they represent the will of the people chose them; people could vote officials to express their will and organize peaceful demonstrations; Every civil has right and responsibility about his benefits, to decide how his government going.

3.3 The democratic thought in Oceana

A commonwealth is an empire having “no more liberty by the laws”. The liberty of a commonwealth consists in the empire of her laws, a commonwealth is an empire of laws and not of men. As we all know, having “no more liberty by the laws, which implies laws is a base of the liberty, may them constitute liberty. “Laws are framed by every private man to protect the liberty of every private man,

which by that means comes to be the liberty of the commonwealth.” Comparatively, having “no more liberty from the laws” implies the laws have been made, who is maker? we don’t know, so the sentence reflects the situation where absence from democracy, however, having “no more liberty by the laws” reflect the democracy and liberty of the commonwealth.

“The whole mystery of a commonwealth, which lies only in dividing and choosing.” Dividing and choosing, in the language of a commonwealth, is debating and resolving; and whatsoever, upon debate of the senate, is proposed to the people, and resolved by them, and by the power of the people, which concurring, make a law.

3.4 The consistency of democratic thought in three people’s works

There is a inherent relationship among the Three Principles of the People, Lincoln’s democratic doctrine and *The commonwealth of Oceana*. Not just Sun Yat-sen expressed that his the Three Principles of the People derived from Lincoln’s thought in March 6, 1921, Lincoln is influenced by western political thinkers, which including James Harrington, but also the nature of their thought is consistent--that is, they all reflects the democratic thought.

In Sun’s opinion, the government must promise the political sovereignty to belong to civil--in that level we could say the government by the people, it is called the doctrine of people’s right. To the doctrine of people’s livelihood, the people should share the right of land and sovereignty; In Lincoln’s “and that government of the people, by the people, for the people, shall not perish from the earth,” through three preposition, we could learned that in Lincoln’s concept, the government represent people’s will. And in James Harrington’s *The Commonwealth of Oceana*, he fought against the constitutional monarchy, praising the power of the laws. He also believed that people’s right should be shared according to their land right.

In *The details of the democracy*, Liu Yu said the polite are not perfect, good polite could restrict the right of arbitrary. For instance, how much tax government get and where does it going? The problems should be determined by public rather than a few people. The democracy of the polite, is a kind of approaches to promote people’s dignity and moral. In *The details of the democracy*, Liu thinks the nature of the democracy is a kind of political participation and decision, but a country need to restrict the political itself, just like the American *The Bill of Rights*, that is, it is necessary to leave a room of right, the rights in this room neither belong to public, nor the class of leader.

Also, Liu believes the reasons that her works is popular because of there is a need of public, she makes the metaphor that her works--*The details of democracy* to Chinese just like the situation in which when everyone is thirsty you start to sell water. So both from theories and fact, which demonstrate there is a necessary to develop

democracy in Chinese polite.

4. Conclusions

Nowadays in China, people’s will to ask for democracy is growing. According to the criteria of Sun Yat-sen, Lincoln and James Harrington, whether the government represent people’s will or not, whether a country make his decision according to the laws or not, whether people share the right and responsibility of the country or not become the criteria of democracy.

Nowadays, the situation of decay is always happened in China, also in other country of the world. According to *Where does freedom come from* written by Bao Limin & Zhao Hanmo, we know that the high level of the democracy could relieve decay, so the democracy in modern China, even other country of the world, still in his way to become perfected and satisfied. In China, some people’s opinions fight against democracy, because they worry about that after democracy, there are turmoils, disturbances, street clashes.

Then, how to develop it? The Sun Yat-sen’s the Three Principles of the People, Lincoln’s democracy thought and James Harrington’s republic thought set the good example for us. “separation of the three powers” and make the laws to give a promise that it can implement smoothly; And build a government that belongs to public, and public executive the political right, and the government should regard the public destination as their own. By dividing and choosing for government to make the laws to promise the will and liberty of the republic.

References

- Axel Hadenius, (1992). *Democracy and Development*. Cambridge University Press.
- Capozzi, (1998). *Eugenio: Republicanism and representative democracy: The heritage of James Harrington*. European Review of History, Autumn 98, Vol.5, Issue 2
- David Copp, Jean Hampton, and John E. Roemer, (1993). *The Idea of Democracy*. Cambridge University Press.
- J.G.A. Pocock, (1992). *The Political Works of James Harrington*. Cambridge: Cambridge University Press.
- J.G.A. Pocock, (2003). *The Commonwealth of Oceana and A System of Politics*, Beijing: China University of political Science and Law Press.
- Liu, J.Q & Li, Z.Y. (1993). *History of Modern Chinese Political Thought*. Tianjin: Nankai University Press.
- Lu, L. (2013). *Sun Yat-sen Three People’s Principles*. Beijing: Commercial Press.
- Lin, Z.D. (1999). *Sun Yat-sen and China’s Modern Road Research*. Guangzhou: Guangdong Education Press.

Human Harmony: A Fresh Perspective, a New Approach

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Abstract: This is an attempt at taking a macroscopic holistic and evolutionary psychological perspective to pin-point, in a nut-shell, the causes and effects of the disharmony that infests Humanity today. And to devise a possible remedial course of action, a pragmatic approach, that can effectively reduce the causes of such disharmony within a reasonable span of time. Whatever exist, in the human external environment, have their source causes in the internal psychic space. So addressing the relevant *internal* issues may alleviate the external disharmony. Millennia old '*partial perceptions*' won't fade away overnight. But, the solution, to this enormous deep-rooted problem, need not be complicated. All we require is an effective strategy to counter the divisive disharmony and a sincere will to persevere and sustain the efforts over a considerable period of time. Consciously or subconsciously, humanity has been inching towards global harmonisation. But, the path has been hap-hazard due to the want of a holistic vision for the future. We can do much better if we take the initiative towards the inclusive harmonisation of all. And it's surely worth making the effort. For the fruits of harmony shall be a huge boon to us, in every aspect of our Human existence.

Key words: Partial perception, fractional identity, disharmony, remedial approach, human harmony

1. Introduction

This article is intended to go a bit into the details of the dynamics of Human Harmony. It is inspired by and richly draws from the recently published Science Fiction book, '*The extra-terrestrial delivery*', which not only goes into the evolutionary past and the happening present but also evokes a vision for the future of a race (Das, 2016). This is more like a search than research, culmination of years' of contemplation. The views expressed here are in my individual capacity and not that of any government, organisation or body.

2. About human harmony

The ideal of "Human Harmony" is anything but new. Perhaps, it has accompanied humanity since the beginning of civilisation. For an example, in the ancient times itself, sages uttered the Sanskrit words "VasudhaEva Kutumbakam" loosely meaning, the world is like a family; thus indicating towards a global sisterhood/brotherhood.

By the second half of the last century, it was known that not only all human beings but all living creatures on our planet Earth are genetically related (e. g., Theobald, 2010; Wigler, 2016; Pelech, 2016).

3. Main content: Discussion, illustration and a possible approach to harmony

Cause/s of disharmony

Even so, more than one and a half decades into the twenty-first century, we, humans, still find ourselves as divided as we are. We need to ask questions like how and why the race gets fragmented, particularly psychologically, and then try to open-mindedly seek answers to these questions and endeavour to find pragmatic

solutions.

Every human baby is born with infinite potentials and possibilities. Then it is given a name. In certain culture/s, the baby is named even before it is born. We can not do without a name and so, are bound by its inevitable consequences. This is just to show how the omni-potent human psyche gets fractionalised. Potentially, the baby could be named anything, from Robert, Rahim, Raam to Ringjing. But, the moment any one of these names is ascribed on the baby, it is instantaneously fractionalised by the limiting connotations attached to the name.

Similarly, ever since our childhood, we, rather credulously, receive one fractional branding after another from our *external* world, in the name of geographical locale, physical feature, colour of skin, language, tradition, convention, faith, nation and so on. With each such branding, our psychologies are reduced to tinier entities that progressively divert our focus from the existence of the *Whole*, that is, all of Humanity.

This happens partly because we imbibe the past and present '*partial perceptions*' from our immediate and extended milieu since an early, tender and impressionable age, but more so because we continue to exist within these fractional systems, and therefore lack a '*holistic perspective*'.

An illustrative model of the on-going natural harmonisation

In order to understand the root causes of the '*fractional identities*' that we carry on inadvertently, let's have an outsider's view at this simplified model, an illustration, about an alien Hoo race in an alien setting on an alien planet called Hoola millions of light years away from Earth, an excerpt from the science fiction book '*The extra-terrestrial delivery*', which is oriented around the central theme of Harmony (Das, 2016):

...In the physical universe, every bit of matter attracts others by the pull of Gravity. It is this all-pervading Gravity that not only keeps the

heavenly bodies in their respective relative positions, but at times, brings dispersed matter closer and unites them into a larger entity. Thus faint nebular gas molecules spread over vast expanses of space, concentrate over billions of years. The molecules collide, swirl and gather into increasingly larger bodies. Eventually, a huge mass of critical size is attained. Then, this huge mass is ignited by the tremendous pressure and heat at its central core, caused again by its own Gravity. Thus is born a star, luminous by its own light.

Likewise, ever since the evolutionary advent of the Hoos on the planet Hoola, they have been gathering into increasingly larger groups, from *individual* existence towards the *Whole*, by the power of the all-pervading forces of nature of different kinds. Of course, economics and technological advancement played their parts too.

First was the isolated *individual* scavenging Hoo struggling to survive against the forces of nature. After the Hoos had gained some knowledge and control over the elements, *family* came into being. After they learnt agriculture, settlement at a given place became possible. *Families* gathered into early rural communities. Then *villages* developed into *towns*. Eventually, economy and security of greater numbers gave rise to *kingdoms*. Kingdoms evolved into nationhoods, the present phase through which the Hoo race is passing. Often this larger picture of the ongoing socio-economic political ascent of the race remains unnoticed. It is taken for granted as if the *nations*, as great and as functional as they seem to be, will remain forever.

But *anything that has a beginning and is subject to change must also have an end*. This seems to be an unerring rule of nature. As the various *nationalities* cherish their individual identities, their interdependence is coming to the fore, in degrees. Already groups of *nations* are associating into regional and pandemic collectives of different kinds, based on varied compulsions and intentions. Already there is an indication towards the union of the *Whole*.

Now, coming to the evolution of the Hoos' internal psychic space, a similar but subtler move, from identification of the self with the *individual* towards that with the *entire*, may be observed. This move from the *unitary* towards the *universal* is guided by, at times manifest but often subtle, power of all-pervading Love. But the impressions of the past and the present partial existences persist, and psychologically render the race retrograde. Today an average Hoo consciousness simultaneously carries the impressions of being an individual, a family, a community, a village, a city, a nation as well as a faint awareness of the *Whole*. Interestingly, often the identification of the self seems to be the strongest with the smallest entity, the individual, and gradually weakens as the size of the group, with which one attaches the self, increases...

Consequences of disharmony: Effects

Coming back to Earth, should humanity continue to carry on the past and present '*partial perceptions*' and thus, incessantly continue to bear the ill effects thereof? '*Partial perceptions*' lead to '*fractional identities*', which, in turn, gives rise to psychologically harmful and externally destructive '*intolerance*'. A '*fractional identity*', to which an individual is psychologically attached, makes the individual consider the people with the same '*fractional identity*' as her/his own people belonging to her/his '*In-group*'. Consequently, the individual perceives all the other peoples who do not share her/his '*fractional identity*' as outside her/his own group, i.e.

belonging to her/his '*Out-group*'. Thus, the '*fractional identities*', through the development of this '*We versus Others*' feelings, fragment the Human race into myriad fractions, which are anything but the *Whole*.

Even though we may not always realise it, the impressions of the '*fractional identities*' reach and remain deep in our subconscious psychological levels, to which we have little access and almost no control. But these subconscious impressions of the '*fractional identities*', nevertheless, continue to mould, shape and control our thoughts, words and actions.

'*Fractional identities*' inevitably led to most of the feuds, battles, displacement of peoples and genocides that Humanity has witnessed till date. We have already fought two World Wars; a third has the potential to nuke the planet to annihilation. Are we, as intelligent living beings, not capable of taking the reign of our destiny in our own hands?

A remedial approach to accelerated harmonisation

With almost nothing to counter the fission effects of our ascribed and/or imbibed '*fractional identities*', we need to establish a viable system, a new stream of thought and education that may be named "Human Harmony", that simplistically puts forth the simple reality of the existence of the entire Human race as a *Whole*, on the planet Earth, which we may call our home, the only home we have so far till date. However, the focus may be on the all-encompassing Human Harmony itself, and not merely on the name. Otherwise, as deceptive as a name can be, "Human Harmony" may end up representing a group with certain limited ideas, which will be anything but the *Whole*. The key is to remain connected to the *Entire*, and to highlight and showcase the all-encompassing *Whole*, accommodating all the component *diversities* therein; and to constantly remind ourselves of our collective *common destiny*.

Another very important thing to remember is that, *external* cosmetic adjustments may be good for adaptations and they may even seem to be functional in resolving some of the *external* symptomatic disorders caused by disharmony; but such *external* cosmetic adjustments can hardly cure the real disease within, the *internal* psychological fragmentation of the Human race caused by the '*fractional identities*', which are, again, the outcome of the '*partial perceptions*'.

Let meritorious scholars as well as people from all backgrounds come forward to engross themselves in the meditation and realisation of the *Whole*. Let them realise the significance of each individual or group being an apparently tiny but unique and potentially enormous wave, an essential part and parcel, of the ocean of Humanity. Continued learning in any field of knowledge, sooner or later, leads to the expansion of the consciousness. So, *through Philosophy, History, Economics and Science, through all knowledge and wisdom, humanity may eventually arrive at the awareness of its own Oneness* (Das, 2015).

Then, having realised the *Whole*, the harmonisers may reach out availing themselves of all possible avenues, like post-modern missionaries of a new kind, and share their expanded consciousness with the world. If we start this process now, Humanity may reach

harmony as early as in three generations' time, i. e. about seventy-five years. It is said to take three generations' time for such a change to effect.

In this regard, let us draw another reference from the book '*The extra-terrestrial delivery*' (Das, 2016). Kit, the protagonist in the Fiction, calls upon his fellow alien Hoos,

"*World Unifiers*, individuals and groups of all kinds, who have ever felt yourselves to be,

One with the *Universal Soul*, that is, one with the *Whole*

Capable of manifesting that *Universal Soul* in every aspect of this external world

Not fragmented by the narrowed down limited notion of the *Self* being the body, or any other form like gender, class, community, village, town or nation

Freer than those who are compelled to relinquish the freedom of their *Souls*, to give vent to their zeal towards coveted positions of power of social, political or economic importance

The ones who have overcome the basic selfish desire to rule and the lust for power, and instead aspire for excellence and service to all

Beholders of the *vision of unity*, and therefore bringers of the *internal psychic union* of the race

"unite.

"Because your unity shall mark the first layer. And augment, reinforce, complement and supplement those forces of unity, which shall, sooner or later, lead the race towards that destiny of a more perfected global existence. These unifying forces, covertly or overtly, subdued or manifested, have always been there and shall ever be. Therefore, we are bound to reach that destiny. It is only a matter of time. But is it not better sooner than later? Because with the alleviation of each difference, the race is blessed and bestowed with such wonderful benefits, like peace and harmony, which forge the race light-years ahead in the path of our ascent and our freedom.

"If you cannot accept each other as you are, surpassing and transcending the differences among yourselves, then what can be hoped of those who are yet to feel the need and realise the wisdom to unite.

"Therefore, hey *World Unifiers*, in spite of your own external differences, be bold and have faith in your inner call. First, unite yourselves. Even if you find yourself fewer in number now, or for that matter, if you are presently compelled to walk the path alone, do not be afraid. Do not be hesitant and do not be overwhelmed by the presently stereotyped majority. For in your heart and in your head, you hold the light that shall usher in the glorious future that awaits the race."

After a brief pause, Kit continued, "There are agencies and faculties which have been at work for this unification, as have been the dark and negative divisive forces. Significantly, but quite naturally, even these faculties of unification have grown distinctions fuelled mainly by their respective unique peculiarities, the time and place of their respective origins, and the courses of their respective developments.

"The challenge that lies before each of these unifying faculties is to preserve the fruits of its own development on the one hand, while opening its heart to be receptive and accommodative to those of the others on the other. *Organic* growth from within any of these agencies may be painstakingly slow and, sooner or later, bound to reach a saturation level well before realising the ultimate goal of *unification of all*. It may be the right

time to expand *inorganically*, through *Collaboration*.

"A singular set of generalised rules may prove defunct. A singular world order may be an unnecessary ideology. It may prove to be a futile intellectual exercise, relativity of Truth itself being dynamic and susceptible to change with respect to time, place and context.

"The knowledge, understanding and realisation of the Truth may be cause enough for the unification. The Truth is not very hard to find. In fact, it is already known. No matter in how many different ways we have been programmed ever since our births, to identify ourselves in the name of tradition, convention and even culture, the Truth remains that we all are, after all, one species, one Hoo race. The sooner we come to terms with this inescapable and basic reality of our existence on this planet, which we may call our home, the better.

"What is required is to ensure to the new-comers and to those who are yet to arrive, yet to be born, the *freedom* from the '*bondage of the ascriptions*': The rest of us, in some way or the other, consciously or more often, subconsciously, have already been soiled by these ascriptions. Let us not pass our contamination unto the new-comers without giving them a chance to think for themselves. What right do we have to such perpetration?

"Let us struggle against *forced branding*. Let us allow the newcomers to acquire knowledge and to grow up in an ambience free from forced dogmas. After they grow up, they may choose which path they want to follow, irrespective of their parentage.

"Most importantly, let us, all the Hoos, wake up to our universal existence as a Whole."

Kit's delivery proved to be an eye-opener for the audience. While they quietly soaked up the rich wisdom, Kit remained silent for a while. Then he went even further and enumerated the possible steps for the *World Unifiers* to unite. He suggested, "Let there be *interactions*."

"Firstly, through *Communication*, we may open up the door to mutual understanding and to mutual appreciation. This will prepare us for the next step, *Cooperation*. Through *Cooperation* shall grow goodwill and friendship. Then, it will have already become easy for friends to *Collaborate*, which is the third step. Thus, *World Unifiers* augment the ever accumulating forces of unity."...

A wonderful example of international collaboration is Sino-Aussie Unique Collaboration Centre for Education Study and Service (SUCCESS). This Sino-Australian initiative apparently transcends all the socio-cultural, political, economic and other diversities, and inclusively accommodates the same, through comparative studies and the resultant mutual understanding and appreciation. Endeavours like this effect people to people, culture to culture contact and exchange, enriching and expanding the consciousness of the participants, an enormously significant step towards global harmony.

Apparently, there are many other sub-national, national, international, public, non-governmental as well as individual, some well-known, like the United Nations, and perhaps many relatively unknown, entities who, in their respective unique ways, envisage the vision of a Harmonised World. In order to accentuate the harmonising forces and to accelerate the harmonising process, each of these harmonising entities, individuals and groups of various kinds, may go beyond its own limiting finiteness. We require a

global open and inclusive platform where every harmoniser is free to add to the cause of Human Harmony.

Of course, it may not be that everybody is waiting to lap up the vision of a Harmonised World. Some people, who are psychologically expanded and open to new ideas, will. Some others, perhaps bogged down with the worldly affairs of their day to day lives, may show indifference. While yet others, the no-changers and those whose vested interests may be adversely affected by Harmony, may even oppose the move. We may start with the people who are already expanded in their outlook or are willing to expand their consciousness to encompass the *Whole* of Humanity. Then, taking one step at a time, we may move ahead from there.

Conclusion

Some of the possible fruits of harmony

It's definitely worth the toil to harmonise, because the benefits of a Harmonised World are not very difficult to conceive. Here are just a few.

1. A Harmonised World will not only bring peace and prosperity to the race, but also require reduced means for war. Even a mere 10% reduction in the global annual military expenditure of about 1.75 trillion USD (e. g., Shah, 2013; Perlo-Freeman, Fleurant, Wezeman, & Wezeman, 2016) may leave surplus resources of about 175 billion USD per year, enough to alleviate extreme poverty on Earth (e. g., Riley, 2014; Anielski, 2016). So long as poverty remains, there can be no peace on the Planet.

2. In a Harmonised World, the terrorist will find little place to hide and operate from, thus further enhancing peace.

3. When, at least a majority of the seven billion strong Human race is psychologically expanded and inclined towards the *Whole*, the deterioration of the global environment will be easier to tame with the open-minded global initiatives.

4. Harmonisation can effectively reduce the risk of that third major war, which can potentially nuke the world into oblivion.

5. Improved international relations will further promote trade, which is always good for all the parties.

6. A Harmonised World would be immensely conducive to a psychologically healthy human existence.

Presently, all the above benefits and many more are not accruing to us, Humanity, mainly due to the reason that we continue to be impaired psychologically by the *'partial perceptions'*, which we have inherited inadvertently from the unavoidable past. But we can surely try and work in the present to rid our consciousness of these

narrow *'partial perceptions'*, and thus, expand towards a much more perfected Global Human Harmony, in the not so distant future. So, let's reiterate Kit's words- *Hey World Uniter, individuals and groups of all kinds, unite*. The sooner we do, the better for us.

References

- Anielski, M. (2016) "The real cost of eliminating poverty in 2016." Retrieved November 21, 2016, from <http://www.anielski.com/real-cost-eliminating-poverty/>
- Das, S. (2015). "Oneness of humanity." Retrieved November 21, 2016, from <https://twitter.com/HumanHarmony1/status/591611987735416832>.
- Das, S. (2016). *The extra-terrestrial delivery*. Chandigarh: White Falcon Publishing.
- Pelech, S. (2016) "Scientists discover an ancestral 'life gene' found in all living things - and without it we would still be slime." Retrieved November 21, 2016, from <http://www.dailymail.co.uk/sciencetech/article-3474723/Scientists-discover-ancestral-life-gene-living-things-without-slime.html>.
- Perlo-Freeman, S., Fleurant, A., Wezeman, P.D., & Wezeman, S.T. (2016) "Trends in world military expenditure, 2015." Retrieved November 21, 2016, from <https://www.sipri.org/sites/default/files/EMBARGO%20FS1604%20Milex%202015.pdf>.
- Riley, E. (2014) "How much money would end global poverty?" Retrieved November 21, 2016, from <http://www.borgenmagazine.com/much-money-end-global-poverty/>
- Shah, A. (2013) "World military spending." Retrieved November 21, 2016, from <http://www.globalissues.org/article/75/world-military-spending#WorldMilitarySpending>.
- SUCCESS, "Your success is our mission." Retrieved November 21, 2016, from <http://huaxiapenrith.wix.com/aussiesinostudies>.
- Theobald, (2010) "Do all living organisms on Earth share a common ancestor, or did life begin more than once?" Retrieved November 21, 2016, from <https://www.quora.com/Do-all-living-organisms-on-Earth-share-a-common-ancestor-or-did-life-begin-more-than-once>.
- Wigler, M. (2016) "Living things share common genes." Retrieved November 21, 2016, from <https://www.dnalc.org/view/16834-animation-40-living-things-share-common-genes-.html>.

The Affinity to the People: the Distinctive Feature of Marxist View of Power

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Abstract: The paper examines the affinity to the people inherent in the Marxist view of power regard to the following aspects: the subjects of power, the objectives of power, and the withdrawal of power. The affinity to the people of the power subject is concretely manifested in the two respects: the power for the people and the power conferred by the people's supervision. People's benefits are supreme and everything should be based on the most people's benefits and start with the people's fundamental interests, which are the highest generalization of the objectives of power about the affinity to people. The withdrawal of power about it connotes that people take back the power and the reclaim of power relies on the people.

Key words: Marxist view of power; affinity to people; proletariat; feature

1. Introduction

Generally speaking, stance determines opinions. That is to say, people who investigate the same thing standing from the stance of different individuals or groups tend to form the mutual different or even contradictory opinions. There is no exception including the Marxist view of power, a general view on the power derived from Marx. Marx always firmly takes up the standpoints of the masses to deliberate a series of problems, like the source, ownership, nature, characteristics, operation and supervision of power, then to form a systematic and theoretical view of power. The Marxist view of power has its alluring charm of the affinity to the people, which is revealed through its unique narrative style and discourse system. It is the distinctive feature that can make a distinction between the Marxist view of power and the non-Marxist views of power. "Whether it always stands on the position of people, whether it is on behalf of the fundamental interests of the masses, is the touchstone to distinguish the true or false Marx".^[1]

The affinity to the people, a kind of political stands, is a political consciousness to ponder issues in the people's stand. What are people? In the different contexts of Marxism, people have different concrete connotations. In the most general sense, people are "person engaged in the practical activities"^[2], which means they have the basic necessities, such as eating, drinking, living, travelling, and so on, thus they work in the material production to satisfy those needs. In the class society, people can be mutually commensurate with the concepts, like "the ruled class", "the exploited class", and "the oppressed class", whereas in the capitalist society, people often refer to the governed class, such as "modern workers", "peasant", "proletarian" or "petty bourgeoisie". In many concepts of people, Marx believes the proletariat is the very core part of it. In this sense,

the affinity to the people is prominently represented by the supremacy of proletariat.

Fundamentally speaking, affinity to the people of Marxist view of power is determined by the historical mission and the substantial characteristics of Marxism. Marxism is "a scientific theory for the proletariat to fight for its own and universal emancipation is a doctrine about the nature, purposes, emancipatory conditions of the proletarian struggle",^[3] science about "the conditions, process and the general results"^{[4][44]}, whose historical mission is to instruct the proletariat to win the liberation and help them overthrow the authority of bourgeoisie by means of violence and establish their rule"^{[4][43]}. In the words of power, it guides the proletariat to seize the state power of bourgeoisie, and deprive the power to enslave others' labor by virtue of the occupation of social products. The historical mission of Marxism determines the affinity to the people of the Marxist view of power.

The affinity to the people is also decided by the nature of Marxism. "The unification between the class character and the affinity to the people" is the most essential feature^[5]. Marx distains to conceal the class character of Marxism, which has been publicly explained in the programmatic document, *The Communist Manifesto*, marking the birth of Marxism. "Recently, the communist has the same purpose with the other proletarian parties, that is, to make the proletariat become class, overthrow the authority of bourgeois and seize the political power". It highlights the orientation of fundamental value that it severs for the proletariat and the masses. "All movements in the past are the movements of minorities or in the interests of minorities while the proletarian movements are the independent movements of the immense majority, in the interest of the immense majority". Hence it can be seen that the grasping power of the proletariat is basically to work for the interests of the masses.

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The Marxist view of power is of profound meaning about the affinity to the people. The affinity to the people of it is mainly represented in the following aspects:

2. The affinity to people of the power subjects

From the perspective of Marxist philosophy, the concepts of subjects refer to the people with the cognitive and practical ability about the objects. The power subjects are the initiators who create power and use it as a tool or means to carry out political activities. In Marx's opinion, the power subjects reflect the distinctive affinity to the people. Concretely speaking, it is mainly presented that the power is given and supervised by the people.

2.1 Power is given by the people- "Whose power"

Where is the power from? Medieval theological thinkers claim that all the power is endowed by God. Modern contract theorists deem the power derives from contract, while Marx expresses the power comes from the people, and is given by the people, as he puts in *The Banquet of Gul Cen Nig* "the only source of all legitimate power is the people of sovereignty".^{[6]695} It implies double meaning as follows: first, the power subjects can be divided into the power owner and the power exerciser. "The power owner" means "all powers belong to People". People are the giver of all powers including the highest power, as Marx once said, "People occupy the highest power, the so-called power that is endowed by people to the king"^{[7]543}. The power of people is supreme, for the power of king is given by the people; second, the power exerciser is equivalent to "the person who wields the power given by the people". All powers in the power exerciser's hands are from the people. "The whole power conferred by people in the original chief meeting is differentiated and gradually formed a variety of power"^{[7]514}. The relationship between the power owner and the power exerciser is like "source" and "flow". There are many disparate methods but the final goal remains the same. The power operated by the various power exercisers originates from people. Logically, the power exercisers are from people, who are a part of people. The power subjects are unified in people. However, in the history, the relationship between the power exerciser and the people varies with the revolution of the social economy.

After studying anthropology, especially Luis Henry Morgan's *The Ancient Society*, in his later years, Marx expounds that the power firstly originates in the primitive society. At that time, the power exerciser is identical to the people, essentially a part of people. All the power exercisers, including the chief, sachem, and the guardian of faith, are elected by the people in their clan. There is not a fraction of difference between their benefits and that of the masses. They work on the production activities together with the people and equally share the fruits of labor. Marx purports that "The chief (removed his function as the clan's leader) doesn't have the power to control the others and to dominate the land."^{[7]487} There are no any privileges except the power in the functional scope. In this sense, they are undoubtedly the servants of the people in the clan. The

power in their hands is used for the common interests of the clan's people without the color of the selfish desire or service. Nonetheless after entering the class society, the internal consistency of moral between the design of power and the operation of it has been relentlessly dispelled, and the equality of the power exercisers and people on the personality and position has also been destructed. Then their opposition of the interests has been highlighted. "This is a common private ownership of the positive citizens. They have to save the joint form spontaneously produced in the presence of slave. Hence, the whole structure of society built on the basis of it, as well as the associated power of people, tends to decline gradually along with the development of private property ownership"^{[8]521}. Despite the power still belongs to the people at this time, the social status of the power exercisers goes beyond the elites of the people, reversely becoming the ruler, enslaver and oppressor of the people, who are from the original servants to the lord domineering over the people. Then an impassable chasm has been built between the power exercisers and the people. The original homoousia between them is broken. The power exercisers are towards the opposite of the people, converting into the enemy of the people. Of course, only when the proletariat conquers the bourgeoisie and seizes the power of the latter can the power exercisers and the people head down the same path. After analyzing the Paris Commune, Marx claims the power exercisers are going to be the servants of people and the oppressive organs of old regime are to be eradicated, whereas the reasonable functions of the old regime will be taken over from the authorities surpassing the society and be returned to the servants who take the social responsibility"^{[9]156}. By then, the power exercisers (servants) will have still been a part of the people.

2.2 Power is supervised by people: Who will supervised it?

Who will supervise power? Is it God? No. Is it the exploiting class itself? No. Is it the power exerciser? No. Marx purports it is people who supervise power. "Power is controlled by people." People are the subjects of the power's supervision. In Marx's opinion, people began to become the master of their lives after the proletariat builds the national regime. However, owing to the limitation of reality and the existence of the labor division, the people also can't "present themselves in person, and act according to own independent power"^{[10]305}, and they have to entrust a part of civil servants on behalf of themselves to use power. Although they are most from the people, "most of them naturally are workers or recognized representatives on behalf of the working class", but there still exists the possibility of separation between them and people after all, so that they do not represent the people, even turning into the opposite of the people. Therefore, the possibility of being the enemy of people can be observed. To this end, the power exercisers must be supervised by people. Marx believes that the people's supervision of the power exercisers is mainly through the general election, the removal from office, the publicity of government affairs, the abolition of privileges and official allowance. The general election is an effective means of monitoring. "In Marx's opinion, universal

election itself is an important form of power restriction and supervision.”^[11] Marx puts “Judges, like other public servants, will be elected, accountable to the electorate,”^{[9]155} If civil servants are irresponsible for voters, people won't choose him again, and he also will lose the opportunity to exercise their powers, which is a unique thought of Marx that people have the right to supervise the civil servants' power. The removal from office to the supervision is more direct and effective. Marx emphasizes in *The French Civil War* that people can be “ready to recall” all civil servants, while “the commune would sack and arrest his own generals who have a slight negligence.” “The commune has sacked and arrested a member of the commune with a false name who has been imprisoned in Lyon for six days only because of having no ability to pay.” “Sunlight is the best preservative.” The publicity of government affairs is also an effective response to the people's supervisory powers. Marx lays an emphasis on the importance of the publicity of government affairs. “Commune, unlike all the old governments that declare they will never make a mistake, publishes all the words and deeds. Moreover, it makes the public know all the disadvantages of them.”^{[9]164} “Let the power operate under the sunshine.” It eliminates all possible “shady operations” to enable people to oversee power effectively exercised. The abolition of privileges and official allowance will break the idea that public servants can make their fortune through the public power. Marx expounds, “From the commune members to all public officials can only receive the payment equivalent to that of the workers. All the privileges and official allowance enjoyed by the high officials of a country in the past are disappeared with the disappearance of the characters.”^{[9]154-155}

3. The affinity to people of the power objective

Taking the fundamental interests of the masses as the foundation, insisting that people's benefit is supreme, starting everything from the point of the people's fundamental interests of the masses and serving the people wholeheartedly are the basic value principle of the Marxist view of power and the highest embodiment of its essence.

The power objective is the result that the power desires to achieve. The power subject is people. Then, what is the purpose of people to create the power? For whom do people delegate the power to the power exerciser? Is it for harming the people? No. Is it for a certain class except the people? No. Marx deems that the objective of people's creating power and delegating the power to the power exerciser is to realize the fundamental interests of people, as Marx says in *The Bourgeoisie and the Counter-revolutionary* “In the revolution, what it really means in people's mouth is that: when the bourgeois organizes the committee of public safety, we hand power to the committee, which is not to reach an agreement with the royal power on behalf of the bourgeois interests, but to defend our interests, the people's interests in defiance of the royal power.”^{[10]130} This is the most explicit expression of the affinity to people of Marxist view of power. This important statement of Marx tells us

that all power is given by the people, not to achieve the special interests of a particular class but to be exercised in order to defend the interests of the people.

The affinity to people of the Marx's view of power starts with Marx's ultimate concern for human destiny and the fundamental interests of the people. In Marx's opinion, the development of social history is the unity of the truthfulness and the valuableness, and the unity of the regularity and the teleonomy. Marx always put the people's interests first, particularly pointing out in the *Communist Manifesto* that all the fundamental purpose of the communists is to serve wholeheartedly for the interests of the proletariat. “They do not have any different interests of the whole proletariat”^{[4]44}. Pertaining to the use of power for the benefit of the “enemies of the people”, Marx mercilessly criticizes it. Because “the enemy of people” has a personal and class distinction, Marx's critique falls into two categories:

The first category is to criticize the act of obtaining the personal gain by the power. As early as the period of *Rheinische Zeitung*, Marx examines the act of stealing wood, having found that the administrative chief of town abuses their power “to seek benefits for the forest owners”, ignoring the interests of the poor who pick up the dead branches, and this kind of power “has been descended as a means to protect the private and a tool to maintain the private interests.”^[12] Marx has aggrievedly expressed, “in the whole national system, the functions of the various administrative agencies should be derailed from the routine, which can finally become the tools of wood owners so as to make the interests of the wood owners turn into the soul controlling the entire organization. All state organs should become a forest owner's ears, eyes, and hands and feet, to inquire, peep, value, guard and work hard for the interests of wood owners.”^{[13]267} The power exercisers consider “wood owners” as the “God”, and neglect the interests of the people completely. Hence, the bourgeois state power's non-affinity to people can be perceptible. In *The French Civil War*, Marx severely criticizes Thiers who is full of resentment for Gizzo let him have no public office and fortune in a long term. Thiers is a typical figure who seeks private gain through the power in a capitalist society. “In order to make French avoid the imminent financial collapse, he takes the first measure, which stipulates to give him the annual salary of 3 million francs.”^[14] In his political career for many years, he never does a thing with even the tiny little practical benefit. Thiers always does not forget just the greed of wealth and hatred for the producers. When he has been first elected as the cabinet's prime minister of Louis Philippe, he is as poor as Job. However, when leaving the office, he has become a millionaire... He has been publicly accused of embezzlement in the House of Representatives”^{[9]138}. As the prime minister who has the power, Thiers' insatiable appetite for wealth contrasts sharply with his hatred for the people. In the evaluation of Augustus in *Is Augustus's Fuhrer a Happier Time for Roman Countries?* Marx pointed it out succinctly that “as for the factions' disputes happened in the era before the Punic wars, they have also been ended, as we

can see. Augustus has changed all the factions, the titles and the powers into his own thing and thus the contradiction of the highest power itself will not occur. Otherwise it may bring the greatest danger to any country. In that way Augustus's prestige in the eyes of foreign nationalities will be declined, which implies that his tackling the national affairs is simply to obtain the personal gain, rather than for the welfare of the people."^{[13]463}

The second one is to criticize the pursuit of the bourgeois private interests. In the bourgeois society, the bourgeois powers, including the property rights or the political power, are essentially the tools to maintain and protect the special interests of the bourgeoisie. "The relationship of modern bourgeois property depends on the state power to be maintained. The bourgeois has founded the state power so as to defend the relationship of their property"^{[14]331}. "The bourgeois and all members of the bourgeois society are forced to combine into we, the legal person, the state, in order to ensure their common interests, and thus they can endow a few people with the collective power for the division of labor requires to do that"^{[15]413}. These two significant statements of Marx expostulate with us about that the bourgeois state power is essentially the tool to achieve their common interests. "The foundation of the parliament's supreme power and the construction of laws and regulations are undoubtedly to maintain the benefits of the owners."^{[16](P74)} Under the domination of the power, the proletariat is in the status of being ruled, exploited and enslaved, not to mention the interests of people. These attitudes to criticize the act of using the power to gain the personal interests for the people's enemies reflects the distinctive feature of the affinity to people in the Marxist view of power.

4. The affinity to people of the power withdrawal

Withdrawal, a philosophical category, is also called "resetting", "revivification" and "backtracking". It signifies the resetting, revivification and backtracking of a certain thing changed from the state changes to its original state. In the philosophical sense, it refers to "the affirmation of negation of negation". The so-called affinity to people of the power withdrawal, is meant to the regression of the condition where the power dose not belong to the people in the capitalism, not in order to realize the interests of the people as its target to the original and natural state where the power is mastered by the people and executed to serve for the common interests of the people. In particular, it represents in the two aspects, withdrawing the power for the people (for whom) and relying on the people to withdraw the power (by whom).

4.1 Withdrawing the power for the people: The people take the state power back again

For whom is the power taken back? For the people and the liberation of the people. As mentioned earlier, the power was born in the earliest primitive society where the power is undoubtedly worthy of people's power, but after entering the class society, the power, far from the people's power, has turned into a "usurped power" by the

people's oppressors, and become the oppressive forces to object and combat with people. In essence, it has become "a kind of organized violence of one class to oppress another class",^{[4]53} monopolized and executed by the ruling class. The majority of people are living in the "inhuman" life under the domination and slavery of the power, and "the nature of man" is in full "alienation". It can be assumed that in the class society, power is only the tool to achieve the interests of the particular class (named "the enemies of the people" by Marx). It is impossible to realize the common interests of the people. The ruled class with the vast majority of the population has been bound to lie in the circumstance where they are ruled, enslaved and suppressed by the political power. The liberation of the people is a systematic project, but the first and foremost thing is to withdraw the power of the ruling class, which is originally the power of the people. Marx expostulates in *The Communist Manifesto* that "every class struggle is a political struggle", while the core of the political struggle is the issue of the state power. Marx gives an enthusiastic praise to the Paris commune and considers the commune as a great attempt to reclaim the power for the people. He holds that, "commune - it is the society that takes the state power back to change it from a force to govern and oppress the society into a social force full of vitality; it is the people who withdraw the state power, and form their own power to replace the organized force oppressing them; it is a political form for the people to accomplish the social liberation, which takes the place of the spurious social force of the people's enemies to oppress them (i.e., the power usurped by the people's oppressors) (formerly the power of the masses, but organized to be against and combat with them)"^{[9]195}. The argument of Marx reflects that the first condition of the people's liberation is to take the power back from "the enemies of the people", and then master and use it. The force to "oppose and fight against" people has been converted into the rebellious one to suppress the "enemies of the people".

4.2 Relying on the proletariat to withdraw the power: philosophy regards the proletariat as its own a material weapon

Who will withdraw the power? Depending on the people, concretely is meant to depend on the proletariat in the capitalist. There is no doubt that Marxist philosophy is essentially practical materialism, whose essential feature is practice, and it repeatedly emphasizes that the world should be changed in practice. "Philosophers simply interpret the world in different ways, and the problem is the change of the world"^{[8]506}, but who should "be depended on to change the world"? "I would reinvest the old characters with redness. There is no more the head of state and civilian. I would whip up a storm in the ink bottle". Romantic philosophers argue that such "change" can be achieved in the ideological field. Utopian socialists are also struggling to find the true forces to repossess the power. But with the restriction of the historical conditions and idealist conception of history, they can not realize the great revolutionary power of the proletariat. Marx evaluates that "they are ignoring the historical progress of the proletariat and still persisting in the old ideas of their teachers"^{[4]64}, and pin their hopes on the "benevolence" of the bourgeoisie. As a result, the thought about withdrawing the body of the power can only

be stuck in the “utopia”. Marx assumes that “changing the world” requires at least two weapons: the spiritual and material weapons, which are both indispensable and necessary. The “spiritual weapon” that Marx defines refers to philosophy, whereas the “material weapon” is the proletariat. “Philosophy considers the proletariat as its own material weapon, likewise, the proletariat takes the philosophy as its own spiritual weapon; once the lightning of thought thoroughly hits the plain land of people, the Germans can be liberated as a person”^{[8]17-18}. In terms of withdrawing the power, the proletariat is its “material weapon”. Without it, the so-called withdrawing the power will inevitably lose the support and the source of motive force. Marx truly solves the problem that the utopian socialism is incapable to tackle from the perspective of historical materialism, figuring out that the authentic material weapon or the body force to withdraw the power is the proletariat.

Why can the proletariat withdraw the power? Or is the subject of the power’s withdrawal necessarily the proletariat, not the other class? The reason is that the proletariat is the only real revolutionary class at that time. Marx points out “among all the classes that are antagonistic to the bourgeoisie in the current time, nothing but the proletariat is a really revolutionary class. The rest of the classes are gradually decaying and finally disappear with the development of the modern industry, while the proletariat is the product of the industry itself”^{[4]41}. In the eyes of Marx, the proletariat is a class the most heavily ruled, enslaved and suppressed by the bourgeois state power, a class which is “completely put on the chain”, and a class which “suffers the universal misery”. Therefore, it is a universal class. “If it can not be liberated from all the other social fields to liberate all other social areas, it will not be able to liberate its own field”. It “can only reply itself through the people’s complete reply”^{[8]17}. In a capitalist society, in order to remain the contradiction and conflict between the bourgeoisie and the proletariat within the scope of the “order”, to avoid perishing together in the long-term intense class struggle and carry out the production smoothly, the state power of the bourgeois state power appears, which is the organized violence to enslave, oppress, and rule the proletariat. The proletariat has lived an inhumane life under the bourgeois state, and the nature of human has been completely alienated. Only when the proletariat overthrows the bourgeois ruling through the revolutions and grasps the new regime by its own strength can it lay a foundation for the liberation of the proletariat and mankind. At the end of *The Communist Manifesto*, Marx makes a thought-provoking prophecy, “in the revolution proletarians just lose their chains. However, they will gain the whole world”^{[4]66}. Only the proletariat is the real and single power to accomplish the withdrawal of power. If the real power of the proletariat can not be realized, or the proletariat can not be wholeheartedly relied on, the dream to withdraw the power will inevitably become the fantasy.

To sum up, whether it investigates from the perspective of the power subjects, the power objectives or the power withdrawal, Marx

is standing on the position of the people from the beginning to the end, whose conception reflects the distinctive affinity to the people. The following basic conclusions are self-evident: the affinity to the people is the most distinctive feature of Marxist view of power, and also mainly represents the essence of it.

References

- [1] Ai Silin, Wang Guixian. Nationality, particularity of times, affinity to the people and the development of the Marxism [J]. *Journal of Jsinghua University (Philosophy and Social Sciences Edition)*, 2008, (S1): 8.
- [2] Mou Chengwen. The Marxist view on the masses and its philosophical revolution [J]. *Chinese Social Science*, 2012, (2): 9.
- [3] Wang Tinghua. The essential generalization of the Marxism: the science of the proletariat struggling for the liberation of itself and the mankind [J]. *Political Studies*, 2011, (1): 27.
- [4] The Works of Marx, K. and Engels, F.: Volume 2 [M]. Beijing: People’s Publishing House 2009.
- [5] Yao Hongyan. Affinity to the people: the essential feature of the socialist core values [J]. *Morality and Civilization*, 2012, (6): 99.
- [6] The Works of Marx, K. and Engels, F.: Volume 6 [M]. Beijing: People’s Publishing House 1965.
- [7] The Works of Marx, K. and Engels, F.: Volume 45 [M]. Beijing: People’s Publishing House 1985.
- [8] The Works of Marx, K. and Engels, F.: Volume 1 [M]. Beijing: People’s Publishing House 2009.
- [9] The Works of Marx, K. and Engels, F.: Volume 3 [M]. Beijing: People’s Publishing House 2009.
- [10] The Works of Marx, K. and Engels, F.: Volume 6 [M]. Beijing: People’s Publishing House 1961.
- [11] Wu Siyuan. A study on the Marx’s and Engels’ idea of power supervision and restriction [J]. *Reality*, 2008, (6): 23.
- [12] Zhang Shuang. The dimension of the affinity to the people on the Marxist national view—from the Marx’s debate and criticism in his youth [J]. *The Academic Exchanges*, 2013, (11): 10.
- [13] The Works of Marx, K. and Engels, F.: Volume 1 [M]. Beijing: People’s Publishing House 1995.
- [14] The Works of Marx, K. and Engels, F.: Volume 4 [M]. Beijing: People’s Publishing House 1958.
- [15] The Works of Marx, K. and Engels, F.: Volume 3 [M]. Beijing: People’s Publishing House 1960.
- [16] Christopher Hill, *The Puritan Revolution*, quoted from Howard Zinn, *A People’s History of the United States*, New York: Harper & Row Publishers, 1980.

The Ethical Concern Changes of Caring Ethics: The Caring Ethics for the Children of Migrant Workers in China

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Abstract: Due to history, economy, and culture, it is difficult for the children of migrant workers to integrate themselves into the city. Thus, they have become a special vulnerable group in the city, and have endangered the harmony of urban health, which requires us to convert the model of traditional caring ethics. This model needs not only the caring of parents, but also the ethical concern of the government, society, schools and teachers. The ethical care on the children of migrant workers should be guided by the concept of "goodness", follow the basic principles of "moderation", should be run through by the moral requirements of "sympathy", and cultivate the idea of "love" to the whole society.

Key words: care, ethical concern, natural concern, the children of migrant workers

1. Introduction

Since the reform and opening up, along with China's industrialization and urbanization fast pace, hundreds of millions of migrant workers moved to the city, seeking for work and development. For the healthy and a better future of children, many parents of migrant workers will bring their children into the city together. The style of floating population is changed from the original personal into a family-style. The children who followed working parents to come to the city are called "The Children of Migrant Workers". "According to the statistical data of 'National Education Development Statistical Bulletin in 2013' published by the Ministry of Education, the population of compulsory education students, who followed migrant workers, is 12,609,700 in 2013, increased by 938,000 from 2012, a growth of 8.03%, its growing numbers and growth are lower than 2012."^[1]Due to history, culture, economy and social discrimination, these children of migrant workers came to an unfamiliar city, while it is really difficult for them to fit into the city. Some of them are out of tune with the urban life, and even hostile to society and other people, which not only affect the physical and mental health of children seriously, but also destroy family harmony, endanger social stability and development.

2. The Dilemma of Children of Migrant Workers Cries Out the Conversion of the Model of Traditional Caring Ethics

The children of migrant workers came to the unfamiliar city due to their parents, the most important problem for these children is how to integrate themselves into the city, which not only includes the objective fusion of institution and rights, but also contains subjective integration of the culture and psychology. Due to history, culture, psychology, and social indifference, it is difficult for these children to integrate themselves into the urban society, which makes them

become a unique vulnerable group in the urban city. First of all, the system of household registration and student management is insurmountable threshold in the education system of city for the children of migrant workers. The inhabitants of urban register have many benefits that can not be enjoyed by non-urban dwellers, which exacerbates the inequality in opportunity and process between the children of migrant workers and urban children, and widens the gap between the two. Secondly, the economic conditions and the quality of their own parents have restricted the development of the children of migrant workers. The economic situation of most of the migrant workers families is relatively difficult, its income mainly to meet the basic needs of life. Thus, the parents have no time to care about their children's education, and even some parents felt guilty and spoiled their children to make up for them. Thirdly, the children of migrant workers can't adapt to the material and cultural environment of the city, leading to some of them to indulge themselves, or even do harm to the society. Most of the children are from remote and poor rural areas with inconvenient traffic and blocking information, and after the move, most of them lived in crowded and dirty sheds with their parents together, which is in sharp contrast with the surrounding high-rise buildings, resulting in a deep shadow and estrangement in their young soul. At the same time, the poor academic performance caused some teachers to treat them with indifference or discrimination, which exacerbated the children's self-esteem and lost, as a result, they gradually lose the confidence in learning, teachers, society and themselves.

The children of migrant workers is in a weak position in the city, the natural care of parents is far from enough to protect the physical and mental health of children, it requires the ethical care from other subjects to compensate for. First of all, from the perspective of responsible ethics, we should give these children with care and help. Every child is the hope and future of the country and the nation, the

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whole society has the obligation to care for their happy and healthy growth. Government, schools and other social organizations should give ethical care for these children based on “discharging one’s responsibility”. Secondly, from the theory of justice, it is a manifestation of social fairness and justice to strengthen the care for the children of migrant workers with a weak position. Rawls proposed second the principle---“principle of difference”, aims to preserve the interests of social resources allocation to the most vulnerable groups. Compared with the urban children, the children of migrant workers are often in the most vulnerable position of the society. Thirdly, from the perspective of caring ethics, our concern for the children of migrant workers is not only a moral affection, but also a moral compensation. Parents of migrant children make a great contribution and sacrifice to the lighting, landscaping for the city. Social members, who benefit from the development of the city, have moral emotions and moral responsibilities to make up for these children. Finally, from the perspective of “utilitarianism”, it is not only beneficial to maintain social stability, but also to develop the economy and achieve common prosperity for caring the vulnerable children of migrant workers.

It is difficult for the children of migrant workers to integrate themselves into the city. Thus, they have become a special vulnerable group in the city, and have endangered the stability and harmony of urban areas, which requires us to convert the model of traditional caring ethics. This model need not only improve the quality of natural concern, but also give the ethical concern to these children from the government, society, schools and teachers. Relative to the natural care, ethical care is more “ethical” and rational in the aspects of way, methods and content. First of all, ethical care is a kind of rational care with emotional infiltration. “Ethical care is based on natural care and rooted in emotional memories of natural care, which is a sense of morality that needs to be awakened and cultivated.”^[2] Secondly, ethical care is also a kind of spiritual concern that based on materials. material care is the most basic care, without it, spiritual care and ethical care are difficult to achieve or lasting; if there is no material care, ethical care is the moon of the water, the flower of the fog and a kind of Utopian-style care. As a spiritual concern beyond the material, the highest level of ethical care focus on the spirits of human beings, which is the value and ultimate goal of ethical care.

3. The Value Criterion on Ethical Care for Children of migrant workers

As the saying goes, “nothing can be accomplished without norms or standards”. Ethical care for vulnerable groups, including the children of migrant workers, must follow some moral principles. In the author’s opinion, aside from the moral principles of humanitarian and social fair and justice, ethical care for the children of migrant workers must follow “goodness, sympathy, love and moderation”.

3.1 Concept of Values: Goodness

People deeply feel that the cultivation of children should focus on not only knowledge and physical health, but also cultivating a

healthy and optimistic personality and building a positive attitude to life. In fact, the natural care of parents is far from enough to a child’s healthy and happy growth, it requires the ethical care from other subjects in our society. In the past, caregivers do not pay attention to the way of care, they often ignore the child’s rights and feelings, only considering their own subjective desire and preferences. They impose some of the care and service on the children, do some “evil” things in the name of “goodness”, do bad things with kindness, which is conflicted with caring ethics. Correcting the bad habits, ethical care is not the patent of the strong. This is not the strong to show their charity, sympathy and compassion, it is based on equal exchanges between the subject and the object. The main purpose of ethical care is to help the children of migrant workers to regain self-confidence and social identity, thus, to achieve self-harmony, harmony with others.

Therefore, ethical care is a kind of reciprocal and win-win relationship between the subject and the object. The main body of care is to care about and meet the object’s reasonable and legitimate needs in a fit way from the position of the caring object. While the object of care should agree and respond to the caring behavior of subject actively, and reflect themselves. Caring for the children of migrant workers is a kind of ethical care from the society, is a kind of requirement of positive morality to entire society. The ethical care for these children should be adhered to the value principle of “goodness” --- the ultimate principle, as the main body of morality, the caretaker is as equal and free as the caregiver. Caregivers should give the care in a fit way from the position of the object’s actual needs, it is necessary for the caregivers to achieve the care and help to the children with meeting their will and freedom. At the same time, as a caretaker, the children of migrant workers should have the ability of perception, adaptation and action to deal with their own situation and others’ caring.

3.2 Moral Requirements: Sympathy

Sympathy is a kind of social emotion that developed gradually from the practice of human long-term life, which is resonated to the misfortune and happiness of others, and thus, it affects one own attitude and behavior. In ancient China, sympathy stands for a kind of “compassion”, “non-action”, “universal love”, or a mixture of them. At the same time, the theory of sympathy is the cornerstone in ethical thought of Adam Smith, and it is necessary to build a moral society. Adam Smith believes that sympathy is a kind of special moral emotion and psychological activity. Adam Smith often expressed sympathy in its double meanings. On the one hand, he regarded sympathy as a moral sentiment such as showing mercy to others and caring for others; on the other hand, he regarded sympathy as dynamic psychological ability or process with considering the question on the others’ position.^[3] The ethical care for the children of migrant workers, from the perspective of main body, should conform to the moral requirements of “sympathy”, exchanging “sympathy” for “empathy” and “resonance”. Motivation transposition refers to a situation where the caring subject resonates to the situation of the caring object, and then appears the willingness of helping the caring object, then, the willingness strengthens to be

a tendency of action. "Caring ethics is principle ethics, its basic principle is that everything done is to establish, maintain or improve the relationship of care."^[4] Once a person takes into account the motivation transposition, his first motive is how to help the person who he really cares to go through her or his crisis, then thinks about the issues that "he or she is doing", "what he or she needs", "how to meet his or her requirements" and so on, and thus, according to the situation, makes the appropriate and specific caring behavior. Of course, the care to the children of migrant workers can't depend on the willingness of caregivers entirely, it also considers whether the caretaker is willing to accept this way of care, and considers what the effect is to the caretaker fully.

3.3 The Basic Principles: Moderation

Is there a limit to the ethical care for the children of migrant workers? Is it blindly given, caring and loving, or is it necessary to follow the basic limits or to grasp the limits of love? As the saying goes, everything should have a limit. Limit means that things should keep the essential limit, once beyond the unity limits between the quality and quantity, things no longer exist and then to be another thing, things changed. Thus, we should adhere to the principle of moderation, grasp the upper limit and the lower limit to prevent too much of a good thing in the process of carrying out ethical care. First of all, the lower limit of ethical care for children should be hold their most basic personal rights and health, such as the right to life and health, education, reputation, privacy, custody and so on. Secondly, the upper limit of the ethical care for the children should follow the rules of teenagers normal physical and mental growth. There are some common rules when teenagers has grown including the children of migrant workers. For example, in the primary school, they are in the period from the image thinking to the abstract logical thinking, and they focus on things with longer time and wider scope. It plays important roles that academic performance, peer interaction as well as teacher evaluation have done in their growth, therefore, to develop good habits, at this stage, combining with other incentives, ethical care should pay much attention to the persuading education; In junior high school, children are in the rebellious, physical and mental growth period, their observation and speculation have been improve continuously. Besides, they have their own judgment on things, and began to deal with the surrounding things with suspicion and criticalness. Thus, when children are in this period, parents and teachers should not obliterate their enthusiasm, but encourage them to improve their ability of cognitive, judgment, evaluation constantly. In high school, children develop their dialectical thinking, logical thinking in an all-round way. The width and depth of thinking can be improved remarkably, such as the way of analogy. At the same time, it is possible to pay attention to their own virtues and qualities, and evaluation from other people. At this stage, care and love should be focused on helping them to establish a healthy and correct outlook on world, life and values. The premise of care for the children of migrant workers should follow the rules of teenagers physical and mental growth, and should avoid some wrong ways, such as

interfering their words and deeds too much, or arranging all affairs for them, or spoiled them too much. Otherwise, they will lose the opportunities of healthy growth.

3.4 Ethical Goals: Universal Love

Mozi expressed his sympathy for the miserable situation of "hunger but no eating, cold but no clothing, sickness but no treating and death but no buried" and he thought that the main reason of this phenomenon was "no love" between people. Therefore, Mozi carried out the rules that the emperor should govern the world with the thought of "universal love", and appealed to that the rulers must "love the common people all over the world", "love emperors" and "love ministers", it means that the governor should be kind to all the common people in the world, and protect the interests of the weak. Particularly, the governor should emphasize that a old man, with no sons and daughters, has been served throughout his or her life; a weak and little orphan can grow up with the help of others. The theory of "universal love" of Mozi not only follows the humanitarian thought of equality for all, but also implements the thought of utilitarianism to the people and the world. Of course, in a turbulent society, the thought of "universal love" violated the interests of the ruling class, which makes it only to be a dream. In the socialist society with eliminating the battles among the classes, its essence is to eliminate the polarization, and ultimately achieve common prosperity, which calls on people of the whole society should be solidarity, mutual love, especially for vulnerable groups, including the children of migrant workers. If the children of migrant workers are still in poverty, it means that their basic requirements for survival, the right and justice can not be guaranteed, and the superiority of socialism will not show up, the core values of society will be difficult to achieve, as a result, the essence of socialism can not be reflected.

Due to historical traditions, economy and culture, and individuals, it leads to the children of migrant workers to be a special vulnerable groups in the city, endangering the stability and development of the city, and then, we need to change the traditional model of care ethics. The ethical care for the children of migrant workers should be guided by the values of "goodness", follow the basic principles of "moderation", should be run through by the moral requirements of "sympathy", and cultivate the idea of "universal love" to the whole society.

References

- Adam Smith. (2008). *Moral sentiment theory*. Beijing: Central Compilation and Translation Press, 37.
- National Education Development Statistical Bulletin in 2013. (2013). Ministry of Education of the People's Republic of China.
- Noddings, Nel. (1992). *The Challenge to Care in Schools*. NewYork: Teachers College Press, 21.
- Zhao, Q. &Luo, W. (2005). *Analyze on A New Theory of Contemporary Ethics: Care Ethics*. Jiangxi: Social Sciences Press.

Review on *Ginseng Empire: the Production, Consumption and Medical Treatment of Ginseng of Qing Dynasty* —Social history of medical treatment under the perspective of globalization

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Abstract: *Ginseng Empire: the Production, Consumption and Medical Treatment of Ginseng of Qing Dynasty*, written by the scholar of Jiang Zushan in Taiwan, is one of masterpieces in the research field of Ginseng history. In this book, the Ginseng history in Qing dynasty has been thoroughly studied through such historical materials as file in Qing court and monographs of Ginseng compiled in Qing dynasty and mainly from the perspective of history of medical treatment and material culture. It has illustrated the prosperity of Ginseng in Qing dynasty and provided positive significance for the study of social history of medical treatment in new times.

Key words: Ginseng history, history of material culture, social history of medical treatment, global view

1. Introduction

Ginseng Empire: the Production, Consumption and Medical Treatment of Ginseng of Qing Dynasty (hereinafter referred to as *Ginseng Empire*), written by the scholar of Jiang Zushan in Taiwan, was published by Zhejiang University Press in March, 2015. With the previous system history, political history and economic history of Ginseng carried out, such historical materials as files in Qing court and monographs of Ginseng of Qing dynasty were applied to make a well-round study on the history of Ginseng in Qing dynasty from the perspective of emphasis of history of medical treatment and material culture. A booming Ginseng empire was pictured, which is of great positive significance for the study of social history of medical treatment in new age.

2. The main content of Ginseng Empire

It has remained to be a detailed and reliable book for the study of Ginseng history of Qing dynasty as yet and acclaimed as a first-class book in the study field of Ginseng history. It is in this book that Ginseng, a well-known precious medicinal material, serves as an opening window that reflects a variety of problems related to politics, economy, society and culture of Qing dynasty.

It has looked back into and summarized the past studies of history of Ginseng on the whole by analyzing six themes, including the policy of Ginseng and Ginseng issues in frontiers of northeastern China in the late Ming and early Qing dynasty and the picking, selling, taxation, seeding and distributing of Ginseng. All these themes have aimed at reviewing the existing findings of Ginseng's politics (referred to the pages of 3-15). Despite of the engagement of academic circles to the history of Ginseng of Qing dynasty, there is

still a lack of a comprehensive study on the history of Ginseng in Qing dynasty as the previous studies have been mainly made politically and economically. They are characterized by highlighting policy of Ginseng of Qing dynasty, emphasizing on the exploration of digging of Ginseng and ignoring the circulation and consumption of Ginseng. Besides, they were concentrated on the description of system of Ginseng's policy with few combination of system history with medicine history. Thirdly, they have overlooked the relationship between commercialized Ginseng and warm-tonic Jiangnan culture. Fourthly, there are no completed materials related to the history of Ginseng, such as the deficiency of such materials other than files as monographs relevant to Ginseng. Fifthly, their themes are empty and old, and lack of an intensive exploration. The author has offered some solutions centered on the combination of multiple perspectives to dig new historical materials, which makes the relatively comprehensive scenery of history of Ginseng of Qing dynasty possible (see Page 16). This idea is applicable to the rest of chapters.

The Ginseng was mainly produced in Shangdang county of Shanxi province before Qing dynasty, with superior characteristics to other varieties. While with the production base transferred to the northeast of China during Qing dynasty, "Liao Shen (Ginseng produced in Liaoning province)" has taken the place of "Dang Shen" (Ginseng produced in Shangdang county), becoming the best popular variety across the country. Apart from the exhaustion of Ginseng due to the long-term excessive exploitation, political factors have also led to the commercial development of Ginseng in northeast China. People once believed that Ginseng would transfer along the spirit of empires. As the production area for "Liao Shen" was the place favored by empires where the spirit of empires was thriving, the Ginseng in northeast China has been gradually widespread over

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the years. The second chapter is the introduction of brief history of Ginseng as medicinal herbs before Qing dynasty and explores the features of writing style and classification of Ginseng of Qing dynasty. The most extensive records about Ginseng in medical books can be referred to the *Ben cao gang mu shi yi* (Supplements to compendium of materia medica). Although the *Ben cao gang mu shi yi* is a masterpiece of agrostology, it, with a distinct market feature, has reflected the changes of the distribution and consumption of Ginseng in the consumer market and identified and classified the variety of Ginseng in details and at length. It has also pictured a scene of commercialization of Ginseng (see pages 40-42). Ginseng as a commodity was a vital resource to Nuzhen tribe at early times when they were in charge of the production base of Ginseng in northeast China. The Ginseng consumed by Ming dynasty mainly relied on the Nuzhen tribe. The Ginseng trade in borders between Ming dynasty and Nuzhen tribe which were the main income source for the Nuzhen tribe at early times has not only boosted the development of Nuzhen tribe socially and economically but provided abundant material basis for the rapid rising of Nuzhen tribe. Disputes and conflicts were inevitable with the increasingly expansion of Ginseng trade between them, leading to a series of Ginseng trade wars. Included in the third chapter are the exploration to the trade role of Ginseng in the border of northeast China in 16 century and the discussion about the policy to Ginseng at the early Qing dynasty by using the newly found historical materials and based on the clear explanation of important role of Ginseng trade in Qing dynasty. As Ginseng still remained to be one of the vital financial sources for the Qing governments after they established a national regime, Qing's governments set up a special organization for the collection of Ginseng--Da Sheng Wu La and made relevant encouraging policies to ensure the fulfillment of responsibilities and duties of official members digging Ginseng. Additionally, "Qi Ban Cai Shen" system were an equivalent to that of Da Sheng Wu La at early Qing dynasty and it were divided into three types, that is, "San Qi Zuo Ling" system in office of internal affair of Shengjing, aristocratic system, "Ba Qi Bing Ding" system (see pages 66-80). Qing governments had forcefully deprived aristocracy of the approved right of freedom to the Ginseng harvest during the reign of Kangxi through a set of measures to strengthen the collection of rights to Ginseng. As a result, the Ginseng harvest was state-owned.

The reform of Yongzheng to the Ginseng harvest system has broken official monopoly, opening the digging of Ginseng to folks. The "system of recruitment of merchants to dig Ginseng" still were the main policy for Ginseng harvest, however, "Guan Cai Pao Fu" system were gradually promoted and a official Ginseng bureau set up to strengthen the right of Sheng Jing and Ji Lin generals to the Ginseng harvest. As a result, merchants as agencies for Ginseng harvest were replaced by states, the direct manager for Ginseng harvest. All characterized the transformation of rights during this

period. These policies of government affairs have been reformed to be more practical and flexible, which is called by the author as "the bureaucracy of management of government affairs" (see page 82). How Qing government shook ride of old system of "the Ginseng harvested by Ba Qi army" and managed to solve complicated problems related to Ginseng harvest at early Qing dynasty through the bureaucratic systems were discussed in the chapter four by means of files in Qing palace and official books. Although the establishment of official Ginseng bureau by Qian Long Empire implemented the bureaucracy of government management, it also made the frequent connection of local governments possible, resulting in the localization of Ginseng harvest. Consequently, officers hooked up with local governments for filthy lucre. The failure of existing Ginseng to meet the dramatic needs of market led to the flooding of transplanted wild Ginseng to the market, and the existing system for Ginseng was not able to cope with such complex situations. All resulted in the appearance of a new wave of reforms. The fifth chapter analyzed the causes and characteristics of transplanted wild Ginseng with the help of discussing about the outburst of cases of translated wild Ginseng during the fifteen years of Jia Qing' reign, and interpreted how Qing government tracked the issue of translated wild Ginseng, and at last explored the impact of national right to fully involve in the Ginseng affairs and its corresponding effects to the future management of Ginseng affairs after the breakout of translated wild Ginseng.

Medical books, medical cases and medical conversations were used to discuss the relationship between Ginseng and warm- tonic culture on the basis of the research findings of febrile disease of Chinese medicine and the history of Chinese medical treatment in the sixth chapter. It was pointed out that doctors in Qing dynasty highly emphasized the warm- tonic culture and the warm- tonic effect of Ginseng in medical treatment. The fact that Ginseng was peculiar to Jiangnan region stimulated the consumption of Ginseng in this area, thereby leading to the rapid increase of Ginseng which resulted in the corresponding rise of Ginseng price. Such issues as price, trade and distribution of Ginseng were discussed in detail in the seventh chapter. In this chapter, it, on one hand, has focused on the changes and distribution ways of Ginseng price in Qing dynasty to picture how the Dongbei Ginseng were distributed to the market and also discussed the relationship between office of internal affairs and Ginseng trade. On the other hand, it also thoroughly explored the consumption culture of Ginseng in Qing dynasty, of which the emerging of Ginseng consumption handbooks, the forming of concept of Ginseng brand and the culture of granting and presenting of Ginseng in Qing dynasty are the features of Ginseng consumption of Qing dynasty.

The author reflected the global-view study of medical history from the Ginseng history at the end of this book and pointed out the Ginseng history of Qing dynasty should be researched from the

perspective of global history with global and cross-culture views.

3. The study characteristics of *Ginseng Empire*

3.1 Peculiar study view and global historical perspective

Ginseng has a long history in China and has long been the popular warm-tonic medicine for Chinese. It plays an essential role in the history of Qing dynasty and is one of significant commodities strictly controlled by empires in Qing dynasty and the Ginseng trade is an important financial income source for Qing governments as well. Undoubtedly, the Ginseng history of Qing dynasty reflects various aspects of that of Qing dynasty. The intention of selecting Ginseng as the theme of this research is to give a picture to economic, political and cultural phenomena and problems of Qing dynasty through the study of Ginseng. Though Ginseng is only just a small theme for the study of Qing dynasty, it contains the mysteries of a whole society. Ginseng has played an important role during the rise of Qing dynasty. The Ginseng politics, Ginseng trade and distribution ways and unique Ginseng consumption culture formed due to the Ginseng are the features of times of China. As a result, the author has called Qing dynasty as the “Ginseng Empire” (Jiang, Z. S. 2015). The changing process of “Ginseng Empire” has illustrated the rise and fall of Qing dynasty to some extent. The previous studies of Ginseng history of Qing dynasty tended to make research on systematic social history with few inclinations to culture (Jiang, Z. S. 2015). However, the study of Ginseng history should not be limited to certain an aspect but be made in a well-round manner, as it covers not only the study of politics and economy but the fields of history of medical treatment and material culture. The author has demonstrated the distribution and consumption of Ginseng in Qing dynasty and discussed the connection of Ginseng with warm-tonic culture of Jiangnan region starting from the perspective of history of material culture and integrating various histories including medicine material history, social history and ideological history. As a result, a new book about the consumption and cultural history of Ginseng has been compiled.

Nowadays “global history” waves are impacting each research field of historical disciplines. The so-called “global history” or “study of global history” can be in short called “large-scale interaction research”, whose core concept is the global “interaction”, an interaction between different regions, nations and cultures by connecting with each other within multiple areas such as economy, politics and culture (Liu, X.C. 2009). One of the most significant contributions of *Ginseng Empire* lies in the study of Ginseng of Qing dynasty in a global view and reflection of global histories of disease, environment and medical treatment, making the global historical view of authors outstanding. The Ginseng history of Qing dynasty is not only the local history but with the cross-nation features. Whatever the Ginseng distribution or trade and the emerging of new knowledge or special books about Ginseng, they should be studied

with a globe view and their research fields should be expanded to the North Korea and Japanese and even further areas of Ginseng trade. All these are the important research direction for the future.

3.2 Highlighting question awareness and focusing on empirical research

A number of previous studies on Ginseng history of Qing dynasty have been made on the basis of files and official books in Qing court to analyze the system of Ginseng affairs and policy of Ginseng management. However, these topics are either too large or empty and lack of question awareness and profound and careful discussion. But the question awareness is the core and vitality of academic research. One of aspects should be noticed by today’s historians is to find and solve questions and take advantage of lessons learned from the relevant problems in practice. The author’s selection of the production, consumption and medical treatment of Ginseng as his research theme is very innovative, refreshing and worthy of exploration. This book is invested with clear question awareness and leading theory thinking, focuses on the empirical research and deeply dissects the political, economic and ecological issues behind the Ginseng history. All these contribute to the prominent research orientation of “new cultural history”. For instance, the author has firstly discussed the medical treatment and consumption of Ginseng through the prevailing of warm-tonic culture in Jiangnan region of Qing dynasty. Such warm-tonic culture, especial the popularity of expensive healthy product in Jiangnan region, not only has stimulated the Ginseng consumption in this area but changed the consumption ways of Ginseng and meanwhile has allowed us to understand why the demands of Ginseng for people all of sudden rose during Qian Long and Jia Qing’s reign (Jiang, Z. S. 2015). And then the author has explored the forming process of consumption culture, new knowledge and new consumption concept of Ginseng in Qing dynasty to highlight the characteristics of Ginseng consumption culture at that time and the social acknowledgment to the Ginseng value. Therefore, a relatively clear hint to the Ginseng consumption in Qing dynasty is made: society favored for tonics and the medical effect Ginseng was of little doubt against the background of warm-tonic culture in Qing dynasty and Jiangnan region was the most prevailing area for the warm-tonic culture. As a result, Ginseng produced in the northeast of China was largely distributed to the Jiangnan region and the price of Ginseng also increasingly increased due to short supply of Ginseng. Ginseng was a luxury with extremely high price in Qing dynasty and the change of Ginseng consumption and distribution ways also boosted the emerging of Ginseng consumption handbook and Ginseng brand, contributing to the creation of unique Ginseng culture.

3.3 Systematic and well-round collection of historical materials and careful analysis

It is a basic skill for the historical practitioners to skillfully use their relevant historical materials. Fu Sinian once said “history is the

historical materials”, and “the historical practitioners cannot make historical research without efficient historical materials”. His words have reflected the importance of essential materials to the historical writing from one side. If an academic research intended to be creative and vigorous in certain an aspect, it should not be made by simply transferring the advanced western research methods but focus on the exploration and thinking of historical materials. Only in this way can such findings be convincing and prospective. The scattered Ginseng materials in Qing dynasty and complicated and diverse relevant materials require the researchers concerned with relatively high quality. The doctor of Jiang Zhushan has collected and sorted the historical materials about the Ginseng in Qing dynasty as soon as possible and has been concentrated on the digging of new historical materials. The author as a history researcher has safeguarded the seriousness of historical discipline by carefully distinguishing true value from fraud. Such historical materials as files and official books and documents stored in the Qing palace, private masterpieces and notes and unofficial history, special books for Ginseng in Japan, South Korea and China in Qing dynasty and local magazines have vividly pictured the specific plots for some historical events. The author has carefully discarded all ridiculous facts in historical materials and reasonably quoted the remaining historical materials, making his book worthy of convince. There are 288 reference lists, of which many foreign documents are included, thereby making readers marvel at the skillful use of documents for the author. For example, when it discuss the case of transplanted wild Ginseng in the fifteenth year of Jia Qing’s reign, mainly included are the files in Qing palace, such as Nei Wu Fu Dang An, Shang Yu Dang, Qing Shi Lu, Jun Ji Chu Dang An Jian, Gong Zhong Dang An Zhe, Ming Qing Nei Ge Da Kui Dang An, to ensure the truth and convince of findings. Apart from these, such historical materials as local county records and medical books in Qing dynasty have largely enriched the arguments involved.

4. Studies on medical social history based on *Ginseng Empire* from the global perspective

There is no doubt that the current medical social history is an emerging research field with great achievements which attracts much attention of historical circle, and boosts the reform and innovation of historical research methods and theories. Driven by the new study wave of social history on disease, environment and medical treatment, history scholars both in mainland and Taiwan have made new exploration to and speculated on Chinese social history of medical treatment, gradually promoting the development and research of such subjects as disease and medical treatment, charity and relief, relationship between doctors and patients and public health care. The *Ginseng Empire*, written by the doctor of Jiang Zhushan, is one of excellent book about the Ginseng history of Qing dynasty and is helpful to the study of research orientation and

academic frontier about the social history of medical treatment in new times and also provide positive reference and enlightenment for our future research.

With a tendency for “global turn” in recent years, academic circle of western history come to pay growing attention to global history and world history and “global history” has also become the most popular word at present. It is a new main stream for research orientation emerging in a new stage in the field of western history, next to the transformation of “new cultural history”. Jiang Zhushan, one of Chinese scholars who have captured this change at earlier time, has discussed such an academic dynamic in detail in his book *The tendency, method and practice of contemporary history research: from New Cultural History to Global History* (Jiang,Z.S. 2012). The secondary disciplines of history have more or less been impacted by the trend of “global turn”, including environmental history, economic history, social history, gender history, material and cultural history and global microhistory (Jiang,Z.S. 2013). Compared with other countries, study on global history in Chinese history circle is relatively later and less profound. How to make studies on the Chinese social history of medical treatment in a much larger view of global history is worthy of attention to both mainland and Taiwan history circle in this new times.

Ph.d Jiang Zhushan has deeply grasped the trend of academic findings achieved in the internationally main streams and western history, applied new concepts and methods to specific research, and conducted his research against the background of leading international academic to get rid of “old wine in a new bottle”. All make his book innovative and refreshing. *Ginseng Empire* has conducted the study of Ginseng history of Qing dynasty in a global and cross-culture view, especially emphasizing on the widespread of knowledge about Ginseng in East Asia or even the global world, and noticed that Ginseng history of Qing dynasty has been consumed across different regions. All these contribute to the constitution of Ginseng empire with the background of global world. One of the prominent advantages for global history is that it has fell out of the framework of narrowed ethnic and national history and inspects and considered many transnational and cross-cultural issues with a more macro view. As to the global history of medical treatment, such subjects as global history of medicine circulation, global history of disease and environment, global public health, transnational organization, occupational public nuisance of asbestos have made great achievements. It is also true of water and health problems as well as the reaction of politics to diseases detected by historians (Jiang,Z.S. 2015). Undoubtedly, the wave of “global turn” of social history of medical treatment has made the ignored new research area found by history discipline and global view is a distinctive flag held high by historical adventurers.

Of course, “the importance of local history of medical treatment will not be neglected by global history of medical treatment”(Jiang,

Z.S. 2015), for what we study should be rooted in the soil of our own nation and country and provide practical service for our state. Studying on global history should be the integration of diversity and universality, as every country and nation has their own unique economic model, cultural habits and the way of political and social organization. The history of native ethnic and nation should not be neglected when researchers have a better understanding of the label of studying cross culture in global history. It requires history researchers to keep a balance between ethnic and nation as well as human world.

The global history is not only a macro global history but able to give a consideration to micro global history which is not conflicted. "People-oriented", a core concept advocated by history academic circle in recent years, requires history researchers to pay attention to the orientation of history of individual life. Tonion Andrade has come up with an issue about how to describe individual history from the global perspective in his book *One Chinese Farmer, Two African Young Men and One Military Officer: the Historical Orientation of Global Micro History* (Jiang, Z.S. 2015). *Ginseng Empire* has paid much attention to discuss the social psychological factors behind the prevailing climate of favoring for tonics when describing this ethos. Patients at that time held their belief that "we are not afraid of dying of illness but only afraid of dying of feebleness". Besides doctors also liked to prescribe medicines with Ginseng included and they thought "Ginseng is a cure-all for all illnesses". Patients considered tonics as a life-saving trick and very fond of taking tonics as doctors in Ming and Qing dynasty especially emphasized on the treatment effect of tonics. As a result, taking Ginseng is a peculiar feature in Jiangnan regions. However, as ginseng after all is an luxury whose price is very high, those who cannot afford for Ginseng tend to find alternatives, the inferior Ginseng belonging to the plant families of Ginseng. The health of patients will be harmed if they take excessive Ginseng or fraud Ginseng with relatively cheap price, or if doctors insist on prescribing Ginseng regardless of the state of illness or the physical condition of patients. All these inappropriate action will be a counter effect, making the life-saving Ginseng become a killer. Jiang Zhushan noticed the anomaly of prevailing climate and made a detailed discussion in *Ginseng Empire*. It is a new orientation for the

study of medical treatment history of disease to make research on disease and medical treatment as well as medical history of physical body with connection disease with physical body and medical treatment to pay attention to life and body from the perspective of social history.

To sum up, the future orientation for the study of social history of medical treatment should be lay in global view, people-oriented and the combination of macro and micro global history as they can not only picture a wonderful local story but make the significance of global world stand out (Hu,C. 2013). What's more, such following issues should be noticed: firstly, notice should be given to the integration and study of cross disciplines and history disciplines should absorb and learn from the advanced theory and research methods of subjects as sociology, medical science and psychology so as to promote the development of Chinese social history of medical treatment form multiple perspectives; secondly, efforts to explore new historical materials should be made and an comprehensive collection and careful organization of existing materials should be made so as to find, analyze and at last solve problems through make a further interpretation of materials.

References

- Hu, C. (2013). *Medicine, Hygiene and China in the world (1820-1937): A Transnational and Transcultural History study*. Beijing: Science Publishing Press.
- Jiang, Z. S. (2015). *Ginseng Empire: The Production, Consumption and Medical Treatment of Ginseng of Qing Dynasty*. Hangzhou: Zhejiang University Press.
- Jiang, Z. S. (2013). The exploration to world association: the tendency and practice of global history. *The History Research*, 1.
- Jiang, Z. S. (2012). *The Tendency, Method and Practice of Contemporary History Research: from New Cultural History to Global History*. Taipei: Wunan Book Publishing Co., Ltd.
- Liu, X. C. (2009). Constitution of world history through interaction. *Guangming Daily*.

A Study on the Buyer's Preference Towards Motorcycle with Reference to Classic Motors, Chennai

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Abstract: The research work is carried on to study the buyers' preference towards motorcycle with special reference to classic motors. The study analyses the influence of the medium in creating awareness about the motor cycles among the customers in Chennai. Primary data collection was made through structured questionnaire and sample was collected among the motor cycle in Chennai. The respondents are chosen as per convenience. SPSS was used to obtain results for statistical analysis. Percentage analyses, Chi-square tests, independent samples test, ANOVA were used for analysis in the study. From the study some interesting findings such as there exists a relationship between age of customer and the person who makes the purchasing decision. When the customer is below 25 years of age, in most cases purchasing decision are made by his parents. When a purchase decision is made by parents, customer attach more significance to the comfortableness while driving the vehicle. Employed people are more price sensitive than parents. Further when a motor cycle is bought on full settlement of cash more significance is attached to the colour of the vehicle. Most of the buyers make use of loan facilities for buying motor cycles.

Key words: Buyer's Preference; Motorcycle; Classic Motors

Introduction

The Indian industrial sector has undergone profound regulatory changes in recent times as a consequence of the economic reforms program put together in between 1988 and 2001. Consequent to these reforms some of the industries that have been influenced the most have been the consumer durables industry, the automobiles industry and certain financial services. In an evolving industry especially in emerging economies like India, it is extremely important to formulate optimal policies on competitions in order to promote both competition as well as growth. India is the second largest manufacturer of two wheelers in the world. It stands next only to Japan and china in terms of the number of two wheelers produced and sold respectively.

Here in the study, the researcher is trying to analyse about the number of two wheelers and how many people are using two wheeler, what motivates and influence them to buy two wheeler what is the most preferable choice in two wheelers in case of motor cycles and scooters and the most recent two wheelers choice in the market .what are their preferences, satisfaction level, who influenced them and the reason to buy.

Objectives of the study

To determine the factors that influence purchase of Motor cycles among youngsters.

To determine the relative significance of various attributes of

motor cycles in determining purchase.

To find out the significance of various advertising media in influencing motor cycle purchase behaviour.

To find out the attributes of the motor cycle that contributes to post-purchase behaviour.

Scope of the Study

The study is only on Buyer's Preference so the other aspects such as Brand Recognition, Brand Image, Brand Equity and other branding concepts are not covered. This study covered only the area of the Chennai. So, the information and the conclusion derived from the study are only relevant to this area alone.

Limitations of the Study

1. The duration of the project was one of the primary constraints for the project.

2. This study is confined only among the Bajaj customers in the Vellore city.

3. It was an academic effort and limited to cost, time and geographical area.

4. Numbers of respondents were restricted due to the time factor.

Review of Literature

According to Pankaj (2009), while buying a motor cycle economy is the main consideration in terms of price of the motor

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cycle and its fuel efficiency. Hero Honda is considered by his respondents as the most fuel efficient motor cycles on Indian roads. Young people in the age group of 18 to 30 years prefer stylish motor cycles.

The study carried out by Omesh (2011), reveals that most of the customers are aware of popular brands in motor cycles. The customers give more importance to fuel efficiency than to other factors. They believe that the brand name tells them something about the product quality, utility, technology and the like. The consumers prefer to purchase motor cycles which offer high fuel efficiency, good quality, technology, durability and reasonable price.

According to Dabawala (2010), in current market scenario, respondents give maximum no. of weight age to price then after they consider mileage and colours respectively. The availability of credit in no way influence the purchasing behaviour.

According to Neoh, Osman, Ramayah, Mohamad (2007), the durability of the vehicle, its price, maintenance cost, advertisements play considerable roles in influencing the purchase behaviour of the customers.

Research Methodology

Type of Research

The research is carried out to determine the factors that influence the buyers preference towards motor cycles. As a consequence of resource constraint the study is limited to the urban youth of Chennai. Detailed review of past studies on the topic is carried out to ascertain the factors. From the review factors like price of the motor cycle, fuel efficiency, maintenance cost, easy driving, durability has been identified. This study is carried out to ascertain the distinguishing roles played by the demography of buyers in attaching relative significance to various attributes of the motor cycles.

Before conducting any research the researcher must have a framework of what has to be done throughout the project along with the procedure to be followed. And this framework is well known by the term research design. Every research design consists of a proper sequence and same has been done here.

Sampling Technique

The respondents of the study are chosen according to the convenience of researcher. The respondents are buyer's of classic motors and IAS students from the IAS academy, Chennai.

Sample Size

Information was collected from a sample size of 150 respondents in Chennai which included both males and females. All of the above were completed in all respects. Therefore, data has been tabulated from the 150 completed forms.

Stistical Tool for Data Analysis

The following tools are used for analysis of data.

Percentage analysis- In this study Percentage analysis test was used. The percentage method is used to know the accurate percentages of the data the researcher has taken for study.

Chi-square test-This is an analysis of technique which analyzed the stated data in the project. It analyses the assumed data and calculated data in the study. The Chi-square test is an important test amongst the several tests of significance Chi-square, symbolically written as

Anova- an ANOVA is an analysis of the variation present in an experiment. It is a test of the hypothesis that the variation in an experiment is no greater than that due to normal variation of individuals' characteristics and error in their measurement.

DATA ANALYSIS AND INTERPRETATION PERCENTAGE ANALYSIS

TABLE NO.1 Age of the Respondents

AGE IN YEARS	NO.OF RESPONDENTS	PERCENTAGE
18-20	6	4%
21 - 25	67	44.67 %
26- 30	65	43.33%
ABOVE 30	12	8%
TOTAL	150	100%

Inference

From the above table, it is inferred that 4% of the respondents fall under age group of 18 to 20 years of age, 44.67% of the respondents fall under age group of 21 to 25 years of age and 8% of the respondents are above 30 years of age.

TABLE NO.2

Distribution Of Motor Cycle Brands Among Respondents

MOTOR CYCLE BRAND	NO. OF RESPONDENTS	PERCENTAGE
BAJAJ	30	20%
HERO HONDA	27	18%
HONDA MOTOR	24	16%
HERO	22	14.67%
YAMAHA	12	8%
ROYAL ENFIELD	5	3.33%
DO NOT POSSES	30	20%
TOTAL	150	100%

Inference

From the above table, it is inferred that 20% of the respondents has Bajaj motor cycle, 18% of the respondents are has Hero motor cycles, 16% of the respondents are has Honda motor cycles, 14.67% of the respondents are has Yamaha motor cycles, 8% of the respondents are has Royal Enfield motor cycles, 3.33%, of the respondents and do not have motor cycles, 20% of the respondents.

TABLE NO. 3 Occupation of the Respondents

OCCUPATION	NO. OF REPENDENTS	PERCENTAGE
Students	93	62%
Salaried	44	29.33%
Business men	13	8.67%
TOTAL	150	100%

Inference

From the above table, it is inferred that 62 % of the respondents are students, 29.33% of the respondents are salaried and 8.67% of the respondents are businessmen.

TABLE NO. 4 Income of Repondents

INCOME IN Rs. PER MONTH	NO. OF RESPONDENTS	PERCENTAGE
Students	93	62%
Salaried	44	29.33%
Business men	13	8.67%
TOTAL	150	100%

Inference

From the above table, it is inferred that 14 % of the respondents Income is Rs.15000 per month, 47.33% of the respondents earn between Rs.15001 to Rs.25000, 26.67% of the respondents are earn between Rs.25001 to Rs.35000, and 12% of the respondents and earn above Rs.35000 per month.

TABLE NO.5**Ownership of Bike by the Respondents**

OWNERSHIP	NO. OF RESPONDENTS	PERCENTAGE
Possess ownership	120	80%
Do not possess ownership	30	20%
TOTAL	150	100%

Inference

From the above table, it is inferred that 80% of the respondents possess ownership, 20% of the respondents and Do not possess ownership.

TABLE NO. 6 Decision Maker

DECISION MAKER	NO. OF RESPONDENTS	PERCENTAGE
Decision by parents	105	70%
Own decision	32	21.33%
Nearer or dearer ones	13	8.67%
TOTAL	150%	100%

Inference

From the above table and chart it is inferred that 70% of the respondents say that the decision to purchase the bike is made by their parents, 21.33% of the respondents make their own decision to purchase the bike and 8.67% of the respondents say that the decisions are made by their near and dear ones to purchase the bike.

TABLE NO.7 Mode of Purchase

Mode of purchase	No.of respondents	Percentage
Purchased on full settlement	72	48%
Purchased on loans	78	52%
TOTAL	150	100%

Inference

From the above table, it is inferred that 48% of the respondents

are aware through Purchased on full settlement and 52% of the respondents are aware from Purchased on loans.

Stastical Analysis**Chi-Square tests****TEST NO.1**

MODE OF PURCHASE	NO.OF RESPONDENTS	PERCENTAGE
Purchased on full settlement	72	48%
Purchased on loans	78	52%
TOTAL	150	100%

Chi-Square between Age and Occupation

H0: There is no significant relationship between age and occupation of the respondents

H1: There is significant relationship between age and occupation of the respondents

TABLE NO.8 Chi-Square Tests Age and Occupation

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.002(b)	1	.968		
Continuity Correction(a)	.000	1	1.000		
Likelihood Ratio	.002	1	.968		
Fisher's Exact Test				1.000	.551
Linear-by-Linear Association	.002	1	.968		
N of Valid Cases	150				

Inference

Since the 2-sided Asymp. Sig value is > 0.05, the null hypothesis is accepted. Thus is there is no significant relationship between age and occupation of the respondents

TEST NO. 2**Chi-square between Age and Ownership**

Ho: There is no significant relationship between age and motor cycle ownership of the respondents

H1: There is a significant relationship between age and motor cycle ownership of the respondents

TABLE NO. 9 Age and bike ownership Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.407(b)	1	.121		
Continuity Correction(a)	1.815	1	.178		
Likelihood Ratio	2.433	1	.119		
Fisher's Exact Test				.154	.089
Linear-by-Linear Association	2.391	1	.122		
N of Valid Cases	150				

Inference

Since the 2-sided Asymp. Sig value is > 0.05 , the null hypothesis is accepted. Thus, there is no significant relationship between age and motor cycle ownership of the respondent

Independent samples t-test

TEST NO. 1

Age and attributes of Motor Bike

H0: There is no significant difference between age and attributes of Motor cycle with respect to buyers preference towards purchase of the bike.

H1: There is significant difference between age and attributes of Motor cycle with respect to buyers preference towards purchase of the bike.

TABLE NO. 10 T-test for significant difference between attributes of the Motor Bike and age group of the respondents

Attributes of Motor Bike	Age group in years	Mean	S.D	t value	P value
Price	Upto 25	3.64	1.39	1.16	0.244
	More than 25	3.45			
Maintenance	Upto 25	3.57	1.40	3.65	0.135
	More than 25	3.53			
Style	Upto 25	3.91	1.26	3.01	0.122
	More than 25	3.99			
Durability	Upto 25	3.22	1.38	3.65	0.361
	More than 25	3.17			
Mileage	Upto 25	3.47	1.22	2.65	0.635
	More than 25	3.55			
Easy Driving	Upto 25	3.22	1.29	3.20	0.426
	More than 25	3.11			
Brand Image	Upto 25	3.11	1.66	1.68	0.122
	More than 25	3.11			
Colour	Upto 25	2.81	1.28	2.01	0.247
	More than 25	2.79			

Inference

Since P value is greater than 0.05, the null hypothesis is accepted at 5% level of significance with regard to attributes of the Motor Bike and Age group of the respondents. So there is no significant difference between age and attributes of Motor cycle with respect to buyers preference towards purchase of the bike.

Inference

Since P value is greater than 0.05, the null hypothesis is accepted at 5% level of significance with regard to attributes of the Showroom and Age group of the respondents. So there is no significant difference between age and attributes of Showroom with respect to buyers preference towards purchase of the bike.

ANOVA

NULL HYPOTHESIS (H0): There is no significant difference between the age of the respondents and distribution of ownership

ALTERNATIVE HYPOTHESIS (H1): There is significant difference between the age of the respondents and distribution of ownership

TABLE NO. 11 Anova for F Value

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	12.960	3	4.320	259.200	.000
Within Groups	1.600	96	.017		
Total	14.560	99			

Inference

The table value of F is 259.200, since the calculated value of F is more than its table value the null hypothesis is rejected. Hence we conclude that there is significant difference between the age and distribution of ownership.

FINDINGS

4% of the respondents fall under age group of 18 to 20 years of age, 44.67% of the respondents fall under age group of 21 to 25 years of age and 8% of the respondents are above 30 years of age.

20% of the respondents has Bajaj motor cycle, 18% of the respondents are has Hero motor cycles, 16% of the respondents are has Honda motor cycles, 14.67% of the respondents are has Yamaha motor cycles, 8% of the respondents are has Royal Enfield motor cycles, 3.33% of the respondents and do not have motor cycles, 20% of the respondents.

62% of the respondents are student, 29.33% of the respondents are, 26.67% of the respondents are salaried, 8.67% of the respondents are while the rest are businessmen.

14% of the respondents are Income earn up to Rs.15000 per month, 47.33% of the respondents are earn between Rs.15000 to Rs.25000, 26.67% of the respondents are earn between Rs.15000 to Rs.25000, 12% of the respondents and earn above Rs.35000 per month.

80% of the respondents are possess ownership, 20% of the respondents and Do not possess ownership.

70% of the respondents say that the decision to purchase the bike is made by their parents, 21.33% of the respondents make their own decision to purchase the bike and 8.67% of the respondents say that the decisions are made by their near and dear ones to purchase the bike.

48% of the respondents are aware through Purchased on full settlement and 52% of the respondents are aware from Purchased on loans.

56% of the respondents are aware through T.V, 24.67% of the respondents are aware through newspapers 10.66% of the respondents are aware through friends and 8.67% of the respondents are aware from other sources.

There is no significant relationship between age and occupation of the respondents

There is no significant relationship between age of the respondents and motor cycle ownership

There is no significant relationship between occupation and motor-cycle ownership of the respondents

There is no significant difference in the ratings of attributes of motor cycles due to age of respondents.

There is no significant difference in the ratings of variables of showrooms due to age of the respondents.

There is significant difference between the Age and distribution of ownership of the respondents.

Suggestions

On the basis of the findings, the following suggestions are made:

Advertisements play a significant role in creating awareness about motor cycles among customers. So they can be effectively employed to exploit this potential.

In most cases the purchase decisions are made by parents. A detailed study on the factors parents are looking in a motor cycle can be carried out so as to bring the motor cycle brands closer to the parents and buyers.

Credit availability influences the purchasing decision significantly. Most of the customers make use of loan facilities to buy motor cycles. Motor cycle brand promoters can create attractive credit facilities to attract customers.

Mass media play a significant role in creating awareness about the features of motor cycles. In particular Television play a vital role in brand promotion. Motor cycle brand promoters can employ these media for brand promotion.

Age of the consumer has a significant relationship on decision-making. Parents make purchasing decisions in most cases when the age of the buyer is up to 25 years of age. Thus when the motor cycle is actually meant for person up to 25 years of age the preferences of parents shall be taken care of.

Salaried people are more price sensitive than students. This distinction shall be taken care while promoting motor cycles which are particularly targeting salaried people.

There exists a relationship between the person who makes the decision and the weight age he attaches to easiness in driving. Further study can be carried out to utilise this opportunity.

Conclusion

The study is carried out to ascertain the roles played by various demographic factors like age of the buyer, occupation, income level,

credit availability, role of media in attaching relative significance to various attributes of motor cycles. From the study it is clear that the advertisements play a significant role in creating awareness about motor cycles among customers. There exists a relationship between the person who makes the decision and the weight age he attaches to easiness in driving. Credit availability influences the purchasing decision significantly. Most of the customers make use of loan facilities to buy motor cycles. Mass media play a significant role in creating awareness about the features of motor cycles. In particular Television plays a vital role in brand promotion. Age of the consumer has a significant relationship on decision-making. Parents make purchasing decisions in most cases when the age of the buyer is up to 25 years of age. Salaried people are more price sensitive than students.

To conclude, the results show that the companies are playing on the peripheral cues to maintain their Total Relationship Management and connect to the customers both present and potential. The companies are operating in a highly aggressive and competitive global market place and this climate has led to the emphasis on quality in all aspects. TQM focuses on integration and coordination as well as the continuous improvement of all activities and processes. Total Relationship Management (TRM) is a very recent marketing strategy and philosophy. It focuses on and is concerned with all integrated internal and external activities within and between the organizations. These two terms are integrated by the manufacturers by building good quality products and building good relationship with dealers and enhancing service levels.

References

- Bedman Narteh et al (2012). Key drivers of automobile brand choice in sub-saharan africa: the case of ghana. *The Journal of Product and Brand Management*, 21, 516-528.
- Clark, Robert.C, Dorazelski, Ulrich, Dragonska, Michaela. (2009). The effect of advertising on brand awareness and perceived quality: An empirical investigation using panel data. *Journal of Quantitative Marketing and economics*, 7, 207-236.
- John H.S. (2008). Buying globally made easier. *Journal of Marketing Management*, 2, 63-65.
- Kay,J.M.,(2006). Strong brands and corporate brands. *European Journals of Marketing*, 2, 742-760.
- Kotler Philip, Keller Lane Kvin. (2010). *Marketing management*. Pearson India Education services Pvt Ltd.
- Kotler Philip, Koshy Abraham. (2012). *Marketing management*. Pearson India Education services Pvt Ltd.
- Ramaswamy.V.S., Namakumari.S. (2006). *Marketing management*. Macmillan Publications.
- Sara Lorge (2008). Purchasing power. *Journal of Marketing Management*, 8, 43-46.

The Status Quo and Its Development of “the Linkage between the Community, the Social Organization and the Social Worker”

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Abstract: After the reform and opening-up policy, the community becomes an important foundation for social management, but there exist the insufficiency of the community governance in all aspects. Hence, it is inevitable to carry out the innovation of community governance. As the focus of the community management and service innovation, “the linkage between the community, the social organization and the social worker” optimizes the structure of the community governance, enriches the diversity of social participation, and promotes the resource sharing, the complementing of advantages and the organic linkage between the community, social organizations, and social workers. There is a new management realm formed that the government and the society can interconnect, complement, and interact with each other. How to effectively link the “three clubs” to better serve the community and society is an urgent problem at present. The paper analyzes the developmental mode of “the linkage between the community, the social organization and the social worker” in different regions, puts forward the developmental path and the general idea to construct “the linkage between the community, the social organization and the social worker”, beginning from the concept of it through the method, literature analysis, which is of great significance for accelerating the process of harmonious community’s construction and provides a guarantee for maintaining the stability of social development.

Key words: the linkage between the community, the social organization and the social worker, community, developmental model, path

1. Introduction

“The linkage between the community, the social organization and the social worker” is conducive to the self-governance of the grassroots and the development of the community. Community is one of the important foundations of the social management, and the stability of the community is the basis of the social stability. However, for a long time, due to the lack of community’s autonomy, the problems, like poor enthusiasm of community participation, and the weak society, have hindered the development of the community. “The linkage between the community, the social organization and the social worker” redefines the connotation of the community construction: social organizations promote the social forces to participate in community management, boost the vitality of the community management, and greatly improve the enthusiasm of the residents participating in community activities.

2. The mode analysis of “the linkage between the community, the social organization and the social worker”

China is a vast country with different regional economic development level and cultural development, which results in that the mode of “the linkage between the community, the social organization and the social worker”, is characterized by a diversification. In 2010, Ye Nan, the dean of Nanjing Social Science

Academy, summarized the following three patterns in the paper *The Study on the Selected Pattern and Strategy of China’s “the Linkage between the Community, the Social Organization and the Social Worker”*.

2.1 The domestic demand-driven mode

The domestic demand-driven mode refers to that the community, the social organization and the social worker interact, coordinate and solve the problem together. With the development of the social economy, the demand of the people’s material and cultural resources is increasing. Hence, the domestic demand-driven mode of “the linkage between the community, the social organization and the social worker” will become the main type.

2.2 The government-oriented mode

“The linkage between the community, the social organization and the social worker” dominated by the government is a government as the center, around the activities, many of them are cooperate government mission requirements or cooperate social events, hardly to community residents demand as a starting point, this kind of organization or even be regarded as subservient to the government; But because of the limitations of social organizations, social work and community development at this stage, this type still exists for a long time.

2.3 The project-led mode

This way has given a large space for the external force to

participate in the community construction, providing the broad space for the professional community organizations. Meanwhile, it can make the organizations of the community and the social workers enhance its professionalism of the organization’s service. However, the project about “the linkage between the community, the social organization and the social worker” is restricted by the contents and time, as well as the sphere of its influence.

3. The status quo of “the linkage between the community, the social organization and the social worker”

Owing to the large population, vast territory, abundant resources and the huge disparity between the historical, cultural and social economic developmental levels, different regions would take the different concrete measures in the process of accomplish “the linkage between the community, the social organization and the social worker”. According to their own requirements, different regions develop along with their practical conditions and create the mode which is suitable for the development of the region.

3.1 The positive factors in the community governance of “the linkage between the community, the social organization and the social worker” in Xiamen

The Haicang district of Xiamen is “the national experiment area of the community management and service innovation”, also the national demonstration area of the harmonious community construction. The Haicang district of Xiamen has founded the operating mechanism of “the linkage between the community, the social organization and the social worker” on the basis of the community, depending on the social organizations and regarding the social work as its professional power, in order to promote the development of society. The social governance mode which adheres to the core leadership of the party and diverse social participation, namely “a core with multivariate” governance mode, plays a significant role in promoting the organized coordinative function of “the linkage between the community, the social organization and the social worker”, calls on the social organizations to actively participate in the community governance and efforts to develop the professional level of the social work; according to the practical condition, the service projects with the creative diversity, take the service projects of the social work as their carrier, and transform the diverse requirements of the community into the specific projects, mainly in the service of the old, the weak, the sick, and the families who lose their only one child or have a single parents, the empty nesters, the poor and other vulnerable groups. According to the requirements, it needs to carry out the professional help services; at present, the community of Haicang district is adopting the way to purchase the service projects relying on the community and the street together, to realize the full coverage of the service work of the social work; Mirroring the concept of “overall construction of the

community” in Taiwan, the service work where the community lays an overall emphasis on the development of community should be comprehensive, moreover, except the social welfare, the construction of education, culture, health, agricultural development, and community security, etc. should be considered), it should forge the community linking the both sides, and promote the development of cross-strait exchanges; Xiamen has hired the Taiwan Foundation, the Community Development Association and other organizations for several times to guide the Haicang district, attracting the Taiwan volunteers to help the Community Volunteers Association.

3.2 The innovative practical investigation of “the linkage between the community, the social organization and the social worker” in Nanjing

Nanjing has given the new vitality to the “three social agencies”. The social governance leads to the new normality. It has achieved the initial success in the practical exploration of “the linkage between the community, the social organization and the social worker”. “The linkage between the community, the social organization and the social worker” expanded in the “three”, refers to that Nanjing stands on the home business, based on the body of the linkage, makes “three social agencies” closely connected from the various aspects, so as to promote the social integration: promoting the comprehensive reform, opening the idea of expanding “three social agencies”, boosting the project purchasing, providing the platform for “three social agencies” to be expanded, carrying out a series of the standardized constructions, laying a foundation for “three social agencies” to be expanded; due to the core of “three social agencies” lies in the “social”, the Nanjing Civil Affairs Bureau, on the basis of emphasizing community as the carrier, adds and subtracts around the “three social agencies”: the social coordination, the simplification of the government’s affairs, the expansion of the social organizations, the active implementation of the de-administration of the community, the development of high-level professional social workers, the development of social workers’ posts, the reduction of social administration; its key is about the “linkage”, mentions that it should regard the residents’ demand as its guidance, and develop the carrier and mechanism and other aspects: it should regulate the office space in the community, and the mechanism of social workers’ professional work in the public welfare project ought to be included in the evaluation of project performance, and the target of civil administration. The orientation of “the linkage between the community, the social organization and the social worker” is strengthened. The special funds of “three social agencies” ought to be integrated. There is a specific project to cultivate the social organizations. By grouping the “three social agencies”, the maximum efficiency should be achieved; the effect of it lies in “moving”, the Nanjing Civil Affairs Bureau supervise the dynamics of it, to ensure the sustainable development of the

mechanism of “the linkage between the community, the social organization and the social worker”: the project must meet the community needs, and be organized by the social organizations to undertake the government projects. After it is responsible for the government projects, it should provide the job posts and platforms for social workers, and achieve the deliberative democracy, and the diversification of social governance. Nanjing is honored as the national demonstration area and unit of the social work service, and the national demonstration area of social organization construction in 2014, through the practical exploration of “the linkage between the community, the social organization and the social worker”. At the same time, Nanjing transforms from “the political affairs” to “the social business” in the practical exploration of “the linkage between the community, the social organization and the social worker” at the grassroots’ administration. At the community level, the government has shifted its original functions, not controlling the whole world, but playing a leading role. The trend of “the linkage between the community, the social organization and the social worker” is irreversible, whose aim is to serve from the venerable groups, like the old, weak, sick and disabled to the masses.

3.3 The implement of “the linkage between the community, the social organization and the social worker” in Guilin, Guangxi promoted scientific development

With complementary advantages, sharing resources and mutual promotion in community, social organizations and social work in Guilin, Guangxi has promoted the formation of the new management pattern between society and government, which is interactive, complementary and interactive. This pattern has also accelerated the development of relief management work there. The government of Guilin developed a team of social work professionals so as to lay a foundation of social assistance. They pay much attention to talent construction, encouraging them to make progress and strengthen the social service consciousness and sense of responsibility. Besides, they also encourage employees to learn actively and to participate in social worker examination to obtain professional certificates so that the assistance station mechanism could be upgraded and more talent would be attracted. In addition, the government also has made some efforts to use personnel effectively in order to promote the development of rescue work in Guilin. What’s more, they also have expanded the content of social assistance. In addition to the meet the basic survival needs and material needs, the rescuer’s psychological needs are also concerned. Psychological counseling was provided to help rescue personnel return to family and society early. They’ve also expanded the scope of social assistance and improved the social security network, with the aim of achieving early discovery, early intervention, early prevention. Meanwhile, the community assistance publicity department was established, whose job is to release assistance card, rescue on-site, and implement targeted rehabilitation

training and skills training in later period. Last but not least, social assistance management strength will be increased and social forces will be guided to join the management of relief society, cultivate social work organization and increase social service items, so that the development of better management of relief society will be promoted.

At present, “the linkage between the community, the social organization and the social worker” in various places are flourishing, showing exuberant vitality, but there are still some factors that restrict its continued development. At the same time, different restricting factors may result into different problems. From the view of overall development, there are some common problems. Firstly, the lack of understanding on this topic makes the corresponding system unsmooth. Government leaders and departments at all levels do not pay enough attention to this practice. And its lack of a complete working system leads to its slow development. Secondly, the government purchase policy is not in place which may result into the lack of funds. The government has not fully implemented the policy of purchasing services, and the preferential policies of the service institutions are not in place. Project funding shortage due to lack of financial support in many areas makes the implement difficult to continue, which hindered the development this practice. Thirdly, the shortage of professional community staff makes the expansion of community services more difficult. In recent years, due to the low treatment of community service, heavy workload and low sense of achievement, the loss of social work professionals is serious and the service personnel in the community are seriously inadequate. There are fewer people and more work in the community. The professional quality of service personnel in the community needs to be improved. Fourth, the capacity of social organizations to undertake projects and services is insufficient and the social organizations in the community are inadequate. There are two aspects of social organization, one is insufficient in quantity. Big cities except Guangdong, Shenzhen city are lack of social organization. The other is the lack of professional service capabilities in social organizations. The lack of professional personnel less quantity and the lack of advantaged social organization development environment lead to social organization being shortage of service ability. Fifth, departments lack of cooperation. The development of this practice requires effective cooperation and support among various departments.

4. The development path of “the linkage between the community, the social organization and the social worker”

4.1 The premier for the development of “the linkage between the community, the social organization and the social worker”

First of all, the community, the social organizations and the social work are not all independent of each other. There is an internal

connection between the three factors. Community governance requires the joint participation of social organization and social work. The development of social organizations rely on the community to promote the platform and social work, providing the basis for social organizations and the development of social work. Whereas, social workers are needed to integrate various resources to serve the residents as the professional team. Therefore, the community needs to build a platform that is linked and autonomous, which serves to undertake the government transfer functions. The government to could buy services from the community organizations, while social organizations should provide quality social services

Secondly, the linkage does not mean that the main bodies in troop, but imply the mutual exchange, resource sharing, complementary advantages, joint decision-making, joint action among the three subjects, which means mutual understanding, support, sharing and common development. Therefore, this practice should act based on cooperation to seek common goals: the need to focus on their own goals, the need to focus on a common goal, achieving individual goals based on the realization of the common goal. This is foundation for a successful practice of “the linkage between the community, the social organization and the social worker”.

Finally, in community construction, community service, community governance, the linkage between community, social organizations and social work should be continuous, sound. All parties should make joint efforts to accomplish common goals, not just paying attention to their own objectives, so as to realize the common goal better.

4.2 The development path of “the linkage between the community, the social organization and the social worker”

4.2.1 Establish and perfect the management mechanism, strengthen the system design, improve the work system so as to provide the organizational foundation for its development.

Firstly, establish a sound leadership mechanism. The government departments at all levels should introduce guidance document as soon as possible. The leadership, leadership team specialized in “the linkage between the community, the social organization and the social worker” should be established. The implementation plan of “the linkage between the community, the social organization and the social worker” should be developed according to local conditions. The content and requirement of “the linkage between the community, the social organization and the social worker” should be clear. Preferential policies meeting to the specific circumstances should be formulated.

4.2.2 We should strengthen financial support and raise funds in various ways to provide financial guarantee for the development of the “the linkage between the community, the social organization and the social worker”.

Firstly, strengthen the government support, the implementation of government procurement of services. To establish a working mechanism in which the fees will be transferred with work, specific projects of community service will be transferred to social organizations or social workers at the same time, the project funds transfer at the same time. The problem of insufficient funds will be solved fundamentally and the level of social organization and social worker service will be improved.

Secondly, implement the policy of supporting the development of social organization and social work, aiming to provide financial support. Ensure make some earnings in nurturing the development of social organizations and other aspects of social workers. Reforming tax policy, personnel salary system aims to support the transfer of government functions of social organizations and social workers. Provide policy of economic resources for the social organization and social workers.

Thirdly, it's the social organization of social workers to find their own economic resources. Encourage social organizations and social workers to actively explore innovative. Holding community service activities supported by enterprises, individual investment, jointly organized. According to the different needs of different groups, find different economic resources.

4.2.3 Strengthen the construction of professional personnel of social work, integrate talent resources, establish a perfect assessment mechanism, and provide a strong support force for the “the linkage between the community, the social organization and the social worker”.

Firstly, clarify their respective responsibilities and functions of work, reduce the phenomenon of “few people, many things” the community service. Establish social organization of clear responsibilities in the community, neighborhood and workstation and establish perfect working mechanism so as to promote community work. At the same time, facilitate community affairs to social organizations and social workers.

Secondly, integrate human resources to promote “the linkage between the community, the social organization and the social worker”. Make full use of the surplus labor of healthy retired cadres, laid-off workers, unemployed and charity dedication of social groups, college students and other volunteers, the majority of residents. Jointly promote the development of the “the linkage between the community, the social organization and the social worker”.

Thirdly, cultivate social workers. Increase publicity efforts of social workers and encourage professional social workers to join social workers' institutions. Improve social workers wages so as to prevent the loss of talent and improve the quality of social workers. Strengthen the construction of social work team, professional. Combine occupation and volunteer to establish professional, excellent personnel team. Encourage community workers to take

occupation level examinations. Provide subsidies for those who passed the examination. Enhance the internal assessment of wages within mechanism. Improve the professional quality and development opportunities. Audit the efficiency, service satisfaction assessment of social organization and social work.

Actively develop social organizations, promote the development of professional social worker organizations, and establish a social organization incubator base.

First, establish a social organization and build a comprehensive coordination platform in every community. The community should establish a promotion committee so as to promote the forces of all parties to actively participate in community construction, to maximize the realization of the rational allocation of community resources and to promote community social organizations serving for community residents.

Second, focus on developing social organizations, such as charity, sports, social service organizations, etc. to build community service platform. Support the elderly, disabled, young people and other special groups of social service organizations. At the same time, combine special group service and community service. Develop community social organization according to different situation in different places and better services will be provided for the residents. Third, establish incubators base of social organizations and platform for the development of social organizations. Integrate social resources and expand the base function. Provide a good social environment for social organization development. Design service programs elaborately. Promote the development of social organizations and social workers by the project. Attract social work talents through the project and cultivate outstanding community service organization.

Strengthen departmental cooperation and provide the necessary resources for the “the linkage between the community, the social organization and the social worker”

The development of “the linkage between the community, the social organization and the social worker” needs the support from various departments. The national development and Reform Commission attaches great importance to the development of “the linkage between the community, the social organization and the

social worker” which should be included in the national economy overall planning; the Ministry of finance should provide adequate financial support; the Ministry of civil affairs should improve the policy system in the government purchase project to make the most use of the resources and talents so as to strengthen the competitiveness of social workers’ institutions. Strict supervision and evaluation are also needed to improve the professional quality of social institutions; the Ministry of human resources and social security need to optimize social work treatment and welfare in order to solve the present situation of social worker in which a large number of talents are lost for wages, working environment factors. At the same time the support and cooperation of education department, the Department of justice, women's Federation, the Federation of the disabled, foundations and community are also needed.

References

- Chen Li, Feng Xinchuan. *LCSS and community management innovation: case of Jiangsu. Social and population research, 2012 (2)*.
- Chen Rongzhuo. *The new urbanization under the background of modern rural social organization management system construction research. Socialism Research, 2013 (2)*.
- Chen Xuerong. *To stimulate the new activities of LCSS to cope with civil affairs new normal. China Civil Affairs, 2015.17*.
- He Lijun. *Deep into the LCSS to build a shared social governance pattern. China Civil Affairs, 2015.20*.
- Li Huibin, Yang Xuedong. *Social capital and social development*. Social Science Literature Publishing House, 2000.
- Wang Sibin, etc. *Introduction to social work*. Beijing: Peking University Press, 2011.
- Ye Nanke, Chen Jincheng. *China's LCSS model selection and strategy research, Nanjing Social Sciences 2010 the twelfth period*.
- Ye Nanke. *Urban society of micro-recycling*. Southeast University Press, 2003.
- Zhu Guoyun. *Community management and service*. Tianjin: Tianjin University Press, 2010.

The Practice and Prospect of Inverse Scheduling Based on Inverse Optimization Theory

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Abstract: The goal of scheduling in traditional manufacturing system is to arrange the operations on corresponding machines with optimal sequence for one or multiple objectives. However, in an actual production system, schedule system often encounters many uncertain events. However, real manufacturing systems often encounter many uncertain events. These will change the status of manufacturing systems. These may cause the original schedule to no longer be optimal or even to be infeasible. Traditional scheduling methods, however, can't cope with these cases. New scheduling methods are needed. Among these new methods, one method "inverse scheduling problem" (ISP) has attracted more and more attentions. In this paper, we pay attention to the inverse optimization problem (IOP) and try to find some ways to solve the ISP. In view of this, this paper provides a comprehensive review of both state-of-the-art approaches on IOP and ISP. Firstly, we focus on the classification of ISP. Secondly, an analysis of the current literature about IOP is presented. And then, the relative relationship between ISP and IOP is discussed. Finally, based on the analysis of the limitations of current research, some future research directions of ISP are provided.

Key words: inverse optimization, inverse scheduling, information technology, combinational optimization

1. Introduction

Generally, the traditional scheduling problem in previous research assumes a set of jobs to be scheduled in an ideal condition and that all parameters are determined. However, in many practical cases, scheduling systems usually operate in highly dynamic and uncertain environments such as machine breakdowns, new job arrivals and so on, whereas the basic scheduling problems in previous literature represent only the determined environment versions of most production processes. Thus may render the predictive optimal schedule neither feasible nor optimal. And these events may also be changing the status of manufacturing systems and processing parameters. The existing methods do not take into account several important aspects frequently found in practice. In many cases of reality, the job sequence cannot change during the scheduling due to the process continuity in a problem condition. A noticeable gap is still observed between the theory and the practice of scheduling. Therefore, researchers and practitioners suggest the necessity of the proposing methods for real-world production scheduling problems. In order to solve this problem effectively, this paper proposes a novel idea of scheduling "inverse scheduling problem" (ISP) to improve the existing manufacturing systems (see Figure 1.).

The definition of inverse scheduling problem (ISP) is that the exact values of parameters (e.g. processing times, due dates) are unknown and they should be determined so that pre-specified job sequence(s) become optimal. In 2009, Brucker^[1] was the first to introduce the concept of ISP, where considered the inverse counterparts of the single-machine scheduling. But now, there has been very little research on ISP. And ISP is also acknowledged as one of the most difficult NP-complete problems.

The reason that the ISP has not been considered previously is in fact not due to the lack of its application, but due to its increased complexity as a result of considering controllable processing parameters in the scheduling problem. In fact, there might be several application scenarios for ISP. For example, in the modern manufacturing system, this may happen as the following: for example, where the producer arranges the job sequence only based on estimated parameters value at the beginning of production planning. But the fact is, the real value of parameters may have slightly different from the estimates. It may lead that the given sequences are no longer optimal^[1-2]. Of course, reality in some scheduling shop, the preplanned job sequence cannot be changed randomly due to technological or process constraints. Then, the producer may identify a few jobs that can be changed processing times, speeding up some of them by adding additional resources, or

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slowing down others, so that the original sequences become optimal.

In addition to the inverse problem, we introduce a reverse problem following the classification due to the paper^[3]. The reverse problem^[3] specifies what usually values of the job parameters are given and they are to be modified in order to reach a satisfaction target value. In this notes, the difference between the traditional scheduling and RSP is that the latter is that objective is given in advance and job sequence is not restricted by some preferred job sequences. So there are still some certain application scenarios for RSP in an actual production shop. For example Figure 2, as the producer, they may want to process the jobs either on time (Lateness) or within a satisfied limit objective (Cost) from the due dates or processing times. It is general knowledge that due dates are considered as quality of service measured whereas the sum of weighted completion time can be seen as total cost. The producer may put some compensation into the customers if the claimed objective (L/C) is not complete on request. To reach such customer satisfaction (L/C), the controllable due dates or processing time incurred are minimal, so that the given objective can be achieved. Furthermore, in some specific production, extensive research and application is awaited. But not many noticed the ISP and its application. Recently, the interest in inverse optimization problem (IOP)^[4] has been increasing dramatically. The methods of inverse optimization problems are introduced in reference^[5]. Thus may lead to more relative relationship between the ISP and IOP. Therefore, we try to find some approaches to solve the ISP from inverse optimization. By comparing the inverse optimization problems, the challenging research question is: how we generate a feasible scheduling sequence at the beginning or how we obtain the optimal solution by adjusting the processing parameters? Usually, only job sequence is required to determine in traditional scheduling. However, the minimal perturbation to the job parameters is also needed to be identified in ISP. It is more difficult to assign resources in a given job sequence constraints, so ISP is more complex than problems with determined parameters. To overcome these problems, there is an increasing need for future study the inverse scheduling. ISP is very important owing practical significance. Especially, ISP may promote new ideas and developments in shop scheduling problem.

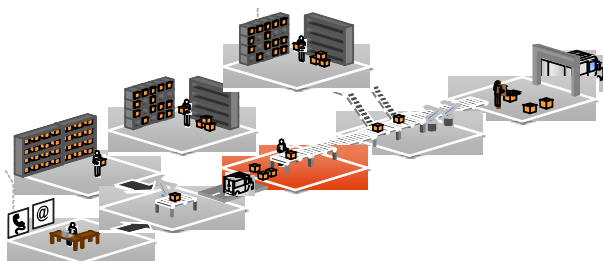


Figure 1. Some certain application scenarios for ISP

In view of this, this paper provides a comprehensive review of

both state-of-the-art approaches on the inverse scheduling. By comparing the inverse optimization problems, we see that inverse scheduling problems is initiated just now and have many problems. Nevertheless there is still significant room for improvements in this area. We see improvements occurring not only in the area of ISP algorithms, but also in the wider application of ISP.

The remainder of this paper is organized as follows. Section 2 discusses the review of inverse scheduling problem. Section 3 reviews the models and algorithms of inverse optimization. More relative relationships between ISP and IOP are reported in Section 4. Finally, some future research opportunities and conclusions are reported.

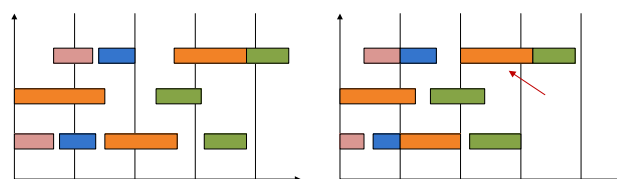


Figure 2. Inverse scheduling in a flow-shop

2. Literature review

The scheduling problem in manufacturing has been widely investigated over the last 50 years. Extensive research has been conducted on various aspects of the scheduling problem, including job shop scheduling, flow shop scheduling, flexible job shop scheduling, and open shop scheduling. Many of the research related to the scheduling has adopted some simplifying assumptions. For example, even though most real-life situations have a lot of uncertain events, most of the research assumes that the job parameters are determined before scheduling. In the present work we introduce a new “Inverse scheduling” for a discrete manufacturing system which assumes processing parameters are controllable.

Apparently, the present study has an increasing need for deep research and application of ISP. In the following sections, the authors will brief review the relevant research of ISP. We will also attempt to show the current limitations in the ISP. Future research could explore the relation between IOP and ISP.

2.1 Brief review on inverse scheduling problem

In this section, we classify the papers according to the optimization criteria, solution approach and production system. Since the references of ISP are relatively few, a short exposition of this problem can be found in references.

There are only a very few papers that have investigated the inverse scheduling. Brucker^[1] firstly raised a particular definition of the inverse scheduling. This paper studied two novel inverse scheduling problems, namely the single-machine inverse and reverse scheduling problem respectively. The two problems with adjustable due dates or processing times are proving NP-hard, for the remaining problems, they provided solution methods for the corresponding

mathematical programming formulations. Unfortunately, there is no effective method, only linear programming methods is used for single machine ISP in previous literature. One year later, Brucker addressed a more complicated two-machine flowshop inverse scheduling problem. They verified the necessary and sufficient conditions of optimality of a solution which obtained in flowshop ISP^[2]. An earlier research performed by Koulamas^[6] is shown that such inverse problem can be simplified linear programming problems even though the corresponding forward problem cannot be solved in polynomial time. However, he does not consider possible increases in the scheduling criteria.

And with the development of inverse optimization, inverse scheduling already caused the attention of some domestic scholars. Typically, Chen^[7] proposed the mathematical programming tool for a single-machine inverse scheduling problem, the corresponding objective is to minimize the total weighted completion time and the corresponding optimal solutions are obtained under different norms. More recently, several studies focusing on the single-machine supply chain inverse problem and flow shop scheduling with two machines have been provided by Chen and Tang^[7-8]. It was shown that, by the theories of scheduling, these problems can be formulated as respective mathematical programming involving different controllable parameters. In 2012, Hongtruong Pham and Lu^[9] also provided efficient methods for the inverse scheduling problem with the total weighted completion time objective on identical parallel machines. Consequently, reverse scheduling was introduced by Li et al.^[3]. The paper presented the structural properties of the reverse model, establishing a link with the forward scheduling problem with due dates and deadlines.

It is important to note that all of the previous works only focused on developing a linear programming to find a solution for their proposed problem.

2.2 Classification according to the characteristics of the production system

ISP was an interesting topic but literature was relatively small. In this section, the references are classified according to a production system point. We have grouped the references, first, according to the characteristics of the machines which correspond to the single-machine and flowshop, next according to the criteria considered.

2.2.1 Single-machine inverse scheduling problem

For inverse scheduling problem, the processing parameter should be determined so that pre-specified job sequence(s) become optimal. A similar issue is the sequencing problem with controllable processing parameter. Some constructive ideas and suggestions will be presented from the analysis of model, here are several papers which deal with a shop manufacturing system with controllable job parameters. Vickson^[10] considered a single-machine problem with controllable job processing times and the corresponding objective was to determine a job sequence and actual processing times that minimize the schedule cost. The survey by Nowicky and Zdrzalka^[11]

provided a review on recent developments in the scheduling problems with controllable job processing time. Chand et al.^[12] studied scheduling problems with controllable job due dates. More recent contributions on scheduling with controllable job parameters can be found in references^[25]. The objective in these papers is to determine job parameter values and job sequences to minimize some function of the job due dates and/or completion times. A summary of inverse problems with a single machine scheduling is first announced in paper^[6]. However, this employed a mathematical programming tool to study inverse problems of a single machine scheduling to minimize the total weighted completion time, and the corresponding optimal solutions are obtained under different norms. Furthermore, Chen et al^{[7] [8]} developed an exact method for the inverse problems where studied inverse scheduling with the maximum lateness objective. As stated above, a model of single machine inverse scheduling is constructed, the optimization objective is to minimize the adjustment of the process parameters. In this paper, it is assumed that weight of each job is controllable and needs to be minimally adjusted so that a pre-specific schedule becomes an optimal one. Formally, w_j ($j = 1, 2, \dots, n$) are the decision variables. It is important to note that the resulting total weighted completion time based on the adjusted parameters is no greater than the total weighted completion time based on the original parameters. This problem can be formulated as follows:

$$\begin{aligned} \min Z = \min \sum_{j=1}^n \|w_j - \bar{w}_j\| \\ \frac{w_1}{p_1} \geq \frac{w_2}{p_2} \geq \dots \geq \frac{w_n}{p_n} \\ \sum_{j=1}^n \bar{w}_j (p_1 + \dots + p_n) \leq \sum_{j=1}^n w_j c_j \\ \bar{w}_j \geq 0, j = 1, 2, \dots, n \end{aligned} \quad (1)$$

Where the parameters can be described as two sets, the original processing time, weight, and completion time of each job are denoted by p_j , w_j , and c_j , respectively; the adjusted processing time, weight, and completion time of each job are denoted by \bar{p}_j , \bar{w}_j , and \bar{c}_j , respectively.

2.2.2. Flowshop problem with two-machine inverse scheduling problem

Inverse scheduling with two-machine flowshop problem, these problems can be formulated as respective mathematical programming in accordance with different parameter adjustments in Brucker^[1-2]. In the inverse counterpart of problem, the typical processing times a_i and b_i are given together with the target job sequences π and σ on machines A and B , which may be the same on both machines or different. In what follows they always assume that the jobs are renumbered in accordance with permutation π , so that $\pi = (1, 2, \dots, n)$. The target job sequences may not be optimal for the given typical values of a_i and b_i . The objective is to modify the processing times within certain limits so that the target job sequences become optimal.

In this problem, the adjusted processing times should be

selected within given boundaries, so that the deviation from the original processing times is minimal and the target job permutations π and σ for machines A and B are optimal. The problem model is as follows:

$$(2) \quad \min \left\| (\hat{a}, \hat{b}) - (a, b) \right\|$$

$$s.t. \quad C_{\max}(\pi, \sigma, \hat{a}, \hat{b}) \leq C_{\max}(\pi', \sigma', \hat{a}, \hat{b}) \quad (2)$$

for any permutation π', σ' ,

$$\underline{a}_j \leq \hat{a}_j \leq \bar{a}_j, \quad j \in N,$$

$$\underline{b}_j \leq \hat{b}_j \leq \bar{b}_j, \quad j \in N.$$

2.3 Classification according to the solution approaches

Brucker and Shakhlevich^[1] have produced mathematical programming formulations and developed efficient solution algorithms for the corresponding problem. The necessary and sufficient conditions for optimality of a given job sequence for problem with completion time are symmetric to those specified for problem with due date. Koulamas^[6] studied inverse scheduling problems with complex shop environment where showed that these problems can be formulated as linear programming problems even when the corresponding forward problems are not solvable in polynomial time. Chen and Tang^[7-8] has developed a mathematical programming tool such as Goldfarb-Ildnani approach for ISP, consequently, this work has also adopted Newton method to solve the single machine inverse scheduling. The corresponding optimal solutions are obtained under different norms. Recently, Hongtruong Pham and Lu^[9] used a Wolfe algorithm to solve the inverse scheduling problem on identical parallel machines.

2.4. Limitations of present research

From the classification of the scheduling model, it can be observed that a lot of research work only considers makespan as criteria, while other common criteria, such as cost or tardiness, are less studied^[39-44]. With respect to solution approaches, linear programming and mixed integer programming are the most common exact approaches for ISP. However, there is still a gap in the research about ISP which causes the following problems:

(1) It is important to note that many research works have been considered the ISP with single machine, whereas multiple machines shop has not been discussed now. This is probably due to the fact that the single machine problem is easier than the multiple machines problem. However, the real-life situation is much more complex, which involves some realistic considerations and constrains in problems.

(2) Furthermore, some previous papers mainly presented exact approaches trying to solve ISP, the limitations of such algorithms is feasible only for some simple, small-scale problems or single objective problems. But it still requires a large amount of the intelligent algorithm for solving large size or more complex shop.

(3) Moreover, in forward scheduling it is to be useful for the design of a prefer system, but will not to be improve the efficient of an existed system, so that the traditional scheduling problem cannot treat this problem effectively. Apparently, the present study has an increasing need for further research. Machine learning methods are used to explore the key factors which affect performance of ISP and to discover the rules of forward/inverse scheduling problem.

Finally, although ISP is a layout increasingly appearing in industry, only few papers reported and explained the real-world applications. It can be noted that ISP can maintain and perfect the production system for better production efficiency. Moreover, it will improve production resources utilization through eliminating or reducing extra cost of changing parameters. Probably this would be an interesting research area which is highly desired by industry and whose results can be easily applied to the real world.

3. Review inverse optimization

3.1. Inverse optimization problem review

A comprehensive review of both state-of-the-art models and methods for inverse optimization problem (IOP) is provided in this section. Recently, the interest in inverse optimization has increased dramatically, which may lead to a more relative relationship between ISP and IOP. Steininger et al.^[13] proposed an inverse optimization method to find a linear objective function which optimizes the given data subject to predetermined constraints. Unfortunately, the paper was written in Japanese, it didn't receive enough attention from the international academic community. Until the 90s, Burton^[14] first investigated an inverse shortest paths problem. Consequently, many problems have been considered by various authors, working at least partly independent. In recent years, some problems in inverse optimization have been solved, which is categorized as the shortest path problem^[15], the minimum spanning tree problem^[16], maximum flow problems^[17], bottleneck capacity expansion problems^[18], and weight reduction problems^[19]. Inverse problems^[20] also arise in other diverse fields such as geophysical exploration^[21], medical imaging, non-destructive evaluation, inverse heat conduction or diffusion problems, and signal processing. Traffic planning problems can be formulated as inverse shortest path problems (See Stout^[22]) and inverse minimum cost flow problem^[23]. In the context of high-speed Asynchronous Transfer Mode (ATM) networks^[24] which have the aim to combine the simplicity of fixed routing and some advantages of a dynamic scheme to obtain reliable and stable self-configuring systems. Nguyen^{[25][26]} suggest an optimal model complexity in inverse modeling of heterogeneous aquifers. In 2012, Chakib develop an inverse method^[27] aiming to circumvent the subjective decision regarding model parameterization and complexity in inverse groundwater modeling, it is a useful result of practical interest in real inverse modeling applications.

Inverse optimization has attracted much attention of researchers in different areas of combinatorial optimization, the summary of the results can be found in the comprehensive reviews^[4,28]. The area

continues to attract attention of researchers, for example, more recent papers ^{(29)[30]}.

By comparing the inverse optimization problems, it can be observed that inverse scheduling problems have not yet been studied widely. Concerning the papers, our main focus is on models and solution procedures; it is also expected to provide us a lot of information through inverse optimization. Recently, the interest in inverse optimization problem (IOP) ^[6] has been increasing dramatically, see Figure 3 and Figure 4.



Figure 3. Number of publications on IOP



Figure 4. Number of publications on ISP

It is also interesting to study the different methodologies and techniques that the authors can apply in some new fields. Clearly, there is a large opportunity for ISP research here. Therefore, further research directions should get together and try to combine several algorithms together to construct some effective hybrid algorithms for inverse scheduling.

4. Analysis inverse optimization application

4.1 Approached based on optimization problem review

Many classical optimization problems have been studied from the point of view of inverse optimization; the summary of the results can be found in the comprehensive reviews ^{[4][5]}. The area continues to attract attention of researchers, see, e.g., more recent papers ^{[31][32]}. In some research, the adjustable parameters are not related to the objective function as, for example, in the inverse counterpart of the minimum cost flow problem with adjustable capacities ^[33] for the latest study. Inverse problems that arise in the area of scheduling are usually of the second type.

Single object unconstrained inverse problem under unit weight is considered by Deaconu and Ciurea ^[34] using the linear programming approach. The single object unconstrained inverse minimum flow problem under unit weight is transformed to a

quadratic cost flow problem by Sokkalingam ^[35]. Kasperski, Kurpisz and Zielinski ^[36] adopted an efficient algorithm for the problem with bound constraints under the L_∞ -norm and the Hamming distance.

In our paper, we consider a class of inverse network flow problems and inverse shortest path problems which has so far not been widely connected to an ISP in the literature, but it seems to have some potential impact on inverse scheduling. However, the author has been research program of ISP according the above theories. The basic flow chart of ISP is shown in Figure 5.

Apparently, linear programming and mixed integer programming and quadratic programming are the most frequently exact procedures used here. It is often difficult to apply the linear programming to solve large problems directly. However, it can be noted that none of meta-heuristic algorithm is used to solve ISP so far. Therefore, further research directions should get together and try to use several algorithms together to design some effective hybrid algorithms for the inverse scheduling. Therefore, to design an intelligence algorithm for ISP is an important trend in the future.

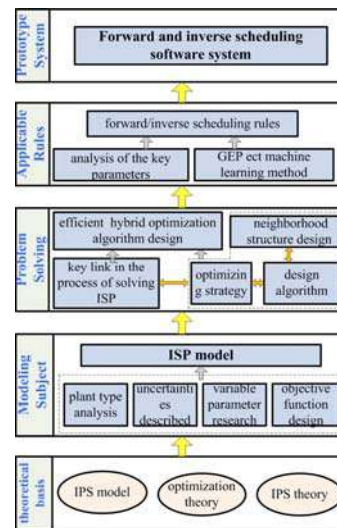


Figure 5 basic flow chart of ISP

4.2. Models based on inverse optimization

In practical manufacturing environments, the processing time can be slightly adjusted by setting the cutting speed or consuming other recourses. For example, in turning operation as you increase the cutting speed and the feed rate, the processing time of the operation is decreased. Our goal in this research is determining a set of amounts of compression/expansion of processing times in addition to a sequence of jobs concurrently. The optimization is to minimize the total modified cost. Guan, Pardalos and Zuo ^[37] developed the inverse sorting problem under the cost function $C(A, X) = \sum_{i=1}^n C_i(a_i, x_i)$, where each C_j is a strictly convex function. Assuming that there are two bounds L and U and all elements of X are required to be integers within the range $[L, U]$, they gave an $O(n \log(U-L))$ -time algorithm. Kasperski and Zielinski ^[38] studied the inverse sorting problem with bound constraints under the Hamming, the objective is to find a non-decreasing sequence

$X=(X_1, X_2, \dots, X_n)$ so as to minimize some cost function $C(A, X)$. It seems that the problem has some practical applications in ISP.

As stated above, the models of ISP depend largely on the cost function. In practice, objectives vary and hence a variety of ISP models are also possible. With respect to solution approaches, only linear programming is the most frequently exact procedures used. Even though ISP may play an important role in improving the performance of a pre-specified manufacturing system, the extant literature about it is scarce. There are still many questions, which have to be considered. For example, how to develop relative relationship between ISP and IOP, how to design intelligence methods to solve ISP or even larger scale ISP? These and many other questions, may lead to significant progress in the study of ISP if properly addressed. At the same time, this will improve the productivity of the manufacturing and reduce cost. Combining with the existing research results of IOP, future studies can be carried out in the following part.

5. Research opportunities and conclusions

This paper first reviews the research contributions published on inverse scheduling problems. The new field of study is attracting more and more attentions. However, few studies have looked at the issue of the inverse scheduling due to its complexity and the special applications. In the review, we have classified all the papers according to many parameters, including machine and job characteristics, constraints, objective functions and employed methodologies. Even though, such extensive analysis is necessarily shallow in the sense because we have not focused our attention in any particular ISP application or solution technique due to the limited space. To be sure, this review work will be helpful for other researchers in the scheduling area.

In practice, objectives vary and hence a variety of ISP models are possible. From the classification of the inverse scheduling criteria, it can be observed that a lot of research work considers minimally perturbing the job processing time, while other common criteria, such as makespan or extra cost, are less studied. Also it is observed that no research has been done concerning multicriteria problems. However, there are other objectives that in practice are sensible too. For instance, minimally perturbing the parameters is going to consume more its resources, or to meet the clients demands on time, or both of them at the same time. Therefore, new research that considers several constraints and criteria are needed in order to diminish the gap between the real-world industrial scheduling problems and their treatment in science.

With respect to solution approaches, linear programming and mixed integer programming and quadratic programming are the most frequently exact procedures used here. These algorithms proposed are just to solve instances with single machine or two-machine flowshop. Therefore, we should pay attention to the inverse optimization (IOP) and try to find some ways to solve the ISP. It can be noted that none of meta-heuristic algorithm is used to solve ISP so far. The above-mentioned works used exact methods to solve inverse scheduling. Since every algorithm has its own advantages and disadvantages, the further research directions should try to

combine several algorithms together to construct some effective hybrid algorithms for ISP. It is also important to consider that the real world is unpredictable and dynamic. Algorithms must be able to find solutions which remain robust under different scenarios.

This paper has provided a comprehensive review of both state-of-the-art approaches on inverse problem and prospected on the inverse scheduling. The review may not provide a complete survey of the literature in this area, but it has presented some representative integration models and implementation methods.

Although ISP is a hard work, its research is necessary. ISP is very important because it can effectively improve an existed manufacturer system and optimally allocate resources. And, the research on ISP is still a challenge. Many models and methods can be proposed in this area. For these reasons, the researchers will continue to do the further and deeper study on ISP.

References

- A. Chakib, M. Johri, A. Nachaoui, M. Nachaoui. *On a numerical approximation of a highly nonlinear parabolic inverse problem in hydrology. Physical Review C.* (2015).
- A. Deaconu and E. Ciurea. *Inverse feasibility problems of the inverse maximum flow problems. Sadhana.* 38(2), 199-209 (2013).
- A. Farago and A. Szentesi, B. Szviatovski. *Inverse optimization in high-speed networks. Discrete Applied Mathematics.* 129, 83-98 (2003).
- A. Kasperski and A. Kurpisz, P. Zielinski. *Approximating a two-machine flow shop scheduling under discrete scenario uncertainty. European Journal of Operational Research.* 217, 36-43 (2012).
- A. Kasperski and P. Zieliński. *Approximating Combinatorial Optimization Problems with Uncertain Costs and the OWA Criterion. Operations Research Letters.* 41(6), 639-643 (2013).
- B. P. T. Sockalingam. *The minimum cost flow problem: primal algorithms and cost perturbations.* (2010).
- C. Artigues and M. J. Huguet, F. Gueye, F. Schettini, L. Dezou. *State-based accelerations and bidirectional search for bi-objective multi-modal shortest paths. Transportation Research Part C Emerging Technologies.* 27(2), 233-259 (2013).
- C. Heuberger. *Inverse combinatorial optimization, a survey on problems, methods, and results. J. Comb. Optim.* 8, 329-361 (2004).
- C. Koulamas. *Inverse scheduling with controllable job parameters. International Journal of Services and Operations Management.* 1, 35-43 (2005).
- D. Burton, Ph. L. Toint. *On an instance of the inverse shortest path problem. Mathematical Programming.* 53, 45-61(1992).
- D. L. Yang and C. J. Lai, S. J. Yang. *Scheduling problems with multiple due windows assignment and controllable processing times on a single machine. International Journal of Production Economics.* 150, 96-103 (2014).
- E. Nowicki and S. Zdrzalka. *A survey of results for sequencing problems with controllable processing times, Discrete Applied Mathematics.* 26, 271-287 (1990).
- J. Lässig, A. Awasthi and O. Kramer. *Common Due-Date Problem: Linear Algorithm for a Given Job Sequence. IEEE, International*

- Conference on Computational Science and Engineering*, 97-104 (2014).
- J. Li, J. Zhu. *The Capacity Expansion Path Problem in Networks. Journal of Applied Mathematics*. 2013,361-376 (2013).
- J. Mou and X. Li, L. Gao, L. Chao, Guohui Zhang. *An Improved Genetic Algorithm for Single-Machine Inverse Scheduling Problem. Mathematical Problems in Engineering*. 2014(4), 1-14 (2014).
- K. T. Nguyen, A. Chassein. *Inverse eccentric vertex problem on networks. Central European Journal of Operations Research*. 23(3), 687-698 (2014).
- K. W. Steininger and B. Bednar-Friedl, H. Formayer, M. König. *Consistent economic cross-sectoral climate change impact scenario analysis: method and application to austria. Climate Services, 1*, 39-52 (2016).
- L. Liu and E. Yao. *Capacity inverse minimum cost flow problems under the weighted Hamming distance. Optimization Letters*.1-12 (2015).
- L. Liu and Y. Chen, B. Wu, E Yao. *Weighted Inverse Minimum Cut Problem under the Sum-Type Hamming Distance// Frontiers in Algorithmics and Algorithmic Aspects in Information and Management. Springer Berlin Heidelberg*. 26-35 (2012).
- M. Cullen, M. A. Freitag, S. Kindermann, R. Scheichl. *Large Scale Inverse Problems*. (2013).
- M. Mohaghegh and F. B. Bonab. *Inverse min-max spanning r-arborescence problem under the weighted sum-type Hamming distance. Asian-European Journal of Mathematics* (2016).
- M. Shirazi and H. Z. Aashtiani. *Solving the minimum toll revenue problem in real transportation networks. Optimization Letters*. 9(6), 1187-1197 (2015).
- M. Trick. *Scheduling Multiple Variable-Speed Machines. Operations Research*. 42, 234-248 (1994).
- N. Martín, R. Mata. *An efficient asymptotic approach for testing monotone proportions assuming an underlying logit based order dose-response model. Statistics*. 66(6), 654-659 (2014).
- P. Brucker and N. V. Shakhlevich, V. Natalia. *Inverse scheduling: two-machine flow-shop problem. J Sched*. 14,239-256 (2011).
- P. Brucker and N. V. Shakhlevich. *Inverse scheduling with maximum lateness objective. Journal of Scheduling*. 12,475-488 (2009).
- Pham. Hongtruong and X.W. Lu. *Inverse problem of total weighted completion time objective with unit processing time on identical parallel machines. Journal of East China University of Science and Technology*. 38(6), 757-761 (2012).
- R. D. Guerra and D. A. L. D. Pablo, C. G. Martín. *An approach to solve the non-proportionate flow shop with controllable processing times. South Asia Journal of South Asian Studies*. 36(2),308-309 (2013).
- R. G. Vickson. *Choosing the job sequence and processing times to minimize total processing plus flow cost on single machine, Operations Research*. 28, 1155-1167 (1980).
- R. J. Chen and F. Chen, T. G. Chun. *Inverse problems of a single machine scheduling to minimize the total completion time. J. Shanghai Second Polytechnic University*. 22(2), 1-7 (2005).
- R. K. Ahuja and J. B. Orlin. *Inverse optimization. Operations Research*. 49, 771-783 (2001).
- R. P. W. vStancliffe and G. J. Duncan, C. R. Phair, G. T. Stabb. *In situ gravity drainage system and method for extracting bitumen from alternative pay regions*. (2016).
- R.J. Chen. *Inverse Scheduling Problem on a Single Machine Stochastic Scheduling to Minimize the Total Completion Time. Journal of Changzhou Institute of Technology*. 19(6), 1-5 (2006).
- S. Chand and D. Chhajed. *A Single Machine Model for Determination of Optimal Due Dates and Sequence, Operations Research*. 40, 596-602 (1992).
- S. S. Li and P. Brucker, C.T. Ng, T. C. E. Cheng, N. V. Shakhlevich, J. J. Yuan. *A note on reverse scheduling with maximum lateness objective. J Sched*, 16,417-422 (2013).
- Stout B ' Q. *Optimal algorithms for unimodal regression, Computing 2%*, the node assignment approach is capable of performing// *Science and Statistics*. (2014).
- V. Kayvanfar and I. Mahdavi, G. M. Komaki. *Single machine scheduling with controllable processing times to minimize total tardiness and earliness. Computers & Industrial Engineering*, 65, 166-175 (2013).
- W. S. Chi and K. W. Shum, L. Huang, H. Y. Kwan. *Linear network coding for erasure broadcast channel with feedback: complexity and algorithms. IEEE Transactions on Information Theory*. 62(5), 2493-2503 (2016).
- W. X. Li and C. L. Zhao. *Single machine scheduling problem with multiple due windows assignment in a group technology. Journal of Applied Mathematics & Computing*. 48(1-2), 477-494 (2015).
- X. Guan and P. M. Pardalos, X. Zuo. *Inverse max plus sum spanning tree problem by modifying the sum-cost vector under weighted l(infinity)norm. Journal of Global Optimization*. 61(1), 165-182 (2015).
- X. Guan, P. M. Pardalos, X. Zuo. *Inverse Max plus Sum spanning tree problem by modifying the sum-cost vector under weighted l(infinity)Norm. Journal of Global Optimization*. 61(1), 165-182 (2015).
- X. Suo. Tibshirani R. *An Ordered Lasso and Sparse Time-lagged Regression. Eprint Arxiv*, (2014).
- Y. Chao. *A Class of Network Bottleneck Capacity Expansion Problem with Constraints. A Class of Network Bottleneck Capacity Expansion Problem with Constraints*. 2014.
- Y. Zhang, and P. Liu, L. Yang, Y. Gao. *A bi-objective model for uncertain multi-modal shortest path problems. Journal of Uncertainty Analysis & Applications*. 3(1), 1-17 (2015).

English Infinitive Form of Verb and Chinese Subjective-Object Construction: Towards a Generative Analysis

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Abstract: English Infinitive Form of Verb and Chinese Subjective-Object structure are accusative in nature. In the two sentence patterns, the first verb gives their own objects cases, and the two deep structures give the second verbs logic subjects. In the surface of syntax, the two sentence patterns have same characteristics.

Key words: English infinitive form of verb, Chinese Subjective-Object construction, generative grammar

1. Introduction

English infinitive form of verb complements the action of the object, which is very common as Chinese both subject and object construction in English and Chinese languages. According to the rules of transformational-generative grammar (TG), both structures involve theoretical issues such as argument structure, phrase structure rules, translation rules, government and binding as well as synchronic study. There are many introductions about the infinitive form of verb and Chinese subjective-object construction, but less to compare the combination of these two theories. This paper will discuss these two syntax phenomena from the perspective of TG.

The universal grammar of TG believes that human languages are bound by a series of conditions, which confine various grammatical categories of various possible human languages. Language differences exist in those common principles within permitted scope. Human languages will not go beyond the scope of this common condition principle despite they are ever changing. These conditions and principles constitute a framework system that is universal grammar. From this point of view, we can find Chinese and English share many common rules. Regarding universal grammar as the research object, Chinese and English with a greater difference must rise to the level of abstract structure, find out their commonness and compare infinitive form of verb and Chinese subjective-object construction of this two kinds of surface structure.

In terms of form, English infinitive form of verb is a complement form of object after a verb in the sentence. It is a kind of verb phrase structure composed by "to + verb phrase". According to rewrite rules, the basic structure of the formative can be represented as: $VP \rightarrow to + V + NP$ (V represents verb, N nouns and P phrase). For example:

Jeeves requires the detective to distinguish the clues.

In this sentence, the element that connects infinitive form of

verb is NP+VP, this example can be rewritten as $S \rightarrow NP + VP$, in which NP and VP are commonly indefinite phrase with reference uncertainty. The universal grammar shows that $S \rightarrow NP + VP$ can generate several sentences with same surface structures but different deep structures. One limitation in infinitive form of verb is that the modified nouns must be the doer of the action.

The research of infinitive form of verb is mainly about the source of action, confirmation of logical subject and person or thing affected.

In structure containing infinitive form of verb, NP and VP are commonly indefinite phrase with reference uncertainty, which is regarded as a surface structure transferred by two deep structures of NP and VP.

Two deep structures are:

a: Jeeves requires the detective.

b: The detective distinguishes the clues.

The first step of transformation is to move b after the verb of a to construct an argument (we call NP argument) and a prediction. As follows:

Jeeves (this part is argument) requires the detective (the detective) distinguishes the clues (this part is prediction).

The second step is to delete overlapping argument in b and a, because the trace left by the moved phrase must be strictly administered by antecedent. In this two deep structures, the argument in b and a is the same thing, after combining to the same deep structure, it can't be under the jurisdiction of itself, so the noun phrase in b is no longer existed in the new structure, which requires to insert infinitive "to" in omitted trace position to construct infinitive form of verb. The verb behind the infinitive should turn third person singular into room form of the verb. This infinitive form actually equals to a clause and reconstructed to form a new prediction in a.

The key question is why we use "to" to instead of a clause after

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the movement of the second step. Some linguists believe that people always put indefinite noun phrase of conveying unknown message into verb phrase, imagining that “to” has functions of discourse. According to general principles of discourse that known information appears first and unknown information appears second, “to” can express information in the second deep structure till it moves to the end of the sentence. It is clear that the discourse function of “to” is to remind us that it is easier to express the message of action than a clause.

The objective case of infinitive form is a key theory of sentence structure research. According to the case theory of generative grammar by Chomsky, case is the necessity of nominal composition of phonetic form into the syntactic level, without playing thematic roles, noun phrase without case form is not licensed of the universal grammar for it cannot be fully explained. The existence of infinitive form shows it does not exist case problem. From the perspective of deep structure, the logic subject can obtain case form from root form of the verb without tenses, and noun phrase behind infinitive form also can obtain case form from accusative verbs. Therefore, the logic subject of infinitive form bearer of the action of whole sentence. For example: “Jeeves requires the detective (arugument1) to distinguish the clues.” It is the first argument of prediction rather than the argument of whole sentence, and it is not the NP in $S \rightarrow NP+VP$, which is agent of the whole sentence rather than logic subject of infinitive form of verb. The bearer of NP action is the logic subject of infinitive form.

In Chinese subjective-object construction, “object and subject” concurrent component is the predicate.

Here are two typical Chinese subjective-object construction sentences:

- 1.王先生 || 叫儿子做作业。
- 2.李不通 || 有个姐姐教英语。

Compared with infinitive form of verb, Chinese subjective-object construction shows some same characteristics: verbs are accusative in nature, mainly are: first, the first predicate verb is about order and forbidden such as “make”, “please”, “send”, “urge”, “force”, “persuade”, “let”, “stay”, “beg”, “entrust”, “command”, “mobilize”, “stop”, “launch”, “organize”, “appeal”. The second verb is the aim or expected result of the former action, just like sentence1. Second, the first predicate verb use “have” to show existence, the second predicate verb also is the aim or expected result of the former action, just like sentence2. If both former and latter verb states the subject of the whole sentence, it is a predicate form instead of concurrent sentence. Second, noun phrase shows infinite effect so it is definite noun phrase. Third, the sentence cannot pause and insert adverbial modifier after the first predicate verb in subject and object construction. For example, we cannot express “组织上派我下半年

去边疆” as “组织上派(下半年)我去边疆”. The sentence is not correct for it does not conform to these conditions. Meanwhile, there is no difference of the logic subject between infinitive form of verb and Chinese subjective-object construction, which is the definite noun or noun phrase after the first verb.

There is no infinitive form in Chinese that is similar with “to” in English, so the theory focuses on the first argument in predicate, namely the objective case of the first verb. Chinese subjective-object construction is pronoun or synonym, which is determined by semantic feature of object of the first verb. Theoretically, there are three domain arguments in Chinese subjective-object construction, which appears behind the first verb of the surface of predicate, and it is impossible to appear in the position of the surface of the subject or behind the second verb of the surface of predicate. Actually, Chinese subjective-object construction and English infinitive form of verb are deep structures composed by two different surface structures in sentence pattern. For example:

3. 妈妈催儿子早点睡觉。

This deep structure can be analyzed as two surface structures:

- a 妈妈催儿子。
- b 儿子(早点)睡觉。

It is the same in infinitive form of verb, when two surface structures merge into a deep structure, the subject brought forward in sentence b can be omitted, the object after the verb in sentence a moves out to sentence b where the subject is. “儿子” is the Chinese subjective-object construction here for it is the object in the sentence a and subject in sentence b. The noun or pronoun as subject or object in Chinese has no forms as in English, which is easy to make us confused about its objective case. This is because the first objective verb gives the cases to the verb that follows.

Form this article, we can see that these two English and Chinese sentence patterns share the same generative grammar construction, which can be summarized as: first, the object after the first verb obtains its case from the predicate, second, the object after the first verb is the logic subject of the predication structure. For the discussion of this article is in the syntax level and is confined to the scope of sentence and grammar, the reasonable explanation of some problems needs to be achieved at the discourse level.

References

- Chomsky, N. *The Minimalist Program*. Cambridge, Mass: MIT Press. 1995.
- Han Jingquan. *Existential sentences in English and Chinese: towards a generative analysis*. *Modern Foreign Languages*, 2001(2): 143-158.
- Huang Borong, Liao Xudong. *Modern Chinese*. Lan Zhou: Gan Su People's Press, 1983.

On Translation Strategies of Four-Character Structure in Written Vernacular Chinese: Based on Call to Arms

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Abstract: Four-character Structure, the language unit composed by four independent characters, is the major component of Chinese words. It can be words or phrases, formed in ways of expanded and contrasted words, loosen phrases, jargons, idioms and idioms variations. Four-character structures are made of four Chinese characters. They often fall into the categories of free phrases and set phrases. Free four-character phrases are composed of four free Chinese characters. It contains idioms as well as other meaningful words composed with four characters. This kind of four characters is assembled temporarily and can be broken up to form new phrases. Set phrases are settled patterns of language and allow little or no changes in forms. The meanings cannot be deduced from the individual characters. At this time, researchers on translation of Chinese idioms and adoption of four-character idioms in translation have been made to a wide extent. However, researches on how to translate free four-character phrases, especially classic Chinese phrases, into English are relatively rear. Therefore, it is necessary to focus on this point. In this thesis, foreignization and domestication are applied to deal this problem, as well as a classification of Four-character structures. Through the researches of Four-character Structure, we have learned the right way of classifications, which guide us in the process of translation.

Key words: foreignization, domestication, four-character Structure, idioms, translation, strategies

Introduction

With the frequent exchanges and communications between different countries, translation, as a way of transferring languages and cultures, is playing a major role in cross-cultural communication.

Four-character phrases, as a kind of vocabulary unit, have shown its importance in both ancient and modern Chinese. *The Contemporary Chinese Dictionary* contains about 4,700 four-character phrases; taking up almost 10 per cent of the whole entries, which shows the great importance of this kind of language phenomenon. There are quite a lot four-character phrases in modern Chinese that derived from ancient Chinese classics. Even if some are not, their construction patterns still have close connections with four-character phrases in ancient Chinese. Four-character phrases have long been a fundamental and vital language patterns in many books. They appeared first in the poetry anthology *Book of Songs* over two thousand years before. Literary works after it also employ a large amount of four-character phrases.

Since four-character phrases are indispensable components of Chinese language which not only possess a vital position but also have a great vitality, it's of great significance to make research on translating Chinese four-character phrases into English in the circumstance of globalization, culture interactions and exchanges and it's definitely a great challenge to every translator to translate classic Chinese four-character phrases into English. It is commonly acknowledged that there are difficulties in translating its.

1. The Definition and the Classification of Four-Character Structures

Let's start the essay from the definition and the classification of

Four-Character Structures. Only do we make the right classification, can we make conclusions about how to translate Four-Character Structures.

1.1 The Definition of Four-Character Structures

In the long history of Chinese literature, researchers cannot ignore the importance of four-character phrases. Four-Character Structures are balanced in structure, enjoyable to ear, easy to remember and catering to Chinese people's favor of balance and phonetic beauty. It's necessary to be clear about the definition of Chinese four-character phrases first in order to make a further discussion on them.

It is hard to give a satisfactory and fixed definition to four-character structures for their complex grammatical and linguistic features. The analysis of four-character expressions first appears in *The Consistent Four-Character Expressions in Chinese*. Scholars hold different opinions towards the definition of four-character structures. Some hold that four-character expressions equal Chinese idioms; while others think free phrases should be included besides idioms.

According to *Chinese Grammar and Rhetorical Dictionary*, four-character structures are set patterns which are composed of four Chinese characters. In the narrow sense, four-character phrases mostly refer to Chinese idioms, which are fixed in meaning and structure, such as “韬光养晦”, “缘木求鱼”, “望梅止渴”etc. While four-character phrases in the wide sense refer to phrases free in their components. They are often used in spoken Chinese, phrases “紧密相连”, “彻彻底底”, “合作愉快”etc., belong to this category.

1.2 The Classification of Four-Character Structure in *Call to arms*

Call to Arms, the famous collection of Lu Xun's short essays, depicted vividly the social life from the Revolution of 1911 to the May 4th Movement of 1919.

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Four-Character Structures can be divided into four categories based on the structure: idioms in Coordination Structure, idioms with Pre-Modifiers, idioms in Verb-Object Structure and idioms in Subject-Predicate Structure.

1.2.1 Idioms in Coordination Structure

There are over 10000 four-character idioms and about 4000 of them are usually used in modern Chinese, among which, coordination is the most common structure. "Coordination means the two constituents having the same grammatical form. Idioms in coordination structure consist of pairs of characters which are neatly paralleled." (王阳, 2003: 16) In the idiom in coordination structure, the first and the third constituents are synonyms or antonyms, while the second and the fourth constituents are synonyms or antonyms. The coordination structure can be divided into following groups.

Pre-modifier structure plus pre-modifier structure: this kind of coordination structure is composed of two paralleled pre-modifier structures. For example: "深思熟虑" means to think over carefully. "深" and "熟" refer to "deep" or "careful", while "思" and "虑" mean thinking or consideration. Both of "深思" and "熟虑" refer to careful consideration. This coordination structure makes the idiom intensive and catchy. In Call to Arms, examples are "青面獠牙".

Verb-object structure plus verb-object structure: this kind of coordination structure is composed of two verb-object structures, for example, "乘风破浪". "乘风破浪" literally means sailing through the wind and cutting through the waves. "乘" and "破" are verbs, while "风" and "浪" are objects. The idiom means having a high ambition as riding the waves, or to overcome all the difficulties. In Call to Arms, examples are "装腔作势".

Repetition structure: this kind of coordination structure consists of repetitions of constituents. Idioms in the structure are usually used as adjective, and they have impressive rhythm. The constituents are meaningless if they are taken apart. For example: "马马虎虎", "马" and "虎" respectively means horse and tiger. It refers to someone careless or something casual. In Call to Arms, examples are "踉踉跄跄" and "战战兢兢".

1.2.2 Idioms with Pre-Modifiers

Idioms with pre-modifiers have modifiers before nouns. The previous constituents are used to modify the posterior constituents and the posterior ones are the major parts of the whole idiom. For example, "一丘之貉" literally means jackals from the same lair. The major constituent of the idiom is "貉" while the modifier is "一丘之". Similar with the English idiom "birds of a feather", it refers to people of the same ilk. Take another example, "天壤之别" means a vast difference. The major constituent is "别", which means difference. The modifier "天壤之" means "like the distance between heaven and earth", in which heaven and earth are extremes. The idiom refers to a world of difference or as far apart as heaven and earth. It applies hyperbole to emphasize the difference between two things or people. In Call to Arms, examples are "与众不同" and "自知之明".

1.2.3 Idioms in Verb-Object Structure

Idioms in verb-object structure consist of verbs and objects. For example, "不拘小节" means not to stick to trifles. "拘" is a verb and it means to pay attention or to mind. "小节" means small matters or trivial

conventions. The idiom refers to a casual or careless way. "重整旗鼓" is also an idiom in verb-object structure. "重" is used as an adverb with meaning of "again" or "once more". "整" is a verb whose meaning is reorganization or consolidation. "旗鼓" is the object in this idiom and it refers to flags and drums used in the army. The idiom signifies pulling one's forces together and start again after a defeat. In Call to Arms, examples are "走投无路" and "无精打采".

1.2.3 Idioms in Subject-Predicate Structure

Idioms in subject-predicate structure consist of subjects and predicates. For example, "老马识途" literally means "an old horse knows the way". "老马" is the subject in this idiom and it signifies an experienced people. "识" is the predicate and it means "know" or "remember". "途" is used as the object and the meaning is way, road or direction. The idiom refers to the experienced people who know the ropes. Idioms in subject-predicate structure consist of subjects and predicates. For example, "昙花一现" literally means lasting briefly as the epiphyllum. "昙花" is the subject in the idiom. It is a kind of plant which blossoms out and withers almost at the same time. "现" means appearance and it is the predicate. The idiom signifies that something vanishes as soon as it appears. In Call to Arms, idioms in subject-predicate structure are "自告奋勇" and "自讨苦吃".

2. Domestication and Foreignization in Idiom Translation

A lot of methods have been put forward by translation scholars to solve the problems in cross-culture translation. Translation theorists and linguists from different countries summarized all kinds of strategies and techniques basing on different cultural background. Foreignization and domestication are the most important ones.

Foreignization and domestication come to the translation field as a pair of new terms. "Domestication means the target-culture-oriented translation; unusual expressions to the target culture are exploited and turned into some familiar ones so as to make the translated text easy for the readers to apprehend. Foreignization refers to a source-culture-oriented translation; it strives to preserve the foreign flavor to transfer the source language and culture in to the target one." (王阳, 2003: 25-26)

2.1 Definitions of Domestication and Foreignization

Lawrence Venuti, a famous American translator, he was the first person to introduced domestication and foreignization in his book *The Translator's Invisibility: A History of Translation*. He said "foreignization is an approach that the translator leaves the author in peace, as much as possible, and moves the reader towards him" while domestication is one that the translator "leaves the reader in peace, as much as possible, and moves the author towards him" (Venuti, 2004:19-20)

By developing these two terms Venuti meant to argue against the tendency of the transparent translation and invisibility of the translator. In his opinion, domestication is a derogative term. On the basis of Venuti's theory, Schuttleworth and Cowie in their book *Dictionary of Translation Studies* define the term of domestication in this way:

A term used by Venuti(1995) to describe the translation strategy in which a transparent, fluent style is adopted in order to minimize the strangeness of the foreign text for target language readers.....it is identified with a policy common in dominant cultures which are

"aggressively monolingual, unreceptive to the foreign", and which he describes as being "accustomed to fluent translations that invisibly inscribe foreign text with [target language] values and provide readers with narcissistic experience of recognizing their own culture in a cultural other". (Schuttleworth & Cowie, 2004:43-44)

"Foreignizing translation in which a TT is produced which deliberately breaks target conventions by retaining something of the foreignness of the original." (Schuttleworth & Cowie, 2004:59) Venuti regarded foreignizing translation as a challenge towards domestication and the function is to "register the linguistic and cultural difference of the foreign text, sending the reader abroad." (Venuti, 2004:20) In translation, domestication means removing all strangeness and foreignness of the source text and making the translation read like the original. "Domestication is oriented towards the target language." (沙特尔沃思, 考伊, 2005:167) Foreignization is the opposite approach and by applying this method the foreignness of the source language will be kept to the greatest possible extent and the translation will certainly read like a translation.

2.2 Application of Domestication and Foreignization in Idiom Translation

Idioms are cultural-loaded phrases, which have been frequently used in literature works. Four-character idiom is of great importance in China. Their characteristics increase difficulties in understanding and translating process. Foreignization and domestication can respectively be used to deal with the translation of four-character idiom and lead to different effects. "To adopt which one of domestication and foreignization mainly depends on the translator's motivation and expectation of target language reader's acceptability" (吕文澎, 喜慧超, 2009:59-61). Translators who seek to introduce those exotic features into the target language and retain the original style would use foreignization. When the original image does not play an important part in the source language text or the source language image is beyond the knowledge of the target language readers, translators may adopt domestication to replace the image in the source language with a standard target language image.

For instance, "雨后春笋" refers to that something emerges rapidly in large numbers. "笋" means bamboo which mainly grows in Asia, especially in China. It is one of the most common plants in China. The target language readers from other countries may have no knowledge of it. If foreignization is adopted, "the translation 'like bamboo shooting after a spring rain' may mislead or confuse the target language readers. They can only comprehend it to the point that they can conceive of how the original language readers understand and appreciate the idiom. On the contrary, if domestication is applied and the idiom is translated as 'like mushroom after a rain', the target language readers will easily understand the idiom because a familiar image is employed" (刘雯, 2011: 146-147). "Under the guidance of Nida's equivalence theory, the former translation can be evaluated as a formal-equivalence-achieved one, while the latter can be regarded as a functional-equivalence-achieved one." (高圆圆, 2009: 67)

From the above exploration, it can be concluded that "neither domestication nor foreignization is the absolute strategy in the translation of four-character idioms (Nida, 1993: 78)". Although domestication and foreignization conflict with each other, they are also supplementary to

each other. There are other kinds of translation strategies and these strategies also have their pros and cons.

3. Analysis of Yang's Translation of Call to Arms

The following analysis is based on the three classifications above. And Yang Hsien-yi's version has been taken for examples. According to this version of translation, foreignization and domestication have both been applied to create different effect and to make sure the readers are clear about the essay and to appreciate the beauty of Chinese short essay.

3.1 Idioms in Coordination Structure

a. 青面獠牙: 那青面獠牙的一伙人, 便都哄笑起来 (鲁迅, 2000: 13)

Then all those long-toothed people with livid faces began to hoot with laughter. (杨宪益, 戴乃迭, 2009: 23)

b. 装腔作势: 装腔作势罢了, 这真可憎恶 (鲁迅, 2000: 68)

Putting on an act like this is simply disgusting. (杨宪益, 戴乃迭, 2009: 121)

c. 战战兢兢: 含着大希望的恐怖的悲声, 游丝似的在西关门前的黎明中, 战战兢兢的叫喊 (鲁迅, 2000: 123)

In the dawn this cry, fearful and despairing yet fraught with infinite hope, throbbed and trembled like a floating thread before the West Gate of the town. (杨宪益, 戴乃迭, 2009: 379)

a. 青面獠牙 is used to describe the appearance of a fierce and malicious man. "青面" and "獠牙" are in pre-modifier structure and their functions are equal, to define someone's look. Therefore, both of them should be translated. In this case, Yang Hsien-yi uses foreignization. When reading this idiom, target language readers share the same understanding with source language readers.

b. 装腔作势 is an idiom in coordination structure composed of two verb-object constructions. "装腔" and "作势" are in a similar meaning. Therefore, it is not necessary to translate both of them. Yang Hsien-yi transfers the information to target readers in the way of domestication, which enable the target language reader to experience in the same way as the source language readers do.

c. 战战兢兢 is composed of repetitions of two characters "战" and "兢", which have the same meaning. This idiom literally means trembling with fear, but in the translation, both foreignization and domestication are employed. Yang used to words that reflect the action to show this fear and alliteration is also used to make a rhyme.

3.2 Idioms with Pre-Modifiers

a. 与众不同: 原谅坏人几句, 他便说"翻天妙手, 与众不同" (鲁迅, 2000: 10)

while if I excused evildoers he would say, "Good for you, that shows originality." (杨宪益, 戴乃迭, 2009: 25)

b. 人们是每苦于没有"自知之明"的 (鲁迅, 2000: 123)

It is a common failing, this lack of "self-knowledge." (杨宪益, 戴乃迭, 2009: 379)

a. 与众不同, the major part of the idiom is "不同", means being unique or different. The pre-modifier structure "与众" means among other people. The idiom here signifies that the one is different from all other people. Domestication is used here by Yang Hsien-yi. He translated this idiom in an opposite way, not literally. The intensive expression enables the target language reader to share the same appreciation with the source

language readers.

b. 自知之明 In the idiom“自知之明”,“自知”means knowing oneself, referring to self-understanding.“明” refers to wisdom. Thus the idiom means someone has the wisdom to know his or her position and behaves properly. Yang Hsien-yi's translation, self-knowledge, with the method of foreignization and the use of a common English word, is accurate that the target language readers are enabled to understand and appreciate the idiom easily

3.3 Idioms in Verb-Object Structure

a. 走投无路: 所谓学洋务, 社会上便以为是一种走投无路的人, 只得将灵魂卖给鬼子(鲁迅, 2000: 2)

Anyone who studied “foreign subjects” was a social outcast regarded as someone who could find no way out and was forced to sell his soul to foreign devils. (杨宪益, 戴乃迭, 2009: 3)

b. 无精打采: 那老女人叹了一口气, 无精打采的收起饭菜(鲁迅, 2000: 91)

The old woman sighed, and listlessly picked up the rice and dishes. (杨宪益, 戴乃迭, 2009: 95)

a. “走投无路”is in verb-object structure. Its literal meaning is having no way to go. “走投”means not walk or rely on, while“无路”means no way or no body. It is frequently used to modify a man in dead ally. Yang Hsien-yi applies domestication did not retain the form of the idiom. It is the formal equivalence attained which may lead confusion of the target language readers.

b. 无精打采 means have no spirit, defeated or in a bad mood. 精 means spirit and 采 means mood. They are antonyms. Yang Hsien-yi's translation is accurate and the target language readers are enabled to understand and appreciate the idiom easily.

3.4 Idioms in Subject-Predicate Structure

a. 自告奋勇: 蓝皮阿五也伸出手来, 很愿意自告奋勇(鲁迅, 2000: 92)

Bule-skinned Awu raised his hand to volunteer to help (杨宪益, 戴乃迭, 2009: 97)

b. 自讨苦吃: 车夫多事, 也正是自讨苦吃(鲁迅, 2000: 110)

The rickshaw man asked for trouble (杨宪益, 戴乃迭, 2009: 121)

a. 自告奋勇: This idiom is in subject-predicate structure. “自” is the subject with the meaning of oneself. “告” is the verb which means to stand out. “奋勇” is bravery. “自告奋勇”refers to someone volunteer to do something. Yang Hsien-yi' domestication translation can be easily understood by the target language readers. The form of the idiom is not retained in his translation, in which Chinese culture is not revealed.

b. 自讨苦吃: Like the previous one, “自” is the subject with the meaning of oneself. “讨” is the verb which means to ask for. “苦” is object with the meaning of hardship. “自讨苦吃”means asking for trouble. Foreignization is used by Yang Hsien-yi. In this sense, equivalence between the source language and target language is achieved. The target language readers are able to understand and appreciate it in the same manner as the original readers do.

Conclusion

The purpose of this thesis is to evaluate the translation of four-character structure in the English version of Call to Arms under the guidance of Foreignization and Domestication, to explore the use in different situation that will enable the target language readers to comprehend the meaning and to appreciate the beauty of Chinese short essay.

Call to Arms, as a famous collection of Lu Xun's short essay, depicted vividly the social life from the Revolution of 1911 to the May 4th Movement of 1919. From the point of democracy, with the spirit of Renaissance and Humanism, Lu Xun unveiled the in-depth conflict between people and the society, and dissected and refused the settled old system of society and traditional idea in people's mind. As the crystallization of culture, the proof of the depth of Chinese language, the vehicle of emotional expressions, four-character idioms greatly increase the vividness of the language and help readers to enter into Lu Xun's mode of thoughts. Moreover, the characteristics of four-character idioms increase not only the expressiveness of language, but also the difficulties in the process of understanding and translating.

The significance of the thesis lies in the following four aspects. First of all, a thorough understanding of four-character idioms will help to translate idioms more effectively. Secondly, the understanding of the proper choice on translation strategy will improve the quality of idiom translation. Thirdly, it can be observed that strategies are not absolute, they should be employed flexibly. Finally, there is no absolute or perfect equivalence between source language and target language, but only equivalence to certain degree. Therefore, what the idiom translators seek is the maximum of equivalence, the equivalence of form, content and the response of the readers.

References

- Venuti, Lawrence. *The Translator's Invisibility-A History of Translation*. Shanghai: Shanghai Foreign Language Education Press, 2004.
- Mark Shuttleworth, Moira Cowie. *Dictionary of Translation Studies*. Saint Jerome Publications, 2004
- Nida Eugene. *A Language, Culture, and Translating*. Shanghai: Shanghai Foreign Language Education Press, 1993.
- 高圆圆. 红楼梦四字格翻译的目的论研究[D]. 哈尔滨工业大学硕士学位论文, 2009.
- 刘雯. 汉语四字格的英译之文献综述[J]. 作家杂志: 思考与演说, 2011. (4):146-147.
- 吕文澎, 喜慧超. 英文互译四字格翻译研究综述[J]. 教学研究, 2009, (2):59-61.
- 鲁迅. 呐喊[M]. 南京: 江苏古籍出版社, 2000.
- 沙特尔沃思, 考伊著; 谭载喜译. 翻译研究词典[M]. 北京: 外语教学与研究出版社, 2005
- 王阳. 《红楼梦》中四字成语翻译策略对比研究[D]. 成都理工大学硕士学位论文, 2003.
- 杨宪益, 戴乃迭. 呐喊(双语插图本)(新课标双语文库)[M]. 南京: 译林出版社, 2009.

A Study on the Characteristics of Word Meaning

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Abstract: Word meaning is complicated by its diversity, multidimensionality, variability and nationality. Geoffrey Leech divides word meaning into seven categories: conceptual meaning, connotative meaning, social meaning, affective meaning, reflected meaning, collective meaning and thematic meaning. The diversity of word meaning makes it more difficult for students to acquire. Of course, different kinds of word meaning don't parallel with each other. They belong to different levels or exist in the form of multidimensionality. Among them, conceptual meaning is the basic meaning, and associative meaning is not the intrinsic meaning of a word itself. It is extended meaning, which is based on the conceptual meaning. The multidimensionality of word meaning requires that students should gain the meanings from different aspects. The meaning of a word is not immutable and frozen. It changes with the development of society. The change of word meaning and the production of a new meaning are the main phenomena of the variability of word meaning. Word meaning reflects culture. Language is the symbolic representation of a people, and it comprises their historical and cultural backgrounds as their approach to life and their ways of living and thinking.

Key words: diversity, multidimensionality, variability nationality

1. Introduction

It is known that, compared with pronunciation and grammatical rules, word meaning is more complicated for students to learn because it not only has its conceptual meaning but also contextual meaning in a certain culture. The difficulty of word meaning acquisition is largely determined by the characteristics of word meaning, which will be explored from four different aspects: diversity, multidimensionality, variability and nationality.

2. Diversity

Linguists both at home and abroad have already made a lot of research into word meaning, and most of the books on linguistics, semantics and lexicology have devoted chapters to word meaning. But different researchers have different opinions about how to classify them.

Richards(1976) points out that word meaning includes: (1) referential meaning, (2) connotative meaning, and (3)cultural meaning. Referential meaning refers to the meaning which connects a word to the real or the made up world. Connotative meaning refers to people's feeling or attitude toward the referent thing or object of the world, and cultural meaning refers to the attached meaning which is given by the special cultural background of a society.

The theory, which gives the most detailed classification to word meaning should be the one offered by the famous linguist, Geoffrey Leech, and his theory is widely accepted in the linguistic field. Leech, in his book *Semantics a Study of Meaning*, thinks that word meaning can be roughly divided into conceptual meaning, associative meaning and thematic meaning.

Conceptual meaning, also called denotative or cognitive

meaning, is widely assumed to be the central factor in linguistic communication. It is integral to the essential function of language in a way that other types of meaning are not (which is not to say that conceptual meaning is the most important element of every act of linguistic communication). So it is often the first meaning listed after a word entry in a dictionary. Conceptual meaning is used to give a definition or description of a subject, a characteristic, a process or a state. It is the most basic meaning expressed by a word, and it is also the central meaning of the communication. The conceptual meaning is comparatively definite and stable. So Leech thinks that "It will be clear that conceptual meaning is an inextricable and essential part of what language is, such that one can scarcely define language without referring to it" (*Semantics a Study of Meaning*, G. Leech, pp13-14).

Associative meaning includes connotative meaning, social meaning, affective meaning, reflected meaning and collective meaning.

Connotative meaning is the communicative value an expression has by virtue of what it refers to, over and above its purely conceptual content. It refers to a kind of association which is aroused by a word, and it can embrace the "putative properties" of the referent, due to the viewpoint adopted by an individual or a group of people or a whole society. Take the English word "mother" as an example. Its conceptual meaning is "female parent", which is the same as the Chinese "母亲" with the conceptual meaning of "woman who has a child". Besides the conceptual meaning, "mother" and "母亲" both embrace the following connotative meanings: love, care, tenderness and forgiving. So based on the connotative meaning of "mother", people like to compare their country as motherland and even call their motherland "mother".

Social meaning is that which a piece of language conveys about

the social circumstances of its use. In part, we decode the social meaning of a text through our recognition of different dimensions and levels of style within the same language. We recognize some word or pronunciation as being dialectal, i.e. as telling us something of the geographical or social origin of the speaker; other features of language tell us something of the social relationship between the speaker and the hearer. We have a scale of "status" usage, for example, descending from formal and literary English at one end to colloquial, familiar, and eventually slang at the other.

Language can reflect the personal feelings of the speaker, including his attitude to the listener, or his attitude to something he is talking about. Affective meaning, as this sort of meaning can be called, is often explicitly conveyed through the conceptual or connotative content of the words used. Affective meaning is largely a parasitic category in the sense that to express our emotions we rely upon the mediation of other categories of meaning—conceptual, connotative, or stylistic. An emotional expression through style comes about, for instance, when we adopt an impolite tone to express displeasure, or when we adopt a casual tone to express friendliness. On the other hand there are elements of language (chiefly interjection like "Aha!") whose chief function is to express emotion. When we use these, we communicate feelings and attitudes without the mediation of any other kind of semantic function. And word meaning has the features of being commendatory and derogatory which also reflects the attitudes and feelings of the user.

Reflected meaning is the meaning which arises in cases of multiple conceptual meaning when one sense of a word forms part of our response to another sense. Collective meaning consists the meaning of words which tend to occur in their environment.

Reflected meaning, collective meaning, affective meaning and social meaning: all these have more in common with connotative meaning than with conceptual meaning; they all have the same open-ended, variable character, and lead themselves to analysis in terms of scales or ranges, rather than in discrete either-this-or-that terms. They can be brought together under the heading of associative meaning

Thematic meaning is communicated by the way in which a speaker or writer organizes the message, in terms of ordering, focus and emphasis. It is often felt, for example, that an active sentence has a different meaning from its passive equivalent, although in conceptual content they seem to be the same.

Diversity of word meaning makes a word complicated to be acquired. To EFL learners, in order to understand word meaning accurately and use it correctly, it is the base for the students to master the conceptual meaning, and it is the key to get the associative meaning and thematic meaning. Neither of the two can be dispensed.

3. Multi-dimensionality

As for Leech's seven kinds of meaning, they don't parallel with each other, that is to say, they belong to different levels. Among them, conceptual meaning is the basic meaning, and associative meaning is not the intrinsic meaning of the word itself. It is only the extended meaning based on the conceptual meaning. Conceptual meaning,

associative meaning and thematic meaning belong to different dimensions.

Polysemy is a common phenomenon in English, but no matter how many different meanings a word has, there should be one central meaning from which the other meanings are extended. Radiation and concatenation are good examples to show the multidimensionality of word meaning. Radiation is an important process by which words extend their meanings. The primary or central meaning locates at the center in the form of a hub, and secondary meanings radiate out from it like the spokes of a wheel. Each of the secondary meanings is independent of all the rest, and may be traced back to the central signification. So it is obvious that word meaning changes from the center to all other dimensions, i.e. from the central meaning to the secondary meaning.

Another process, as opposed to radiation, is called concatenation. It means that a word moves gradually away from its original sense as result of successive semantic changes until, in many cases, there is not a trace of connection between the sense that is finally developed and the primary sense. The different meanings of a concatenation are developed in a horizontal way.

From the above analyses, we may say that, during the process of vocabulary teaching, it is quite necessary to make the students know word meanings in different dimensions. Only by doing so can students comprehend and apply the word correctly and appropriately.

4. Variability

The meaning of a word is not immutable and frozen. It changes and develops with the development of the society. The change of word meaning and the production of a new meaning of a word are the main process of the variability of word meaning. When a new word comes into being, it is generally used as the name of a thing, a phenomenon, a quality or a behavior. So it has always the tendency of only one meaning. But with the progress of the language, it has come to gain a different new meaning or new meanings, so polysemy comes into being, and it is the result of the change of word meaning. During the process of the development of the society, primary meaning, which refers to what a word originally meant, will be lost, and will be replaced by the derivative (derived) meaning, which refers to the meaning springing from the original meaning. There are also cases where older meanings are often restricted and a new meaning can be used more freely.

Lu Guoqiang thinks that there are seven common types of word meaning changes. They are: generalization, specialization, elevation, degeneration, the use of the abstract for the concrete or vice versa, common words from proper names and transference of meaning.

"Generalization" refers to the stretching of meaning. Most words begin as specific names for things. With the passage of time, this precise denotation is lost and the word meaning is extended, generalized or blurred. "Picture", for example, once meant only a painted picture, then also a drawing, then a photograph, a cinematic picture, an x-ray picture, a TV picture, and now even a radio-telescope picture. Where the referent was once a fixed stable object, "picture" now names a class of things that can break up and reassemble themselves, dissolve, and in the case of laser holography,

even be three dimensional.

“Specialization” is a term referring to shrinking of meaning. When a word is equally applicable to a number of different objects which resemble each other in some respects, or to a vague, or general category of ideas. It may at any moment become specialized by being used to name one of those objects or to express one of those ideas. “Pill”, which once meant a general category of small medicinal ball, has now narrowed to the more specific meaning of “birth control pill”. The old meaning of “artillery” was “munitions of war”. Today it means “mounted guns”. These are the examples of “specialization”.

When the meaning narrows toward a more favorable meaning, it is called elevation or amelioration. For example, “naughty” once meant “wicked” and “depraved”. Today, it means only “mild mischief”. At one time “shrewd” meant “depraved” or “wicked”. Today, it is somewhat complimentary. Some words that originally implied only neutral judgment, then gradually narrowed in the direction of “favorable”. “Praise”, for example, once meant “set a value on something good or bad”, and now applies to something good. “Fame”, which originally meant “report” now means “good reputation”. A process similar to this has occurred with words that refer to various occupations and social roles that have elevated through history: “Knight” originally named only a boy or youth; “marshall,” a stable servant, ambassador, or a messenger.

When the meaning of a word narrows toward an unfavorable meaning it is called “degeneration” or “pejorative change”. Some words once respectable may become less so and others once neutral in meaning may acquire a pejorative connotation. A “villain”, for example, was originally a man who worked on a farm or villa. Such a person was naturally felt by his social superiors to have a low sense of morality, and the word “villain” at first a term implying no contempt, came to be a term of reproach.

The striking use of the abstract for the concrete is the application of the name of a quality to a person. It is the reverse of personification. In personification, a quality is spoken of as a person whereas in the use of the abstract for the concrete a person is designated as if he were the quality incarnate, as in “She is virtue itself”. The Elizabethan poets applied abstract nouns to persons. Thus Shakespeare used “admiration” for “wonderful creature”

The use of a proper noun to convey a general idea is known as antonomasia. In English some proper nouns suggest allusions or anecdotes which it tickles our fancy to remember. They may come from history or from literature differently. Some words derived from proper nouns have changed in form in the course of time. Many technical terms coined in honor of an inventor or discoverer have changed into common nouns such as “Volt” from A. Volta, an Italian physicist; “Watt” from James Watt, a Scottish inventor. Names of places are sometimes scarcely recognizable in the common nouns derived from them: “currant” from Corinth; “damask” from Damascus; “millinery” from Milan, Italy.

Almost every conception has two aspects: (1) that of the person or thing that possesses or exercises it; (2) that of the person or thing that is affected by it. This difference between the active agent and the effect produced, between the cause and that which it causes,

between the subjective and the objective, is very great. The process by which the difference has occurred in the development of a language is called transference of meaning.

5. Nationality

Language is a part of culture and plays a very important role in it. Some social scientists consider it as the keystone of culture. Without language, they maintain, culture would be not possible. On the other hand, language is influenced and shaped by culture; it reflects culture. In the broadest sense, language is the symbolic representation of a people, and it comprises their historical and cultural backgrounds as their approach to life and their ways of living and thinking.

With the advocacy of communicative competence in foreign language teaching, more and more EFL (English as Foreign Language) teachers have gradually come to realize the necessity of putting more emphasis on the cultural aspect of the English language so as to help the learners increase their cultural awareness of language, reduce the cultural mistakes they made in their interaction with the native speakers, and so students can promote their cultural fluency. Nevertheless, in China this emphasis has mostly been laid on culture in its general sense. For example, courses like “An Outline of England and America” and “Western Culture” have been taught in most of the foreign language departments. These courses mainly deal with politics, economy, society, art, literature, history, geography and so on. They serve as an added component of language teaching. Culture, on the contrary, in its linguistic sense, i.e. culture embedded at the different levels of the language such as vocabulary, syntax and discourse, has been comparatively neglected. But the intercultural differences of English and Chinese exist at the level in terms of conceptual meaning and cultural meaning. The following three distinctions which exist in each of them are the reflection of word meaning’s nationality.

5.1 What English language and its culture have but Chinese language and its culture have not

Because of cultural differences, English words and their counterparts in Chinese carry differences in their conceptual as well as cultural meaning. There are many English words that have no Chinese equivalents. These are mainly the words such as proper nouns, terminology, and those that reflect the unique social-cultural conventions. Since they do not exist in Chinese culture, a Chinese student will feel puzzled when he meets them even if he can find the explanations in a dictionary. For the same reason, many Chinese words do not have counterparts in English culture. As a matter of fact, because of the different societies, beliefs, conventions, life-styles, etc, most of the words in one language can hardly have an equivalent in another language. This is usually one of the fundamental reasons that cause misunderstandings between two interlocutors of different languages.

Some proper nouns, technical terms and words referring to everyday things, which are common to all the human beings, might have the same conceptual meaning whatever languages they belong to. For example, “computational linguistics” and “计算机语言” “the Atlantic Ocean” and “大西洋”, such words lead to no problem in the

learners' understanding.

Cultural meaning refers to the meaning culturally encoded in the conceptual meaning of a word. It is in this aspect that intercultural misperception and misanalysis are likely to occur as the cultural meaning of a word may be decoded quite differently in different languages.

"Apple", for instance, is a case in point that is culturally loaded in English language while its Chinese conceptual counterpart "苹果" does not bear any cultural loads. It is associated with at least three widely known anecdotes in English: Adam and Eve in the Garden of Eden, Newton's discovery of the law of gravity, and the story of William Tell who was forced to shoot an apple off on the head of his son with an arrow. In Chinese culture, nevertheless, "苹果" has no cultural load at all. It is equivalent to "apple" only in the conceptual meaning. "Propaganda" is another word in this case. Since "propaganda" is culturally associated with "lying, cheating" etc. in English. Such an idea can not be generally found in "宣传"; "Indoctrinate" is loaded with a strong pejorative sense while "灌输" is not. Intercultural mistakes will no doubt arise on the part of the Chinese students if they decode such words only in the conceptual meaning.

5.2 What the Chinese language and culture have but the English language and culture have not

The converse may be said of the word "criticism". According to Chinese culture, "批评" is very often used as a derogatory word with the sense of "unfavorable judgment or comment" attached to its conceptual meaning "evaluation", such as being used in the expressions "批评缺点和错误" (criticize one for his shortcomings and mistakes) and "他受到了批评" (He was criticized). Its English counterpart generally fails to carry such a sense as being used in "literary and art criticism" (the analysis or evaluation of a work of art, literature, etc). The following examples show in both English and Chinese cultures, there exists cultural meaning on the part of the Chinese word.

"松树" signifies "longevity and moral integrity", an idea that usually lacks in "pine"; "菊花" stands for "nobility of character", an idea that "chrysanthemum" fails to carry; "鸳鸯" is culturally loaded with a sense of "an affectionate couple", which the English counterpart "mandarin duck" fails to carry. At this point our students are likely to transfer the Chinese meanings to English literally, which is unquestionably a handicap in their learning.

5.3 Both English and Chinese languages and cultures have, but are expressed or used differently

This is another situation in which the conceptual meaning is the same between an English word and its Chinese counterpart, but the cultural meanings are either similar or different. This is certainly a tough problem for our students to tackle.

As is known to all, cultural meaning is often associated with the essence and characteristics of the objective thing a word refers to. Therefore it might be possible to have similar cultural meaning even in two strikingly different languages. "Lamb" and "mother", for instance, have the similar cultural meanings with their Chinese

counterparts "羔羊" and "母亲". In both cultures, the former is encoded with the meaning "innocent, meek, easily deceived, without resistance" and the latter "caress, kind, cordial". "Woman" is another word whose cultural meanings reflect the changing attitudes of a certain society, class and community towards women in both English and Chinese. It has got a derogatory meaning in the societies where women are despised: "frail, prone to tears, emotional, inconstant". Along with the liberation of women the word has also obtained some good senses "compassionate, hard-working and gentle".

Similarity is relative, but difference is absolute. The differences of intercultural meanings of words in English and Chinese present far greater difficulties or challenges to Chinese teachers as well as learners of English. One of such words is "liberalism" (自由主义), which is used appreciatively in the western culture where there is a strong liberal tradition, and yet it is always used pejoratively in Chinese culture. Dragon is a symbol of monster, or devil in the western culture, while the Chinese dragon is a symbol of royalty, referring to nobility power and even beauty. Cuckoo is a symbol of joy, harbinger of spring while "杜鹃" calls up the saddest feelings in a Chinese poetry.

Such cultural differences represent the nationality or the characteristic of a nation in each language. They are the major obstacles in the process of word meaning acquisition as the students are likely to shift the Chinese cultural meaning to the understanding of the corresponding intercultural communication.

References

- Geoffrey Leech, (1981). *Semantics a Study of Meaning*. English Penguin Press.
- J. Michael O'Malley Anna Uhl Chamot.(1990). *Learning Strategies in Second Language Acquisition*. Cambridge University Press.
- James Coady, Thomas Huckin (1997). *Second language vocabulary acquisition*. Cambridge University Press
- James Hurford & Berndan Heasley (1984). *Semantics a course book*. Cambridge University Press
- Jef Verschueren (2000). *Understanding pragmatics*. Edward Arnold (publishers) Limited.
- John I. Saeed. (2000). *Semantics*. Blackwell Publishers Ltd
- Jonathan Newton, (2001), *Options for vocabulary learning through communication tasks*. *ELT Journal Volume 55/1*, pp31-37 January 2001. Oxford University Press.
- Norbert Schimitt (1998). *Tracking the incremental acquisition of second language vocabulary: a longitudinal study*. *Language learning 48:2, June 1998*, pp281-317
- Paula Jullian (2000). *Creating word-meaning awareness*. *ELT Journal Volume 54/1, January 2000*. pp37-53
- Zhou Ruiying. *A probe into nationality of word meaning in view of Cognitive domain*. *Journal of Xiangtan University*. March 2013: 155-157.
- Zhou Ruiying. *A study on word meaning and its teaching*. *Journal of Shaoxing University*. Oct.2011: 22-24.

Efficacy of the Continued Nursing Mode Applied in Clinical Nursing for 67 Patients with Severe Burns

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Abstract: Object To analyze the clinical efficacy of the continued nursing mode in patients with severe burns. **Methods** The study object was 67 cases of patients with severe burns in our hospital from May 1st, 2015 to May 1st, 2016. Patients were divided into two groups by double-blind method. The control group (n=32) used the conventional nursing mode, and the observation group (n=35) used the continued nursing mode, and then the quality of life was compared between the two groups. **Results** The physical function, psychological function, social relationship and general health status of the observation group were significantly higher than the control group ($P < 0.05$). **Conclusions** The effect of the continued nursing mode applied in clinical nursing for patients with severe burns is good, it is worth promoting.

Key words: continued nursing mode, severe burns, efficacy

Introduction

Burns are common clinical diseases. Severe burns in patients with limb dysfunction due to a long time in bed, joint stiffness, muscle atrophy, hypertrophy scar, contracture or ulcers, etc. Some clinical studies show that 6-months after the burn wound healing is the best time to inhibit cicatrization and enhance limb function. But most patients are difficult to accept a long-term hospitalization for rehabilitation due to the influence about hospital costs and other factors. And they maybe develop ulcers difficult to heal and symptoms of cicatrization, limb malformation, flexion contracture of the knee due to a lack of scientific and normative in the self rehabilitation training after discharge^[1-2]. This will not only affect the rehabilitation effect, but also affect the psychological state of the patient. Even more serious is that severe mental disorders will occur. Accordingly, the clinical proposed continued nursing mode, the purpose was to let patients enjoy the professional, standardized care services after discharge, promote their rehabilitation and make sure they can return the society better^[3]. Now 67 patients with severe burns were included in our study in order to explore the clinical efficacy of the continued nursing mode in patients with severe burns. And the details are as follows.

1. Materials and methods

1.1 Materials

The study object was 67 cases of patients with severe burns in our hospital from May 1st, 2015 to May 1st, 2016. The inclusion criteria is that (1) the diagnoses of patients coincide with the diagnostic criterion for severe burns; (2) patients with third-degree burns; (3) the burn area is 11~20%; (4) the length of stay is not less than 14 days; (5) patients who understand the purpose of this study and participate voluntarily; (6) patients with language disorders and

holergasia are excluded. Patients were divided into two groups by double-blind method. The control group (n=32) used the conventional nursing mode, and the observation group (n=35) used the continued nursing mode. In the control group, 18 were male and 14 were female, aged from 16 to 72 years, with an average age (40.2±8.3) years. There are 19 cases of patients with limbs burns and 13 patients with trunk burns, facial burns or neck burns. In the observation group, 20 were male and 15 were female, aged from 15 to 70 years, with an average age (39.5±6.8) years. There are 21 cases of patients with limbs burns and 14 patients with trunk burns, facial burns or neck burns. There were no statistically significant differences in age, sex, and burns between the two groups ($P > 0.05$).

1.2 Methods

On one hand, The Patients in control group received conventional nursing care. That was patients were paired with nurses who offered routine discharge guidance and assistance when they left the hospital. And the nurses provided patients telephone visit after 15 days in order to know the rehabilitation, compliance and the implementation of referral plan of patients. The specialist offered guidance and assistance according to the rehabilitation of patients on their return visit. On the other hand, the observation group (n=35) used the continued nursing mode. And the details are as follows:

1.2.1 The formation of professional nursing groups

The continued nursing group consisted of seven people, one head nurse who was group leader and the other members included the department directors, doctors and the nurses. At the same time, a continued nursing nurse who was more professional would be identified. To ensure that the measures of the continued nursing was carried out, the continued nursing nurse was responsible for providing home visiting in time and home care guidance included psychological guidance and rehabilitative guidance for patients, and knowing their conditions.

1.2.2 The development of nursing care plan

The leader of team organized group members to analyze retrospectively the previous clinical problems, such as the rehabilitative exercise programmers were not scientific, cicatrisation and the patients were in poor mood. In order to prove these issues, the team leader immobilized group members to search actively the relevant literature, and evaluate the results of systematic reviews with higher credibility based on the evidence related to evidence-based care. And combined with clinical practice and patient conditions, such as cultural background, burns, psychological capacity and social status, and then the nursing care plan was set out. The continued nursing group developed the nursing care plan mainly as the Handbook of Burn Patient Rehabilitation Guidance (hereinafter referred to as "handbook") was compiled.

1.2.3 The specific implementation

When patients were discharged from hospital, (1) Nurses placed the Handbook into their hands, and then built the rehabilitation file, registered patient-related information such as general information, health problems, burns, etc; (2) The responsible nurses and full-time nurses jointly assessed the health problems of patients and carried out the six-month rehabilitative exercise programmers; (3) Nurses guided patients and their families how to effectively prevent scar hyperplasia according to the contents of the Handbook, and at the same time introduced the skills, methods and contents of rehabilitative exercise in different time periods. After the patients were discharged from hospital, (1) Nurses provided patients telephone visit once a week in the first month, also provided patients home visit and psychological counseling twice a week, so as to enhance patient confidence in the rehabilitation; And then observed whether the patients to use scar or wear elastic clothing as soon as possible after the wound healing, at the same time watched the tightness of elastic clothing, and checked if the daily duration was more than 12h. After the wound healing, nurses guided the patients' family to do some arthritis sports for patients, and at that time should pay more attention to be gentle and slow. Next made sure that patients' proximal limbs were fixed, and then gradually expanded the scope of patient's activities, it took 15~30 minutes per time, it needed 5~6 times per day; (2) In the second to third month, nurses provided patients telephone visit once two weeks, and also provided patients home visit once a month. The content of guidance was mainly related to self-care ability training, such as toileting, eating, dressing, etc., gradually let patients get out of bed and do some exercises good for the recovery of patients' limb function. Also nurses warned the patients to be patient and step by step in the rehabilitation; (3) In the fourth to sixth month, nurses provided patients telephone visit once a month, and also provided patients home visit once three months. Nurses could provide patients who is bad understanding, old or on serious cicatrisation home visit once a month in order to know the recovery of patients' limb function, self-care ability, etc. When patients were convalescing, the interactive platform on the Internet called QQ or Wechat was built between nurses and patients. On the interactive platform, nurses

could answer the questions from patients in time, also the nurses and patients could share experience with others. The nurses regularly organized group members to discuss the case, the full-time nurses reported the recovery of patients, the doctor adjusted timely rehabilitation schemes combined with individual differences and rehabilitation of patients.

1.2.4 The self-management education for patients

(1) The main content: the group carried out the Handbook of Self-monitoring for Patients with Severe Burns combined with the content of "Handbook", and encouraged daily patients to self-monitoring of the disease, including the application, vital signs, urine, body weight, wound observation, sleep quality, itching, exercise and self-care ability. In order to facilitate the patients to understand, increase the color maps were added. (2) The main method: the self-management education team consisted of responsible nurses, rehabilitation physicians and attending physicians was set up. Members were subject to system training, and had a full understanding on the content of self-management. Members should allow patients to understand that they were the main bearers of the self-management and treatment, and health care workers were the guiders and assistants. One day before discharge, nurses should carefully assess the patient's overall condition, also understood the patient's career, social support and knowledge level, and required family members to participate in the guidance process. The individualized self-management educational prescription was carried out combined with patient self-management and evidence-based nursing concept. The prescription was divided into two parts, one part is the disease knowledge mission, the other part is the problem processing method. And then the responsible nurses placed the Handbook of Self-monitoring for Patients with Severe Burns into the hands of patients and explained in detail, then built the rehabilitation file and organized self-management education activities, and let patients understand the basic concepts, necessity and purpose of self-management by using group discussions, group activities and individual guidance. After patients were discharged from hospital, the responsible nurses carried out the whole follow-up, and gave them the lecture once two weeks within three months, also encouraged patients to share experience with others and improve the level of the self-management.

1.3 Observed index

The quality of life of patients was assessed by BSHS (Burned Health Scale)^[4], the scale contains four areas, namely, physical function, general health status, social relations and psychological function. The quality of life of patients was scored by the 5-level Likert Scale, zero score pointed that extreme, one score pointed that a large degree, two scores pointed that moderate, three scores pointed that mild, four scores pointed that no. The higher the score, the better the quality of life.

1.4 Statistical analysis

All experimental data are expressed as means \pm standard deviations. Statistical analysis was performed by SPSS Statistics for

Windows, Version 20.0 (IBM, Armonk, NY, USA) and one-way ANOVA for comparisons among groups. For all analyses, $P < 0.05$ was considered to be statistically significant.

2 Results

The BSHS scores of patients in two groups were compared. The specific results are shown in Table 1.

Table 1 The comparison of BSHS scores between two groups ($X \pm S$, score)

Group	Psychological function	General health status	Physical function	Social relation
The control group (n=32)	40.7±9.5	30.3±7.9	20.4±6.3	50.1±12.8
The observation group (n=35)	48.3±12.4	39.2±11.2	26.8±8.5	62.1±15.2
t	3.591	4.108	3.114	4.862
P	<0.05	<0.05	<0.05	<0.05

3 Discussions

Severe burn patients after treatment often left scar. That can affect the heat sweating function and beauty of patients. And in the developing of disease, the scar tissue of joints, face or neck will contracture, it can affect the degree of joint mobility and function. As a result, the burn causes the patients to suffer severe pain. Affected by various factors, severe burn patients do some rehabilitation training without scientific and normative guidance after the patients are discharged from hospital, thus it causes that the scar hyperplasia, joint dysfunction or skin pain, itching, etc come into patients' bodies. It makes patients feel terrible and also seriously affect the patients' life after the patients are discharged from hospital. Therefore, to deal with family health problems after the patients are discharged from hospital and ensure that patients can also enjoy good treatment and care in the community or family, the clinical research proposes that patients with severe burn patients should be used the continued nursing intervention^[5-6]. At present, the medical profession focuses on research of the continued nursing model. In this study, the nurses carried out the six-month rehabilitative exercise programmers after the patients were discharged from hospital. And then to maximize the patient's function and minimize the damage caused by trauma, the rehabilitation training for patients was carried out based on the "Handbook". Full-time nurses understood the implementation of patient rehabilitation program through telephone return visit, home visit, QQ or We Chat during the rehabilitation period, so that nurses could correct timely bad behavior and guide the exercise according to the standard. In addition, to ensure that the training results are the best, the full-time doctors gave some guidance to patients during the rehabilitative exercise period, and adjusted timely rehabilitation schemes combined with individual differences and rehabilitation of patients. And also our hospital provided the self-management education for patients, which was the way to maintain and enhance patients' health, the way to manage and monitor the state of the patients' disease, and the way to lower the impact of relationships, social function and emotion from disease. The model was a new type of health care method, and patients were regarded as a center in the process of self-management education. The model was good for

enhancing patients' motivation and building a good relationship between doctors and patients. As a result, the quality of life of patients is also significantly improved. The results of this study showed that the physical function, psychological function, social relationship and general health status of the observation group were significantly higher than the control group ($P < 0.05$), and it was similar to the report^[7-8].

In summary, the effect of the continued nursing mode applied in clinical nursing for patients with severe burns is good, it is worth promoting.

References

- Guangfen Xie. *Effect of Continuing Nursing on Quality of Life in Patients with Severe Burn*. *Chinese Baby*, 2016,23(1):112-112.
- Min Huang, Runwen Huang, Guijun Lian, etc. *Effect of Continuing Nursing on Quality of Life of Patients with Large Area Burn*. *Journal of Luzhou Medical College*, 2016,39(4):338-339.
- Qimin Zhou, Xiaohua He, Guangrong Jiang, etc. *Effect of Continuing Nursing on Quality of Life in Patients with Severe Burn*. *Journal of Nursing Science*, 2014, 29(12): 41-42,50.
- Shaoxian Chen, Jiezhen Ou, Zhongjian Chen, etc. *Effect of Continuing Nursing Intervention on Treatment Compliance in Patients with Severe Burn*. *Journal of Qiqihar Medical College*, 2016,37(5): 662-664.
- Xia Zhang, Yun Zhang. *Continuation Care Requirement and Nursing Intervention Effect in Patients with Hand Burn Scar Plastic Surgery*. *Journal of Baotou Medical College*, 2016, 32(9): 117-119.
- Xiaoli Zhang. *Effect of Continuing Nursing on Quality of Life in Patients with Severe Burn*. *For All Health*, 2016,10(8):257-258.
- Xiulin Wen, Jieqiong Li, Xiaowei Huo, etc. *Evaluation of the Effect of Continuing Nursing in Patients with Facial Cosmetic Surgery Based on Humanistic Care*. *Chinese Journal of Medical Ethics*, 2015,14(5): 808-811.
- Yanhong Chen. *The effect of extended nursing on the quality of life of patients with severe burn*. *Journal of Clinical Medicine*, 2015,05(7): 1299-1299.

Observation on the Effect of Combined Inhalation of Compound Ipratropium Bromide and Budesonide in Treating Infantile Asthmatic Pneumonia

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Abstract: Objective: To investigate the clinical effect of compound ipratropium bromide combined with budesonide inhalation in the treatment of children with asthmatic pneumonia. **Methods:** From November 2013 to January 2016, 76 children with asthmatic pneumonia were randomly divided into control group and observation group (n = 38). The control group received ipratropium bromide, combined with budesonide and inhaled compound ipratropium bromide and budesonide, and observed the clinical effect of the two groups of children. **Results:** In the observation group, the time of disappearance of clinical symptoms was significantly shorter than that of the control group ($P < 0.05$). In the control group, there were 2 cases of facial flushing, 1 case of muscle tremor (about 7.89%, 3/38). There was no significant difference between the two groups in the incidence of adverse reactions, $P > 0.05$. **Conclusion:** The combination of compound ipratropium bromide and budesonide in the treatment of asthmatic pneumonia can effectively improve the clinical symptoms of children, and less adverse reactions, drug safety, clinical Value.

Key words: compound ipratropium bromide, budesonide, asthmatic pneumonia, effect

Introduction

Infantile asthmatic pneumonia is also called capillary bronchitis, which is a pure capillary bronchitis where injured alveoli and alveolar septa are difficult to be found. Thus it is seen as a special kind of pneumonia at home. It is common in infants under 2 years old, and the infants with 1-6 months are of high incidence. It is mainly caused by respiratory syncytial virus (RSV) invading capillary bronchus. The clinical manifestations include cough, anhelation, asthma, dyspnea, etc. With the progress of the disease, it can lead to concurrent heart failure, respiratory failure and organ damage, which can pose a threat to infants' lives[1]. The clinical traditional therapy mainly includes anti-infective and oxygen-absorbing sedation, but the effect is not obvious. Therefore, it is significant to explore an effective drug therapy. In the eighth edition of Pediatrics, "Bronchiolitis" proposes controlling breathing nebulization inhalation therapy. This paper is based on the above background and has observed the effect of aerosol inhalation of compound ipratropium bromide combined with budesonide, hoping to provide new insights for clinical treatment.

1. Data and Methods

1.1 General Data

From November 2013 to January 2016, 76 children with asthmatic pneumonia were randomly divided into control group and observation group (n = 38). The ratio of male to female was 26: 12 in the control group; the age ranged from 1 month to 6 months, and the average age was (4.41 ± 0.57) months; the course of disease

was 1 ~ 5 days, and the average course was (2.81 ± 0.04) days. The ratio of male to female was 25: 13 in observation group; the age ranged from 1 month to 6 months, and the average age was (4.50 ± 0.27) months; the course of disease was 1 ~ 4 days, and the average course was (2.51 ± 0.07) days. There was no significant difference in baseline data between the two groups ($P > 0.05$), and thus they were comparable.

The criteria for inclusion and exclusion were as follows: ① The age of 1 - 6 months, is consistent with the diagnostic criteria of capillary bronchitis; ② The clinical manifestations include cough, asthma, anhelation, lung expiratory and laryngeal wheeze[2]; ③ Children with congenital heart disease, thoracic deformity, bronchopulmonary dysplasia, malnutrition and bronchial foreign body are excluded.

1.2 Therapeutic Method

Both groups were treated with anti-infection, sputum aspiration, oxygen absorption, fluid infusion and sedation. On this basis, ipratropium bromide (manufactured by AstraZeneca, product name: Atrovent, 2ml, 0.5 mg,) combined with budesonide in the control group (manufactured by AstraZeneca Pty Ltd in Australia, product name: Pulmicort, 2ml, 1 mg) has aerosol inhalation. 0.25 mg of ipratropium bromide and 0.5 mg of budesonide are prepared into a mixture, supplemented with saline to 3-4 mL per time, q8h. Compound ipratropium bromide in the observation group (manufactured by Shanghai Boling Yingehan Pharmaceutical Co., Ltd. product name: Combivent, 5 ml, containing 0.5 mg of ipratropium bromide, 0.3mg of salbutamol) combined with budesonide has aerosol inhalation. 1.25ml of compound isoproprum

bromide and 0.5 mg of budesonide are prepared into a mixture, supplemented with saline to 3-4 mL per time, q8h.

In that two groups, the pneumatic atomizer device (manufactured by Guine in Beijing) is adopted for children's atomization inhalation; the liquid medicine is injected into the atomization cup of the sprayer; the child is picked up by the family member; the seat is taken and the gas flow is adjusted to 0.3Mpa,4L/min; the output water density is up to 25mg/L. When the mist is sprayed, the mouth and nose of the child can be covered by a mask for continuous inhalation of 10 ~ 15 minutes. After inhalation, gently pat the back of the child to promote the absorption of liquid medicine[3]. After further inhalation, oral care and face cleaning shall be given in time to minimize drug residues. Both groups were treated within 1 week.

1.3 Observational Index

After 1 week of continuous treatment, the disappearance time of

clinical symptoms and adverse reactions of children in both groups are observed.

1.4 Statistical Treatment

Data are analyzed statistically by SPSS19.0; the measurement data is expressed as (\bar{x}), and checked by t, the enumeration data is expressed as n (%), and checked by chi-square. Statistical values refer to the requirements of statistics difference $P < 0.05$.

2. Results

2.1 Disappearance time of clinical symptoms

Disappearance time of clinical symptoms in the observation group was shorter than that in the control group, $P < 0.05$, shown as Figure 1.

Figure 1 Comparison of clinical symptom disappearing time between the two groups (\bar{x} ; d)

Group	Number of cases	Cough	Lung expiratory wheeze	Asthma
Control Group	38	6.01±0.45	5.90±1.33	5.51±0.73
Observation Group	38	3.54±1.15	3.89±1.04	3.14±1.59
t	--	12.330	7.339	8.350
P	--	<0.05	<0.05	<0.05

2.2 Adverse Reaction

In the control group, 2 children have flushed faces, and 1 child has muscle tremor (about 7.89%, 3/38); in the observation group, 3 children have muscle tremor (about 7.89%, 3/38). There was no statistical difference between the two groups, $t = 0.000$, $P > 0.05$.

3. Discussion

Asthmatic pneumonia is the most common respiratory asthmatoïd disease in infants and young children. The recent epidemiological investigation shows that the prevalence of asthmatic pneumonia has been increased gradually with the increasing of air pollution in China[4], which has adverse effect on our population quality. The pathogenesis of the disease is relevant to RSV virus[5]; human metapneumovirus, rhinovirus, adenovirus and parainfluenza virus, Mycoplasma pneumoniae can also cause the disease. The virus intruding into the respiratory tract of children leads to inflammatory obstruction in the small airway; after the intima of respiratory tract is infected, allergic inflammation appears, which leads to the loss of epithelial cells. As the respiratory mucosa function and smooth muscle of bronchia of infants are weak and the respiratory tract is relatively narrow, the symptoms of submucosal edema and smooth muscle, etc. are extremely apt to occur. In addition, RSV can inhibit against β_2 receptor[6], which can lead to asthma, dyspnea and anhelation. In the terminal stage of disease progression the disease may develop into severe pneumonia or asthma later, so effective

anti-inflammatory and spasmolysis drugs are especially important for children with asthmatic pneumonia.

The recent research shows that there is a correlation between asthmatic pneumonia and bronchial asthma. Clinical application of ipratropium bromide, salbutamol and budesonide aerosol inhalation has a definite curative effect. The disappearance time of clinical symptoms in the observation group was shorter than that in the control group, $P < 0.05$; In the control group, 2 children have flushed faces, and 1 child has palpitation (7.89%, 3/38); There were 3 cases of muscle tremor in the observation group (7.89%, 3/38). No statistical difference was found between incidence of adverse reaction in the two groups, $P > 0.05$. The causes of this study are as follows: ① Compound ipratropium bromide contains salbutamol and ipratropium bromide; salbutamol is a short acting agonist of β_2 receptor, which can produce a series of biochemical reactions after entering the body through the airway, and which can relax the contractive smooth muscle of the airway, inhibit the release channel of inflammatory mediators, promote the mucociliary movement of the children, reduce the vascular permeability, antagonize bronchospasm and improve the ventilation function. Ipratropium bromide is a new cholinolytic medicine, which can only selectively antagonize the contractility of anti-acetylcholine; it is the only medicine of local inhalation for anti-choline used in the clinic, which has non-fat solubility, so the blood concentration is low, and the whole body reaction can't be caused; after inhalation of the medicine,

it is limited to expanding the local bronchus of the airway; thus there is a significant local effect and the effect time is long. The combination of salbutamol and ipratropium bromide can enhance the bronchial dilation and make up the insufficiency of its antagonistic effect on acetylcholine to achieve the best detoxifying effect and improve lung function. ② Budesonide is a non-halogenated glucocorticoid, which can play a good role in local anti-inflammation of airway, and can inhibit and block the release of airway inflammatory cells and their mediators, reduce glandular secretion and airway hyperreactivity and repair the airway slowly[7]; in addition, budesonide has a high binding capacity of glucocorticoid receptor, and therefore it can have a remission effect on an increased state of airway responsiveness caused by acetylcholine and histamine. The research of Yuan Chen shows that the effect of budesonide on anti-inflammatory and asthma is significant. After 1% ~ 5% of the solution is atomized and inhaled, the pesticide effect can extend to the whole lung; its efficacy is 2 times higher than that of beclomethasone, which is superior to systemic glucocorticoid. ③ The combination of compound metopropium bromide and budesonide can play a complementary role, which can expand the airway, relieve smooth muscle and restrain the inflammatory mediators of capillary bronchia[9]. The former can enhance the anti-inflammatory effect of the latter by inhibiting the release of inflammatory mediators. The latter can improve bronchiectatic activity by increasing the expression of β_2 receptor, while ipratropium bromide and budesonide lack the complementary role. In addition, the dosage of atomizing inhalation is little with high safety, and the local blood concentration can be maintained for a long time, avoiding influencing organs of the whole body. It is more convenient for infants to accept it. At present, the domestic literature suggests that there is controversy for the application of bronchodilators in the treatment of asthmatic pneumonia, and suggests that the bronchodilators provide at most mild transient relief. The research shows that the aerosol inhalation of compound ipratropium bromide (including ipratropium bromide and salbutamol) and budesonide can significantly improve the symptoms of asthma and anoxia to make the children survive in the severe period of the disease. Despite the excessive use, it is still a breakthrough treatment.

To sum up, the aerosol inhalation of compound ipratropium

bromide and budesonide can treat infants with asthmatic pneumonia, improve infants' clinical symptoms and has clinical value; it is safe to use little medicine for adverse reaction.

References

- Li Jing. Efficacy observation of the aerosol inhalation of budesonide and compound ipratropium bromide for treating infants' capillary bronchitis and its effect on serum PCT and hs-CRP[J]. *Journal of clinical and experimental medicine*, 2015, 14(19):1641-1643.
- Li Qianmei, Wu Suling, Shi Caixiao, etc. Analysis on risk factors of hospital infection in children with bronchiolitis[J]. *Chinese Journal of Hospital Infection*, 2015, 25(4):934-936.
- Liu Naihua, Liu Aihong, Liu Liping, etc. Clinical efficacy observation of the aerosol inhalation of compound ipratropium bromide and budesonide for treating infants' capillary bronchitis [J]. *Chinese Remedies & Clinics*, 2012, 12(4):499-500.
- Lu Xianhong. Clinical nursing observation of budesonide and salbutamol in the treatment of asthmatic sputum[J]. *Journal of Nurses Training*, 2014, 29(15):1434-1435.
- Ma Zhongxia. Clinical efficacy observation of budesonide, ipratropium bromide and salbutamol combined with oxygen in nebulizer treatment of children's asthmatic pneumonia[J]. *Journal of clinical appropriate medicine*, 2016, 9(14):55-56.
- Mi Yinghua. Efficacy observation of budesonide, ipratropium bromide and salbutamol combined with oxygen in nebulizer treatment of children's asthmatic pneumonia[J]. *Journal of Henan Employee Medical College*, 2015, 28(5):612-613.
- Song Hongling. Effect of the aerosol inhalation of ipratropium bromide and budesonide on serum immunoglobulin, T lymphocyte and inflammatory factors of children with viral pneumonia[J]. *Hebei Medical Journal*, 2016, 38(13):1946-1949.
- Wang Xuemei. Efficacy observation and nursing care of aerosol inhalation of budesonide suspension combined with compound ipratropium bromide solution compression pump for treating infants' capillary bronchitis[J]. *Clinical Research*, 2016, 24(9):16-17.
- Yuan Chen, Mao Wei, Min Fangmei. Efficacy observation of aerosol inhalation of budesonide for preventing acute asthma attack in children caused by infection of mycoplasma pneumoniae[J]. *Chinese Journal of Hospital Infection*, 2014, 24(11):2829-2831.

Comparison of the Efficacy of Continuous High Volume Hemofiltration and Conventional Volume Hemofiltration in the Treatment of Sepsis Patients with MODS

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Abstract: Objective: To explore the therapeutic effect of continuous high volume hemofiltration program in sepsis patients with multiple organ dysfunction syndrome (MODS). Method: During the period from 2013 March to 2015 December, A total of 100 cases of sepsis patients with MODS caused by various factors from the intensive care units of a hospital were selected and assigned to receive CHVHF(n=53) and continuous volume hemofiltration (CVHF, n=47). The changes of vital signs, hemodynamic parameters, MODS score, acute physiology & chronic health evaluation II (APACHE II) score, procalcitonin (PCT), arterial blood lactate, liver & kidney function parameters were observed before and after treatment. Result: After CHVHF treatment, body temperature and heart rate of patients were improved to a certain extent($t=7.059, P<0.01; t=12.014, P<0.01$); the hemodynamic parameters in 48, 72 h appear to improved, cardiac index(CI), mean arterial pressure(MAP), systemic vascular resistance index(SVRI), stroke volume index(SVI) tend to be stable, MODS score and APACHE II score were significantly decreased, ($F=30.026, P<0.01; F=87.950, P<0.01; F=367.944, P<0.01; F=217.257, P<0.01$). There is a significant changes compare with treatment before, the difference was statistically significant (both $P<0.05$); PCT and arterial blood lactic acid ,liver and kidney function indexes were gradually returned to normal at 24, 48 and 72 h post-treatment ($F=21.210, P<0.01; F=76.410, P<0.01; F=86.060, P<0.01; F=199.800, P<0.01; F=120.900, P<0.01; F=162.100, P<0.01$). Conclusion: CHVHF may stabilize vital signs and improve hemodynamic, tissue perfusion and organ function in sepsis patients with MODS.

Key words: sepsis, Continuous blood filtration, Multiple organ dysfunction syndrome

Introduction

Sepsis often occurs in the patients with serious diseases, such as multiple injuries, severe burns and surgeries^[1]. Sepsis is so dangerous that although the inhibition of inflammatory response, focus clearance and other treatment measures are adopted timely, some severe sepsis patients can still continue to develop multiple organ dysfunction syndrome (MODS), leading to high mortality. Recent studies have shown that high volume hemofiltration (HVHF) in sepsis patients can remove a variety of harmful substances in the body, which can improve the prognosis of sepsis. HVHF is a kind of widely used blood filtration technology. On the basis of continuous venous veno-hemofiltration (CVVH), HVHF is developed to form the present continuous high volume hemofiltration (CHVHF)^[2]. The treatment can improve the removal of large and medium molecular solutes. However, it is not clear whether CHVHF can effectively control the condition of MODS after sepsis. The purpose of this study is to compare the clinical efficacy of two treatments for sepsis by statistical analysis of sepsis patients with MODS treated with

CHVHF and CVHF.

1. Data and intervention

1.1 Clinical data

During the period from 2013 March to 2015 December, a total of 100 cases of sepsis patients with MODS caused by various factors from the intensive care units of a hospital were selected. 53 cases were treated with CHVHF (Group A), and the other 47 cases were treated with CVHF (Group B). The two groups of patients were consistent in gender, age and inflammation type ($\chi^2=0.023, P=0.879; t=0.818, P=0.416; \chi^2=0.756, P=0.505$, Table 1). All patients were diagnosed with 2008 SSC international guidelines for the treatment of severe sepsis and septic shock^[3], and scored with 1995 Marshall multiple organ dysfunction scale (MODS scale)^[4] for organ dysfunction. They were all hypodynamic patients, and the scoring criteria was more than 5 scores. Exclusion criteria: pregnancy, chronic renal failure, less than 18 years old and immunosuppressive therapy.

Table 1 Comparison of two groups of patients in general

Items	Group A (n=53)	Group B (n=47)	t/ χ^2	P
Male (cases)	29	25	0.023	0.879
Age (years old)	45.03±5.33	44.20±4.75	0.818	0.416
Severe pneumonia (cases)	11	9		
Acute suppurative inflammation (cases)	9	9		
Severe acute pancreatitis (cases)	8	7	0.756	0.505
Severe multiple injuries (cases)	10	9		
Postoperative abdominal infection (cases)	8	7		
Digestive tract perforation complicated with abdominal infection (cases)	7	6		

1.2 Study methods

All patients in Group A and Group B established vascular access by internal jugular vein of femoral vein catheterization, maintained activated partial thromboplastin time (APTT) in 40-60s without heparin, or with low molecular heparin or unfractionated heparin for anticoagulation^[5]. Two groups of patients were both given CHVHF hemofiltration. The patients of CHVHF group were continuously treated for 24-30h each time, with a displacement volume of 50-60 ml/ (kg*h) and a blood flow of 200-250 ml/min. While the displacement volume of the CVHF group was only 30 ml/ (kg*h) .

1.3 Evaluation indexes

The changes of body temperature (T), heart rate (HR), MODS score and APACHE II score of the two groups before and after CHVHF treatment were recorded and analyzed. The arterial blood and venous blood were extracted before and after CHVHF treatment in two groups of patients, and the changes of procalcitonin (PCT), arterial blood lactate and liver and kidney function were measured before and after CHVHF treatment. The cardiac index (CI), mean arterial pressure (MAP), systemic vascular resistance index (SVRI),

stroke volume index (SVI) and central venous pressure (CVP) were observed before and after hemofiltration in the two groups.

1.4 Statistical methods

The data of this study were input into SPSS13.0 for data analysis. Measurement data were analyzed by chi-square test. Count data were analyzed with t test. F test was used for comparison between groups. A p value < 0.05 was considered statistically significant^[6].

2. Results

2.1 Disease outcome

In Group A, among the 53 sepsis patients with MODS, 40 cases were cured and discharged, 4 cases gave up treatment for various reasons, 9 cases died, and the mortality of Group A was 17.1%; In Group B, among the 47 patients, 35 cases were cured and discharged, 5 cases gave up treatment for various reasons, 9 cases died, and the mortality of Group B was 19.1%. After two different treatments, there was no significant difference in mortality between Group A and Group B ($\chi^2=0.650, P= 0.885$). Table 2.

Table 2 Disease outcome and mortality of the patients after two treatments

Group	Cases	Cure	Giving up treatment	Death	Mortality (%)
Group A	53	40	4	9	17.1
Group B	47	34	5	8	19.1
χ^2	-		0.650		
P	-		0.885		

2.2 After CHVHF treatment, the body temperature and heart rate of the patients in the two groups were significantly reduced, and the difference of MODS score and APACHE II score were statistically significant before and after treatment ($t=7.059, P<0.01; t=12.014, P<0.01; t=4.639, P<0.01; t=10.306, P<0.01$). From the

decrease of body temperature, heart rate, MODS score and APACHE II score, it can be observed that the vital signs of patients were tending to be stable. And the decrease of Group A was more significant than that of Group B ($t=6.867, P<0.01; t=4.300, P<0.01; t=1.697, P=0.043; t=4.367, P<0.01$). Table 3.

Table 3 Changes of vital signs in patients before and after CHVHF treatment

Group	Cases	Temperature				Heart rate				MODS				APACHE II score			
		Before treatment	After treatment	t	P	Before treatment	After treatment	t	P	Before treatment	After treatment	t	P	Before treatment	After treatment	t	P
Group A	53	38.6±0.8	37.2±1.0	7.059	<0.01	121.7±14.5	90.0±12.6	12.014	<0.01	7.9±3.3	5.3±2.4	4.639	<0.01	17.1±3.3	9.2±4.5	10.306	<0.01
Group B	47	38.7±0.8	38.4±0.7	2.055	0.042	120.9±14.2	101.1±13.2	7.435	<0.01	7.9±3.3	6.2±2.9	2.817	0.04	17.1±3.4	12.9±3.9	5.910	<0.01
t	-	0.624	6.867	-	-	-0.278	4.300	-	-	0.002	1.697	-	-	0.003	4.367	-	-
P	-	0.534	<0.01			0.782	<0.01			1.000	0.043			1.000	<0.01		

2.3 Hemodynamic changes before and after CHVHF treatment

The patients got better significantly at 48, 72h after CHVHF

treatment. CI, MAP, SVRI and SVI gradually tended to be stable. The difference before and after CHVHF treatment was statistically significant ($F=30.026, P<0.01; F=87.950, P<0.01; F=367.944,$

P<0.01; F=217.257, P<0.01). Compared with Group B, the increase of CI, MAP and SVI after treatment in group A was more significant, while the decrease of CAP and SVRI in Group A was more

significant (t=-2.764, P=0.004; t=-4.731, P<0.01; t=5.273, P<0.01; t=-5.839, P<0.01). Table 4.1 and Table 4.2.

Table 4.1 Hemodynamic changes of patients before and after CHVHF treatment

Group	Cases	CI					MAP				
		Before treatment	48h after treatment	72h after treatment	F	P	Before treatment	48h after treatment	72h after treatment	F	P
Group A	53	2.0±1.0	3.9±1.9	4.5±2.1	30.026	<0.001	77.0±5.3	86.5±6.8	92.4±5.9	87.950	<0.001
Group B	47	2.5±1.0	3.3±1.4	3.5±1.4	8.025	<0.001	76.8±5.1	81.1±4.4	86.1±7.4	20.540	<0.001
t	-	0.499	-1.778	-2.764	-	-	-0.192	-4.648	-4.731	-	-
P	-	0.619	0.038	0.004	-	-	0.848	<0.001	<0.001	-	-

Table 4.2 Hemodynamic changes of patients before and after CHVHF treatment

Group	Cases	SVRI					SVI				
		Before treatment	48h after treatment	72h after treatment	F	P	Before treatment	48h after treatment	72h after treatment	F	P
Group A	53	2768±213	1985±163	1850±185	367.944	<0.001	33.0±6.8	55.0±6.1	57.2±6.9	217.257	<0.001
Group B	47	2766±211	2299±194	2043±180	165.413	<0.001	32.5±6.0	44.0±6.1	48.5±8.0	69.964	<0.001
t	-	-0.0047	8.793	5.273	-	-	-0.388	-9.000	-5.839	-	-
P	-	0.963	<0.001	<0.001	-	-	0.699	<0.001	<0.001	-	-

2.4 Changes of liver and kidney function before and after CHVHF treatment

PCI and arterial blood lactate levels were higher than normal values before CHVHF treatment. After CHVHF treatment, the two indexes gradually returned to normal. The patients were suggested

with liver and kidney dysfunction before CHVHF treatment. After CHVHF treatment, the liver and kidney function gradually returned to normal. There were significant differences before CHVHF treatment and after CHVHF treatment at 24, 48, 72h (F=21.210, P<0.01; F=76.410, P<0.01; F=86.060, P<0.01; F=199.800, P<0.01; F=120.900, P<0.01; F=162.100, P<0.01). Table 5.

Table 5 Changes of PCI, arterial blood lactate and liver and kidney function in patients before and after CHVHF treatment

Items	Before CHVHF	24h after CHVHF	48h after CHVHF	72h after CHVHF	F	P
PCT (μg/L)	7±3	5±3	3±2	2±1	21.210	<0.01
Blood lactate (mmol/L)	6.8±2.7	3.4±2.1	2.7±1.7	1.7±0.9	76.410	<0.01
ALT(U/L)	123.4±41.5	68.2±24.1	51.4±21.6	45.2±18.7	86.060	<0.01
TBIL(μmol/L)	35.1±8.1	19.3±4.5	16.3±4.0	11.3±3.2	199.800	<0.01
BUN(mmol/L)	25.4±6.1	14.2±4.4	12.3±4.3	9.0±3.7	120.900	<0.01
Scr(μmol/L)	173.9±31.5	117.9±27.2	89.2±30.3	67.3±11.5	162.100	<0.01

3. Discussion

Sepsis is a common clinical critical disease. There are more than 18 million cases of sepsis in the world each year^[7]. About 41% of critically ill patients in ICU can develop sepsis. In ICU, cardiac death is the leading cause of death, and sepsis is the second leading cause of death in critically ill patients. The mortality of MODS

secondary to sepsis can reach 32%-61%. A large number of inflammatory mediators and proinflammatory substances are released and then interact in the late stage of sepsis due to ischemia reperfusion, infection and other factors. Through cascade amplification, an inflammation "waterfall effect" is formed, which causes MODS^[8]. Immune imbalance is the main cause of sepsis complicated with MODS. To reduce the mortality of sepsis

fundamentally, we need to correct the imbalance of immune system. Continuous blood purification treatment can be used to gain time for reducing the mortality of sepsis, because it can clear the abnormally increased vasoactive substances in blood through filtration, adsorption and diffusion^[9]. HVHF is an important method for continuous renal replacement therapy (CRRT). It can reduce mortality and improve prognosis. Because it can reduce the severity of immune system paralysis, so as to reduce the risk of secondary infection. CRRT treatment can effectively correct the acid-base balance and electrolyte disorder in sepsis patients, and comprehensively reduce the peak concentration of various inflammatory mediators in the body. Therefore, early treatment with CRRT can reduce the effects of inflammatory mediators on hemodynamics and endothelial cells, and can reduce the overall inflammatory response in a timely manner^[10,11].

The study showed that, compared with CVHF, CHVHF could significantly reduce the body temperature and heart rate of sepsis patients, decrease the MODS score and APACHE II score, and the difference was statistically significant. Consistent with the results of many studies in our country, CHVHF treatment can help to stabilize the vital signs in sepsis patients with MODS^[12].

The study showed that in sepsis patients with MODS after CHVHF treatment, SVRI was improved significantly, CI and MAP increased, the arterial blood lactate reduced, CVP decreased significantly, and the formation of cardiovascular complexes such as endothelin and myocardial depressant factor was disturbed^[13]. The results indicated that CHVHF could improve the tissue perfusion and hemodynamics in sepsis patients with MODS, and thus played an important role in the recovery of organ function in patients with MODS^[14]. PCI is a serological index with high specificity in the diagnosis of sepsis^[15]. The results of this study showed that PCI gradually decreased to normal after CHVHF treatment, indicating that CHVHF is of great significance in the treatment of sepsis.

In summary, for the sepsis patients with MODS, CHVHF can stabilize vital signs, improve hemodynamics and tissue perfusion, and restore organ function. It is a potential treatment for sepsis complicated with MODS.

References

- Bomsztyk K, Mar D, An D, et al. *Experimental acute lung injury induces multi-organ epigenetic modifications in key angiogenic genes implicated in sepsis-associated endothelial dysfunction*. *CRIT CARE*, 2015, 19(1):1-13.
- Du C, Cai H, Shao S, et al. *Efficacies of continuous high volume hemofiltration in severe sepsis patients with multiple organ dysfunction syndrome*. *CHINESE MED J-PEKING*, 2015, 95(3): 210-3.
- Kleber A, Altmeyer S, Wolf B, et al. *Impact of melatonin receptor deletion on intracellular signaling in spleen cells of mice after polymicrobial sepsis*. *INFLAMM RES*, 2014, 63(12): 1023-1033.
- Li W, Weng L. *Effects of continuous blood purification on inflammation and nutritional status in patients with severe sepsis*. *CHIN MED HERALD*, 2014, 11(2):57-59,62.
- Lu X, Liu H, Zhou F, et al. *Efficacy of continuous blood purification in the treatment of severe sepsis*. *ACAD J PLA POSTG MED SCH*, 2014,35(11):1090-1092,1100.
- Nicole D S, Lori R, Scott B, et al. *Therapeutic plasma exchange in the management of sepsis and multiple organ dysfunction syndrome: a report of three cases*. *J CLIN APHERESIS*, 2014, 29(2):127-131.
- Ronco C, Ricci Z, Backer D D, et al. *Renal replacement therapy in acute kidney injury: controversy and consensus*. *CRIT CARE*, 2015, 19(1):1-11.
- Spoto S, Valeriani E, Costantino S. *Nosography of systemic inflammatory response syndrome, sepsis, severe sepsis, septic shock, and multiple organ dysfunction syndrome in internal medicine patients*. *Italian Journal of Medicine*, 2015, 9(3): 243-251.
- Sun Z, Ye H, Shen X, et al. *Continuous venovenous hemofiltration versus extended daily hemofiltration in patients with septic acute kidney injury: a retrospective cohort study*. *CRIT CARE*, 2014, 18(2): 1-9.
- Toshiaki I. *The obstacles that should be overcome to develop new anticoagulants for severe sepsis*. *CRIT CARE MED*, 2014, 42(3):e248-9.
- Tsao C M, Li K Y, Chen S J, et al. *Levosimendan attenuates multiple organ injury and improves survival in peritonitis-induced septic shock: studies in a rat model*. *CRIT CARE*, 2014, 18(6):1-12.
- Vet G L H, Steven E. Epstein DVM DACVECC, Carrie Palm DVM DACVIM, et al. *Resolution of anuric acute kidney injury in a dog with multiple organ dysfunction syndrome*. *J VET EMERG CRIT CAR & CRIT CARE*, 2014, 24(6):724-730.
- Wu Z, Tao S. *Progress in treatment of continuous blood purification in children*. *INT J PEDIATR*, 2015,42(5):595-598.
- Xu C, Fan K, Xie L, et al. *Evaluation of optimized continuous venovenous hemodiafiltration therapy efficiency in severe burn patients with sepsis*. *BURNS & J TRAUMA ACUTE CARE*, 2014, 2(3):125-129.

Evaluation of the Effect of Glucocorticoid Combined With Terbutaline in the Treatment of AECOPD

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Abstract: Objective To investigate the effect of glucocorticoid combined with terbutaline in the treatment of AECOPD. **Methods** The clinical data of 90 patients with AECOPD diagnosed in our hospital from March 2015 to April 2016 were collected and treated with glucocorticoid or terbutaline. The patients were divided into control group and observation group. The control group were treated with terbutaline, a total of 44 cases, the observation group were treated with glucocorticoid combined with terbutaline, a total of 46 cases. By retrospective analysis, the correlation between the therapeutic effect of two groups of patients with AECOPD and arterial blood gas analysis index PaO₂ and PaCO₂ were compared and analyzed. **Results** The total effective rate of the observation group was significantly higher than that of the control group, the difference was statistically significant ($P < 0.05$). The arterial blood gas analysis index PaO₂ and PaCO₂ in the observation group were significantly higher than those in the control group, the difference was statistically significant ($P < 0.05$). There was no significant difference between the observation group and the control group ($P > 0.05$). **Conclusion** The use of glucocorticoid combined with terbutaline in the treatment of patients with AECOPD could significantly increase the clinical efficacy, improve the quality of life of patients. This program is worth promoting in clinical practice.

Key words: Acute exacerbation of chronic obstructive pulmonary disease, glucocorticoid, terbutaline, arterial blood gas analysis

Introduction

Chronic obstructive pulmonary disease (COPD), is one of the severe respiratory diseases characterized by persistent airflow limitation^[1]. The incidence of the disease was mainly related to the harmful particles in the air, which leads to the abnormal inflammatory reaction of the trachea. The disease would be further developed into severe pulmonary heart disease or respiratory failure^[2]. Chronic obstructive pulmonary disease in patients with chronic obstructive pulmonary disease exacerbation (AECOPD) if not treated quickly, it would often become an important cause of death^[3]. In China, it had a high morbidity and mortality, which was a chronic respiratory disease that affected the quality of life and safety of patients. Because the disease was prone to repeated attacks, with irreversible, in the outside world, the continuous stimulation of lung function would continue to deteriorate^[4]. In order to improve the quality of life of patients with AECOPD, reduce the cost of treatment of patients with AECOPD, this study focused on the therapeutic effect of glucocorticoid combined with terbutaline in the treatment of AECOPD, the report was as follows.

1. Materials and methods

1.1 Research objects Clinical data of 90 patients with AECOPD diagnosed in our hospital from March 2015 to April 2016 were collected and treated with glucocorticoids or terbutaline. They were divided into control group (44 cases) and observation group ($n = 46$).

Inclusion criteria: age < 80 years old; clinically diagnosed as AECOPD patients; resting state, arterial blood gas analysis PaO₂ < 7.00 Kpa, PaCO₂ > 7.60 Kpa. Exclusion criteria: those who do not meet the AECOPD diagnostic criteria; do not want to participate in this study; suffering from other serious diseases of the system. The control group consisted of 23 males and 21 females with an average age of (54 ± 3.2) years old. The observation group consisted of 22 males and 24 females with an average age of (52 ± 4.4) years old. There was no significant difference in age, sex and disease between the two groups of patients with AECOPD ($P > 0.05$).

1.2 Method Purchase to AstraZeneca terbutaline (Zhunzi H10930058), GlaxoSmithKline (Chongqing) Co., Ltd. Fluticasone Propionate Aerosol (Zhunzi H20010388), Atomizer in Shanghai Home Environment Technology Co Ltd. to control group 1ml inhalation of terbutaline (2.5mg terbutaline sulfate), two times a day, continuous inhalation time 20mins; the observation group for inhalation with terbutaline while adding 100u fluticasone propionate, once a day, continuous inhalation time is 20mins. To the control group 1ml inhalation of terbutaline (2.5mg terbutaline sulfate), two times a day, continuous inhalation time 20mins; the observation group for inhalation with terbutaline while adding 100u fluticasone propionate, once a day, continuous inhalation time was 20mins, one week of treatment. Observed the clinical symptoms of patients before and after treatment and monitor arterial blood gas analysis index and pH value.

1.3 Evaluation index According to the AECOPD standard, the treatment of cough, sputum and other clinical symptoms disappeared

or improved, arterial blood gas analysis index of PaO₂ and PaCO₂ returned to normal as excellent; cough, sputum and other clinical symptoms, arterial blood gas analysis index was improved effectively; cough, sputum and other clinical symptoms, arterial blood gas analysis index did not change as invalid. Compared the evolution of two groups of patients with AECOPD after the use of different treatment options.

1.4 Statistical processing After double entry data, SPSS 9 statistical software was used for data processing. The data were expressed by percentage or example, and the mean + standard deviation ($\bar{X} \pm s$) was used to represent the measurement data. The correlation between the two groups was analyzed by independent t test and chi square test. The difference of $P < 0.05$ was statistically

significant.

2. Results

2.1 Comparative analysis of the treatment effect of the two groups of patients with AECOPD The total effective rate of observation group was 94.25%, control group total effective rate was 74.21%, with significant difference between two groups ($\chi^2=3.92$, $P < 0.05$), that was better than the treatment effect of the observation group with glucocorticoid combined with terbutaline treatment regimen in the treatment of AECOPD patients with the control group. The results shown in table 1.

Table 1 Comparison of therapeutic effects between the two groups of patients with AECOPD (n, %)

Group	The number of cases	Most effective	Higher effective	Invalid	Total effective rate
Observation group	46	36(78.26)	8(18.18)	2(3.56)	44 (94.25)
Control group	44	20(45.45)	10(22.72)	14(31.83)	30 (74.21)
χ^2	-	3.99	1.42	3.88	3.92
P	-	<0.05	>0.05	<0.05	<0.05

2.2 Comparative analysis of the blood gas analysis index before and after treatment in the two groups of patients with AECOPD Two groups of patients with AECOPD before and after treatment of blood gas analysis index was statistically significant ($P < 0.05$), indicating that the two programs had a certain therapeutic effect. After treatment, the blood gas analysis index PaO₂ and

PaCO₂ in the observation group were higher than those in the control group, the difference was statistically significant ($P < 0.05$), indicating that the treatment effect of the observation group was much higher than that of the control group after treatment. There was no significant difference between the observation group and the control group ($P > 0.05$). The results are shown in Table 2.

Table 2 Comparison of blood gas analysis indexes between the two groups of patients with AECOPD before and after treatment

Group	PaO ₂		PaCO ₂		PH	
	Before treatment	After treatment	Before treatment	After treatment	Before treatment	After treatment
Observation group	7.59±1.58	10.58±1.42*	9.40±1.95	6.88±1.62*	7.40±1.10	7.40±0.13**
Control group	7.89±1.21	8.78±1.41	9.51±1.68	8.81±1.52	7.51±1.30	7.38±0.89**

Note: * $P < 0.05$; ** $P > 0.05$

3. Discussion

COPD was one of the most common irreversible respiratory diseases in Department of respiration. The clinical manifestations were cough, expectoration and even breathing difficulties and other symptoms of^[5]. The incidence of the disease was high, the mortality rate was high, the highest mortality rate in the country ranked fifth, had become one of the serious diseases threatening human health^[6]. COPD patients with acute respiratory infection often developed into AECOPD patients. The cough, sputum and other clinical symptoms would be more serious. The majority of patients often had systemic fever and other symptoms of inflammation, shortness of breath, dyspnea, abnormal arterial blood gas analysis index PaO₂ and PaCO₂, increased white blood cell. Patients often needed to be hospitalized, if not timely control, that would seriously endanger the lives of patients^[7]. Clinically, AECOPD was often the main cause of

death in patients with COPD and an important reason for the increase in medical costs^[8]. Research^[9] found that in our country, the incidence rate of COPD patients was higher than that of urban residents. Patients with primary and long-term inhalation had certain correlation with the air particles produced by incomplete combustion of firewood. At present, the pathogenesis of COPD remained to be further studied. However, there were research^[10] and analysis that the disease was mainly related to pulmonary inflammation. Due to irreversible airway inflammation of lung inflammatory reaction, long-term stimulation led to pulmonary artery blood supply, blood flow and ventilation imbalance. COPD patients tended to further the development of respiratory failure, caused severe metabolic disorder, eventually endangered the lives of patients^[11]. Therefore, in addition to timely symptomatic treatment, we had to strive for the best treatment to save the AECOPD patient's life, to improve the quality of life and reduce the risk of recurrence.

Clinical use of terbutaline to relieve dyspnea in patients with AECOPD, which could improve the body metabolism and save the patient's life time. There was a certain amount of clinical efficacy^[12]. Terbutaline was a selective beta 2 adrenergic receptor agonist that acted primarily on the bronchial smooth muscle and myometrium, relieving muscle spasms. It could relieve the symptoms of dyspnea, increase the capillary area of the lung, reduce the pressure of pulmonary artery, and regulate the metabolic disorder of^[13]. There was a great deal of literature^[14] indicate that terbutaline played a positive role in patients with cough, sputum and dyspnea. Research^[15] found that systemic use of corticosteroids and antibiotics could effectively improve the treatment effect of AECOPD patients, improve arterial blood gas analysis index, shorten the hospitalization time, reduce the early recurrence rate.

It had been found that the mechanism of using glucocorticoid was mainly about inhibiting the release of inflammatory factors, alleviating pulmonary inflammatory reaction, reducing the pulmonary vascular permeability, reducing pulmonary edema, inhibiting the release of lysosomal enzymes, maintaining the integrity of the cell membrane, improving lung tissue hypoxia tolerance, relieving bronchospasm and improving the lung function. But at the same time, the side effects caused by the use of glucocorticoids were also noteworthy.

The results of this study found that the observation group AECOPD were treated with corticosteroids combined with terbutaline after treatment, the total efficiency was 94.25%, the control group AECOPD were treated with terbutaline after treatment, the total effective rate was 74.21%, with statistically significant difference between the two groups. It showed that the treatment effect of glucocorticoid combined with terbutaline in the treatment of AECOPD patients was significantly better than that of the control group. Two groups of patients with AECOPD before and after treatment of blood gas analysis index had statistical significance. The results showed that the two methods have certain therapeutic effect on AECOPD patients. After treatment, the blood gas analysis index PaO₂ and PaCO₂ in the observation group were higher than those in the control group, the difference was statistically significant. The study found that the pH value of the observation group had no significant difference with the control group. But the results suggested that glucocorticoids combined with terbutaline in the treatment of AECOPD patients was significantly higher than the control group, which could greatly improve the clinical symptoms of patients, reduce the side effects of drugs, and improve the quality of life of patients.

To sum up, the use of glucocorticoids combined with terbutaline in the treatment of patients with AECOPD could

significantly increase the clinical efficacy, greatly improve the quality of life of patients. This treatment was worthy of clinical promotion.

References

- Arce SC. *Long-Term Oxygen for COPD*. *N Engl J Med*, 2017,376(3): 286-287.
- Cui Y, Liu KW, Liang Y, et al. *Inhibition of monoamine oxidase-B by selegiline reduces cigarette smoke-induced oxidative stress and inflammation in airway epithelial cells*. *Toxicol Lett*, 2017,268: 44-50.
- Eliasson O. *Long-Term Oxygen for COPD*[J]. *N Engl J Med*, 2017,376(3):287.
- Gai L, Liu H, Cui JH, et al. *The allele combinations of three loci based on, liver, stomach cancers, hematencephalon, COPD and normal population: A preliminary study*. *Gene*, 2017,605:123-130.
- Galiatsatos P. *Long-Term Oxygen for COPD*. *N Engl J Med*, 2017,376(3): 286.
- Girodet PO, Ch R, Molimard M. *Effectiveness of Fluticasone Furoate-Vilanterol in COPD*. *N Engl J Med*, 2016, 375(26): 2605-2606.
- Hirooka S, Ueno M, Fukuda S, et al. *Effects of Simvastatin on Alveolar Regeneration and Its Relationship to Exposure in Mice with Dexamethasone-Induced Emphysema*. *Biol Pharm Bull*, 2017,40(2):155-160.
- Kim SJ, Park EC, Han KT, et al. *Nurse Staffing and 30-day Readmission of Chronic Obstructive Pulmonary Disease Patients: A 10-year Retrospective Study of Patient Hospitalization*. *Asian Nurs Res (Korean Soc Nurs Sci)*, 2016,10(4):283-288.
- Li L, Hu B, Gong S, et al. *Pulmonary Function and Arterial Stiffness in Chronic Heart Failure*. *Biomed Res Int*, 2016,2016: 5478394.
- Solera J, de Cabo C, Solis-García dPJ. *Effectiveness of Fluticasone Furoate-Vilanterol in COPD*. *N Engl J Med*, 2016,375(26): 2606-2607.
- Suissa S. *Effectiveness of Fluticasone Furoate-Vilanterol in COPD*. *N Engl J Med*, 2016,375(26):2606.
- Vestbo. *Effectiveness of Fluticasone Furoate-Vilanterol in COPD*. *N Engl J Med*, 2016,375(26):2607.
- Vozoris NT. *The need for greater opioid pharmacovigilance in COPD*. *Int J Chron Obstruct Pulmon Dis*, 2017,12:189-192.
- Wise RA. *Long-Term Oxygen for COPD*. *N Engl J Med*, 2017,376(3): 287.
- Zhang M, Cheng YJ, Zheng WP, et al. *Impact of Chronic Obstructive Pulmonary Disease on Long-Term Outcome in Patients with Coronary Artery Disease Undergoing Percutaneous Coronary Intervention*. *Biomed Res Int*, 2016,2016:8212459.

Countermeasures on Improving the Teaching Quality of Preventive Medicine in China

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Abstract: With the development of medical education, the importance of preventive medicine has been increasingly recognized. Preventive medicine is not only to deliver knowledge, but also to help the learners solve their practical problems by using acquired knowledge. However, the traditional teaching methods of preventive medicine have so many drawbacks that cannot satisfy the requirements for training medical talents with comprehensive and innovative abilities. Therefore, how to improve the teaching quality to strengthen students' comprehensive capabilities has become an urgent problem for preventive medical educators. Combining with the current status of teaching in medical colleges of China, this article would put forward related proposals for how to improve teaching quality from theoretical teaching, experimental teaching and examinations mode, so as to cultivate practical, innovative and pioneering medical talents for the future.

Key words: preventive medicine, theoretical teaching, experimental teaching, examination mode

Introduction

Preventive medicine is a main subject of medical education in China, and has the characteristics of scientific, practical and strong applicability, belongs to a bridge course between clinical medicine and basic medicine. With the development of medicine and the change of disease spectrum, more and more people pay attention to disease prevention and control. Medical education is no longer simply delivering knowledge via a single instructional method (Epling, & Morrow et al.,2003), it is a growing recognition by medical educators that there is a need to improve prevention and population health education for medical students (Novick, & Lazorick et al.,2011). So the development of modern science and technology provides higher requirements for preventive medical educators to train more medical students to satisfy the social requirements. Nowadays, preventive medicine is one of the compulsory courses for clinical medicine in China, but the students are usually passive learning for scores, while they are ignoring the active learning of knowledge and skills because of the professional contacting alienation between preventive medicine and clinical medicine, so as that most of students are lack of interests to preventive medicine and have the characteristics of high scores and low abilities. Accordingly, it is an urged issue for preventive medical educators to take diversified teaching methods for improving teaching quality and stimulating students' interests of study. Combining with the current status of teaching in medical colleges of China, this article is aimed to detect the possible teaching methods from theoretical teaching, practical application and examinational mode to improve teaching quality and cultivate students'

comprehensive abilities of thinking and solving practical problems.

How to stimulate students' interests from theoretical teaching

Theoretical teaching is the main part of medical education. By theoretical teaching, the students can systematically acquire related medical knowledge. At present, the theoretical teaching of preventive medicine in China usually depends on the lecture-based learning, which is mainly based on teacher-center model and the knowledge delivered to students in a lecture format throughout the class, so the teacher is the primary source of teaching information, while the students are only passive learning. Although this teaching method is controllable, economic and simple(Wang, 2015), it usually makes the students give up active thinking instead of passive acceptance, and it cannot effectively stimulate students' interests of study or improve their comprehensive capabilities. Therefore, during the process of teaching, we must carry on the innovation of education ideal, try to adopt diversified teaching methods while not only depending on the lecture-based learning, so as to stimulate students' interests and strengthen students' abilities of actively thinking and independently solving practical problems. Firstly, according to the arrangement of courses, the teacher can design several problems related to teaching contents of preventive medicine before class, and guide the students to use class time to analyze, discuss and solve these problems. The students actively involve in knowledge construction and application by discussing and solving these problems, while the teacher only serves as a guide to help the students with their learning. For example, when the teachers introduce the clinical manifestations, diagnosis, treatment and

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prevention of environmental or occupational harmful factors (lead, mercury, benzene, et al) to health, they can design some questions based on the clinical cases, and guide students to carry on diagnosis or find out treatments or propose preventive measures. This method can go beyond the simple coverage of teaching contents and promote the understanding of theoretical knowledge. Secondly, the teacher can arrange several seminars according to the teaching contents of preventive medicine during the lecture. The specialists may involve in various fields of preventive medicine, such as environmental health, occupational health, toxicology, epidemiology, et al. By inviting specialists for seminars, it can broaden the students' horizons, expend their knowledge and increase their experience. For example, when the teachers introduce preventive strategy and surveillance of diseases, they can invite the specialist of Disease Control and Prevention Centers to take a seminar. Additionally, when the teachers introduce the diseases caused by environmental or occupational harmful factors, they can cooperate with professional hospitals to organize students to visit and analyze related cases for more understanding clinical manifestations, diagnosis, treatment and prevention. This teaching method can well stimulate students' interests of study and increase their integration with society in the future. Thirdly, we can take Project-based Learning (PBL) method during the teaching of preventive medicine. PBL is considered an approach that aims to actively and independently solve the problems via individuals or small group during the process of learning-teaching. (Kaya, & Lsik et al., 2014) At present, many internationally medical schools are changing their teaching curricula and using PBL programs as their teaching methods (Azer, 2011), but in China, the application of PBL is still in the initial stage, especially in the education of preventive medicine. (Ding, & Chu et al, 2014) In Project-based Learning, the students are assigned a project and they can complete the project to acquire their understanding of knowledge by individuals or groups. (Yang, & Yang, 2013) It has been demonstrated more effective in all domains including theoretical knowledge. (Ding, & Chu et al, 2014) Based on the theoretical teaching syllabus of preventive medicine and the teaching time arrangement, the teachers can design several topics for students according to preventive medical contents and the focus issues of current society before class. The students can choose topics themselves basing on their interests, and they complete the topics after a period of time by internet, books, et al. In the end, the students can participate for the 25-min presentation of interactive teaching in the class or write a summary according to their topics. This method not only can make the students actively involve in learning as they participate in and complete their topics in a personal manner, but also can increase the students' comprehensive abilities by using theoretical knowledge to solve practical problems in the future.

How to strengthen students' comprehensive practical

abilities

Preventive medicine has a strong nature of practice. So it is not only based on theoretical teaching, but also pays great attention to emphasize practical teaching. Practical teaching can better promote students' understanding for theoretical knowledge, and improve their abilities of thinking and solving practical problems by applying acquired knowledge and skills. With the rapid development of society, more and more employer units require graduates with innovative spirits and comprehensive practical abilities of solving problems independently. Therefore, it is an urgent issue for preventive medical educators to seek new methods to strengthen the students' innovative spirits and comprehensive practical abilities. At present in China, the practical teaching of preventive medicine most ignores the combination of theory with practice. It mainly depends on laboratory teaching, and uses the experimental model of verification. That is to say, the teachers usually deliver experimental principles and steps to everyone, and the students passively simulate the experiments only in laboratory. In addition, the curriculums contents and the experimental methods have little change for several years. This situation cannot satisfy the requirements of social development. Therefore, it is important to reduce verification experiments and expand practical teaching methods during the teaching of preventive medicine. Firstly, during the practical teaching of preventive medicine, the teacher should strengthen working practices so as to expand the practical opportunities for students. For example, when the teachers introduce the detections of environmental factors and their biological effects, they may organize the students to related workplaces for on-site monitoring, observing and analyzing harmful factors' occurrence, toxic mechanisms and preventive measures, or let the students carry on detections for local water, soil, air, et al. Additionally, according to the teaching arrangement, the teachers may arrange several visiting class for students in order to acquire modern disease preventive knowledge and improve the abilities of solving practical problems. For example, they can organize students to visit the health supervisions or the disease control and prevention centers, or they can encourage students to enter into communities for carrying on the propagandas of preventive medical knowledge or taking part in the activities of community health service. This teaching method can well enhance the students' practical work abilities of analyzing and solving problems, and it is also an effective way for the students to transform the professional theoretical knowledge into practical works. By this teaching method, it can more better to achieve the purpose of theoretical knowledge in combination with practice. Secondly, during the practical teaching of preventive medicine, the teachers may design several scientific topics for students so as to cultivate their innovative spirits and comprehensive capabilities. For example, according to the time arrangement of practical teaching, the teachers can design some scientific topics at beginning of the term for

students' choice. These topics are based on the relevant contents of preventive medicine or parts of the teachers' scientific researches or hot spots of current society. The students are divided into several groups and each group chooses one topic according to their interests. They may use leisure time or holidays for bibliographic retrieval and designing simple experimental steps. Then they complete these experimental steps by their acquired experimental methods in a period of the practical teaching, and write experimental reports in the end. This teaching method expects the students to work independently and collaboratively in their groups and to acquire useful information from different resources. By this process, the students can develop their scientific innovative spirits and strengthen their comprehensive abilities of thinking, decision, analyzing and operation, so as that they can be better to adapt the actual work in the future.

How to develop diversified examinational modes

Examinations are the important way for evaluating preventive medicine education. It is not only to test students' understanding for knowledge, but also to test students' comprehensive capabilities of solving practical problems by the gained knowledge. Accordingly, the examination should not only cover the contents of theoretical core, but also cover the contents of practical core. At present in China, although the traditional examinational mode (closed-book exam) of preventive medicine is the most popular type of assessment and has an advantage of being easy to quantify (Luo, & Huang et al., 2013), it more emphasizes memorized written exams that fail to test the students' comprehensive capabilities. According to the present examinational mode of most medical schools in China, the exam grade includes two parts: the regular grade and the final exam grade. The regular grade includes attendance, assignments and experimental reports, accounts for 30% of the total grade. The final exam grade is usually carried on book closed examination, and it emphasizes memorized knowledge taught by teachers, rarely involves the practical skills. This simple examinational mode mainly focuses on theoretical knowledge from books, while ignores the improvement of students' practical comprehensive abilities, so it cannot reflect the combinations of latest researches with clinical applications. Accordingly, it is necessary to develop diversified examinational modes for overall reflecting students' abilities. Nowadays, the examinations of most American Universities are basically characteristic of high frequency, which can make the students timely gain the feedback of acquired knowledge through these exams. The examinations should also be throughout the whole process of teaching in China. The final test to students may include

two parts: theoretical examinations and practical examinations, both are accounting for 50%. The theoretical examinations may include closed-book examinations, group discussions, Project-based presentations or summaries, et al. The practical examinations may include field investigational results and comprehensive experimental performance. Among them, the comprehensive experiments can be designed and completed independently by students. Both theoretical examinations and practical examinations can give scores timely according to the performances of students in the process of teaching.

Conclusion

With the deepening of the global health reform, preventive medicine has gained more importance in modern medical education. Traditional preventive medicine education has been difficult to adapt the social development. The educators of preventive medicine must change traditional teaching ideas to develop diversified teaching methods, so as to improve teaching levels and cultivate the talents for the society with innovative spirits and comprehensive abilities.

References

- Azer SA.(2011). *Introducing a problem-based learning program: 12 tips for success. Med Teach, 33(10): 808–813.*
- Ding, X., Zhao, L., Chu, H., Tong, N., Ni, C., Hu, Z., Zhang, Z., & Wang, M.(2014). *Assessing the effectiveness of problem-based learning of preventive medicine education in China. Sci Rep, 4:5126.*
- Epling, JW., Morrow, CB., Sutphen, SM., & Novick, LF.(2003). *Case-based teaching in preventive medicine: rationale, development, and implementation. Am J Prev Med, 24 (4S):85-89.*
- Kaya, H., Senyuva, E., Lsik, B., & Bodur, G.(2014). *Nursing students' opinions regarding project based learning. Procedia-Social and Behavioral Science, 152: 379-385.*
- Luo, Y., Zhou, Q., Huang, J., Luo, R., Yang, X., Gao, Y.(2013). *Medical continuing education: reform of teaching methods about high altitude disease in China. High Alt Med Biol, 14(2):181-182.*
- Novick, LF., Lazorick, S., Clay, MC., Merricks, PA., Daugherty, JC., & Efirid, JT.(2011). *Using clinical skills exams to evaluate medical students skills in prevention. Am J Prev Med, 41(4S3):S181-186.*
- Wang, F.(2015). *Optimization of medical teaching methods. IETI Transactions on Computers, 1(1):22-29.*
- Yang, TH., & Yang, BS.(2013). *Nursing Students' Experiences with Facilitator in Problem-Based Learning Class. Asian Nursing Research, 7: 198-204.*

Effects of Lifestyle Guidance on Health Behavior and Prognosis of Patients with Coronary Heart Disease

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Abstract: The objective of the study is to explore the effect of lifestyle guidance on the health behavior and prognosis of patients with coronary heart disease. The methods used involved 100 patients with coronary heart disease who were treated in the hospital from January to March 2014 were randomly divided into observation group (50 cases) and control group (50 cases). The control group was treated with routine nursing. Based on the control group, it compared the health behavior, medication compliance and prognosis of the two groups. The results are: the scores of disease knowledge, drug management, self-monitoring and symptom management were significantly higher in the observation group than in the control group ($P < 0.05$). The incidence of medication in the observation group was higher than that in the control group, and the incidence of sudden cardiac death, myocardial infarction and malignant arrhythmia was lower than that of the control group ($P < 0.05$). It concludes that lifestyle guidance can lead to the formation of healthy disease in patients with coronary heart disease, improve drug compliance, improve the prognosis.

Key words: lifestyle; coronary heart disease; healthy behavior; prognosis

Introduction

Coronary heart disease is caused by atherosclerosis caused by heart blood flow, heart ischemia, has become the number one killer of human health. In recent years, the incidence of coronary heart disease gradually increased, has become China's urgent need to address the social public health problems. Coronary heart disease patients, although effective treatment can control the development of the disease, reduce mortality. However, studies have reported that health education through the treatment of lifestyle and intervention on the positive impact of coronary heart disease patients is far better than drug therapy [1]. Therefore, effective and effective nursing intervention to guide patients with coronary heart disease, for reducing complications, improve the quality of life and prognosis of patients with a positive effect. Our hospital from January to March 2014 on 50 cases of coronary heart disease on the basis of routine care for lifestyle guidance, it is now 50 patients with routine care of the patients were compared, reported as follows.

1 Materials and methods

1.1 General information

100 cases of coronary heart disease patients, included in the standard: (1) all patients are willing to participate in the study; (2) coronary angiography diagnosed as coronary heart disease, in line with WHO on coronary heart disease clinical diagnostic criteria [2]; (3) ECG showed coronary insufficiency, ST (1) with peripheral

vascular disease or embolic disease; (2) liver and kidney dysfunction; (3) malignancy; (3) malignancy; (3) malignancy; (3) malignancy Tumor impaired; (4) acute myocardial infarction, severe arrhythmia; (8) NYHA grade III or more; (9) 3 cases of coronary artery bypass surgery; 1 month or coronary intervention within 6 months of treatment. The patients were randomly divided into observation group and control group. The observation group consisted of 21 males and 19 females, aged 45-65 years, with an average of 58.5 ± 8.6 years. Heart function classification: grade I 16 cases, heart III grade 24 cases. Course of 4 to 25 years, an average of 15.5 ± 5.4 years. The education period is 7 to 21 years, with an average of 12.5 ± 5 years. The control group of 23 males and 17 females, aged 42 to 65 years, mean 59.2 ± 10.5 years. Heart function classification: grade I 19 cases, heart III grade 21 cases. Duration of 5 to 23 years, an average of 16.25 years. The education period is 6 to 19 years, with an average of 12.2 ± 4.8 years. The general data of the two groups were not statistically significant ($P < 0.05$).

1.2 Methods

The control group was treated with routine care and only the basic care and medication guidance were given. The observation group was treated with lifestyle intervention based on the control group. The contents were as follows:

1.2.1 Individualized health guidance

In addition to the introduction of conventional coronary heart disease knowledge, emphasizing the adverse effects of bad lifestyle on the disease, to explain the healthy behavior of the positive role of disease development. Cause wake up to do some simple get up

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forelimb movement, early bed after taking medicine and then get up. Guide the patient after a meal in the corridor or ward balcony for a walk, playing tai chi, Ba Duan Jin or brisk walking, exercise with the patient's condition to choose, it is recommended that the exercise does not exercise. Inform nicotine in tobacco can cause vasospasm and encourage smoking to quit patients [3]. Guide the patient can clockwise massage the abdomen, but when drinking honey to prevent constipation.

1.2.2 Dietary guidance

Tell the patient not to drink or drink less tea, ban on coffee, fasting cold, spicy, dry and hard to stimulate food, give high protein, high vitamin, light, digestible food, eat more fresh vegetables; eat kelp, Fungus and other potassium foods, not only can lower blood pressure, but also to prevent stroke. Eat more foods rich in strong oxidizing agents Vitamin A, Vitamin C, Vitamin E, such as strawberries, blueberries, carrots, oranges. Daily diet contains high crude cellulose, add natural protein powder, encourage patients to drink natural mineral water to drink well water. But also allow patients to drink green tea, delay arteriosclerosis [4].

1.2.3 psychological guidance

To inform the patient of negative emotions on the negative impact of the disease, and strictly prevent over sadness, rage frightened and other radical emotions appear. Assess the patient's bad psychology, teach the patient some psychological adjustment methods, to guide patients to correctly understand the disease, establish the confidence to overcome the disease. To guide the families of patients to create a comfortable and harmonious family atmosphere, the conditions permit more than close to nature, relax.

1.2.4 Guidance on medication

Guidance patients will be prescribed as part of daily life, in addition to conventional medication knowledge, the emphasis on long-term, standardized, the importance of medication, adverse reactions to observe and prevent. So that patients understand the benefits of long-term medication and intermittent medication or alternate withdrawal of the heart function of the harm, to correct the behavior of non-compliance.

1.3 Observe indicators

Table 1 Comparison of two groups of patients with healthy behavior

Standardized Management	Observation group(n=50)	Control group (n=50)	P
Disease Knowledge	91.45±1.75	88.32±2.86	<0.05
Drug manage	90.73±2.49	87.88±3.45	<0.05
Self-monitoring	92.24±0.45	85.23±2.57	<0.05
Symptom manage	90.34±0.95	86.34±1.25	<0.05
Psychological manage	90.21±0.87	85.05±1.21	<0.05
Diet manage	90.26±0.89	85.24±0.57	<0.05
Regular Review	90.42±1.59	86.12±1.32	<0.05

2.2 Comparison of drug compliance and prognosis in both groups

(1) Health behavior: combined with the relevant literature [5], the development of coronary heart disease health behavior questionnaire, including disease knowledge, diet management, drug management, psychological management, symptom management, self-monitoring, exercise management, prevention of recurrence, regular referral 9 aspect. Each part of the full score includes many small problems, each small question is divided into fully aware, compliance is good, some know, most of the compliance, do not know, most do not comply with three cases, score 3,2,1 points, Convert the total score to 100 points. Investigate the patient and evaluate the extent of the doctor's management of the disease. Medication compliance: reference Morisky-Green (MG) standard to measure medication compliance, including a total of four questions, poor compliance: 1 to 2 answers for the "yes"; poor compliance: 3 to 4 answers are "Yes". Patients were trained by professionally trained personnel and instructed patients to complete. Recycle questionnaires on the spot. (3) The prognosis of the two groups were followed up for 6 to 24 months, an average of 14.5 ± 5.5 months, recorded in this period the incidence of adverse cardiac events in patients with major cardiac adverse events are: sudden cardiac death, myocardial infarction, Abnormal, symptomatic heart failure.

1.4 statistical processing

Statistical software version of SPSS16.0, measurement data using the mean ± standard deviation between the groups using t test, measurement data using the mean ± standard deviation, the count data using R * C chi-square test, Fisher exact test, grade Comparison of data using Yi and test to P <0.05 that the difference was statistically significant.

2 Results

2.1 Comparison of two groups of patients with health behavior

The scores of knowledge of disease health, drug management, self-monitoring and symptom management were significantly higher in the observation group than in the control group (P <0.05). See Table 1.

The incidence of medication in the observation group was higher than that in the control group, and the incidence of sudden

cardiac death, myocardial infarction and malignant arrhythmia was lower than that of the control group ($P < 0.05$). See Table 2.

Table 2 Comparison of medication compliance and prognosis in both groups

Group		Observation(n=40)	Control(n=40)	P
With Compliance [n(%)]	good	45(90.0)	36(72.0)	<0.05
	poor	4(8.0)	11(22.0)	
	worse	1(2.0)	3(6.0)	
Prognosis [n(%)]	S heart failure	5(10.0)	11(22.0)	<0.05
	M arrhythmia	0	4(8.0)	
	Myocardial	0	2(4.0)	
	Cordial death	0	1(2.0)	

3 Discussion

Coronary heart disease has become a threat to human life and health of one of the most serious diseases, the number of deaths in China's coronary heart disease has been ranked second in the world. Coronary heart disease history of a physical and mental disease has been recognized by the majority of medical scholars, therefore, for patients with coronary heart disease in addition to symptomatic treatment, the patient's lifestyle intervention, for improving the treatment effect, delay the deterioration of the disease, reduce the recurrence of clinical symptoms has a positive effect^[6]. The results of this study show that compared with the control group, the patients with coronary heart disease lifestyle guidance, patients with disease knowledge, drug management, self-monitoring, symptom management and other health behavior of the higher scores, medication compliance is higher, and the prognosis it is good.

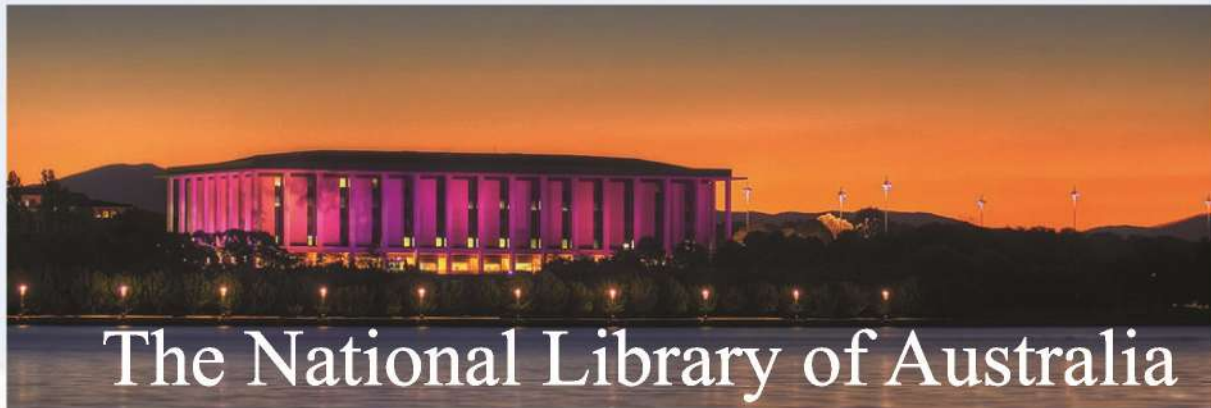
The implementation of lifestyle guidance makes up for the lack of knowledge of patients with coronary heart disease, such as medication, diet, exercise, sleep, etc., to improve the patient's prevention and treatment knowledge, to help patients establish good living habits and lifestyle, promote and consolidate self-care ability and health related Behavior, improve the management of the disease^[7]. Research reports, lifestyle guidance in improving the clinical efficacy of coronary heart disease, promote patient rehabilitation and improve the quality of life of patients is to promote the effect of^[8]. Improve the way of life of patients with coronary heart disease guidance, to enable patients to quit smoking, alcohol, a reasonable diet, exercise, to maintain a good attitude and medication, effectively reduce the bad lifestyle and medication does not comply with the effect of treatment, thereby improving the prognosis of the patient. Lifestyle guidance emphasizes the subjective initiative of the person who acts as the subject of the disease in response to the disease, and fully mobilizes the human factor and plays a multiplier effect.

To sum up, lifestyle guidance can lead to the formation of

coronary heart disease in a healthy way to improve the drug compliance, improve the prognosis.

References

- Chen Huixian, Ning Chuanyi, Li Hong, and so on. *Effect of self-management education on rehabilitation of coronary heart disease after interventional therapy. Nursing Practice and Research, 2012,09 (2): 129-130.*
- Dai Hui, Wu Weimin, Wang Yujuan, et al. *Effect of intensive nursing on the curative effect of chronic heart failure in patients with coronary heart disease. Chinese Journal of Modern Nursing, 2013,19 (6): 656-658.*
- Deng Baofeng, Luo Changchun, Li Haifang, et al. *Effect of comprehensive assessment of the elderly on the daily living ability and nursing adverse events in the elderly patients. Chinese Journal of Modern Nursing, 2013,20 (8): 937-939.*
- Jing Lei, Wei Liqin, Wang Aiyang, and so on. *Effect of continuous and healthy guidance on improving self-management ability and health behavior of patients with coronary heart disease. International Journal of Nursing, 2015, 28 (11): 1522-1524.*
- Ke Meifang, Luo Shu-ping, Xiong Lu, et al. *Effect of Nursing Intervention on Self-care Ability and Health Behavior of Patients with Coronary Heart Disease. Hebei Pharmaceutical, 2015,37 (6): 947-949.*
- Yan Wei, Ren Jie, Zhao Zhongyang, and so on. *Effect of structural family therapy on health behavior and self-efficacy of patients with coronary heart disease. Chinese Journal of Modern Nursing, 2015,21 (26): 3123-3126.*
- Yang Hongqin, Yuan Yiqiu, Yang Wendong. *Effect of comprehensive nursing intervention on compliance and effect of patients with coronary heart disease. Journal of Practical Cardio - Pulmonary Hypertension, 2012,20 (4): 728-730.*
- Zhao Shiguang. *Cardiology*. Beijing: People's Health Publishing House, 2010: 287-293.



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