

## EDITOR

**Adrian Marcus Steinberg** *Institut für Interkulturelle Studien*

## EDITORIAL ADVISORY BOARD

**Awni AlKarzon** *Northern Illinois University*

**Wen-jen Hsieh** *National Cheng Kung University*

**Nicholas Papasyriopoulos** *University of Macedonia*

**Kelechi A. Kalu** *University of Northern Colorado*

**Yalcin Karatepe** *Ankara University*

**Gregorio Giménez Esteban** *Universidad de Zaragoza*

**Jerry Kolo** *Florida Atlantic University*

**M. Femi Ayadi** *University of Houston-Clear Lake*

**H. Young Baek** *Nova Southeastern University*

**George Skoulas** *University of Macedonia*

**Mahdi Hadi** *Kuwait University*

**Neil Reid** *University of Toledo*

**Stylianos Karagiannis** *Center of Planning and Economic Research*

**John Mylonakis** *Tutor - Hellenic Open University*

**Athanasios Koulakiotis** *University of the Aegean*

**Basel M. Al-Eideh** *Kuwait University*

**Narender L. Ahuja** *Institute for Integrated Learning in Management*

**Amita Mital** *Xavier Labour Relations Institute*

**Wassim Shahin** *Lebanese American University*

**Dimitrios Mavridis** *Technological Educational Institute of West Macedonia*

**Nicholas Papasyriopoulos** *University of Macedonia*

**Yen Mei Lee** *Chinese Culture University*

**Maria Elena Garcia-Ruiz** *University of Cantabria*

## **AIMS & SCOPE**

Research Journal of International Studies seeks to acquaint a broad audience of readers with the best research being done in the variety of intellectual traditions included under the rubric of international studies. Therefore, the journal welcomes all submissions addressing the community's theoretical, empirical, and normative concerns. First preference will be given to articles that address and contribute to important disciplinary and interdisciplinary questions and controversies. The journal publishes original research articles on a wide range of issues and problems of contemporary relevance in the broad field of international studies.

## **READERSHIP**

Researchers, graduate students, practitioners, and policy-makers in the broad field of international studies

## **SUBMISSIONS**

Manuscripts are invited from academicians and practitioners for publication consideration. The journal welcomes submissions in all areas related to international studies. Each manuscript must include a 200 word abstract. Authors should list their contact information on a separate paper. Electronic submissions are acceptable. The journal publishes both empirical and conceptual research. Articles for consideration are to be directed to the editor through [RJIS@eurojournals.com](mailto:RJIS@eurojournals.com). In the subject line of your e-mail please write "RJIS submission". Articles are accepted in MS-Word or pdf formats. Contributors should strictly adhere to the format of the journal. All correspondence should be directed to the editor.

## **EDITORIAL POLICIES**

All research and reviews published in the journal are fully peer-reviewed by two, and in some cases, three internal or external reviewers. Unless they are out of scope for the journal, or are of an unacceptably low standard of presentation, submitted articles will be sent to peer reviewers. They will generally be reviewed by two experts who are asked whether the manuscript is scientifically sound and coherent, how interesting it is and whether the quality of the writing is acceptable. Any manuscript submitted to the journals must not already have been published in another journal or be under consideration by any other journal. Authors are required to ensure that no material submitted as part of a manuscript infringes existing copyrights, or the rights of a third party. Contributing authors retain copyright to their work.

## CONTENTS

<b>Empirical Evidence on Greek Outward Foreign Direct Investments: The 90's Experience .....</b>	<b>4-16</b>
<i>Anastasia Vardavaki and John Mylonakis</i>	
<b>Darfur Crisis: Implications of the United States Policy and the Reality of Genocide .....</b>	<b>17-24</b>
<i>Michael O. Adams and Gbolahan S. Osho</i>	
<b>An Algorithm for Evaluating the Distribution of Labor Turnover.....</b>	<b>25-31</b>
<i>Ben-David Nissim</i>	
<b>The Status of Communication Management Education in Malaysia: Meeting A Global Standard .....</b>	<b>32-41</b>
<i>Zulhamri Abdullah</i>	
<b>Application of Peace Counseling in the Management of Anger.....</b>	<b>42-52</b>
<i>Ayoka Mopelola Olusakin</i>	

# Empirical Evidence on Greek Outward Foreign Direct Investments: The 90's Experience

**Anastasia Vardavaki**

*16 Epidavrou str., Halandri, 152 33 Athens, Greece*

E-mail: anastasia\_vardavaki@yahoo.gr

**John Mylonakis**

*10 Nikiforou str., Glyfada, 166 75 Athens, Greece*

E-mail: imylonakis@panafonet.gr

## Abstract

The purpose of this paper is to examine, by econometric analysis, whether the theoretical framework of Foreign Direct Investments (FDI) provide solid theoretical and empirical evidence in explaining different aspects and patterns of the Greek overseas production. The interest is drawn upon the manufacturing sector for 135 firms that present significant investment activity abroad. Research results revealed two categories of Greek firms involved in outward FDI: the first category includes leading domestic firms and subsidiaries of foreign Multinational Enterprises (MNEs) possessing distinct ownership advantages; the second category includes Small and Medium sized Greek companies involved in the production of labor intensive goods, with a fragile comparative advantage in the Greek market seeking opportunities for survival and expansion in markets with cheap labor and raw materials, such as Balkans.

**Keywords:** Foreign Direct Investment, Multinationals, Firm Specific Competitive Advantage, Outward Investments, Foreign Subsidiaries

**Jel Classification Codes:** F230

## 1. Introduction

Greece has been, until very recently, a recipient of capital in the form of foreign direct investment (FDI). Inward FDI has been encouraged in Greece since the early 1950s in order to revive and expand the country's industrial base. Heavy Smithian-type of industries, such as chemicals, basic metals and transportation, attracted the majority of FDI flows from 1963-73. In the 1980s and 1990s, labour intensive Heckscher-Ohlin type industries such as textiles, food and drink as well as consumer electronics were the main recipients of FDI flows (Ozawa, 1994).

The opening up of Eastern European economies in the 1990s, offered investment opportunities to Greek firms to expand into new markets and become multinationals (MNEs). The majority of Greek outward FDI is concentrated in the Balkan region, although significant projects have been taking place in other Eastern European countries, in certain European Union (EU) countries, such as Portugal or in other developed economies (DCs) such as the USA. Other emerging markets outside Europe, including China, Nigeria and Egypt, have also attracted Greek FDI more recently.

The purpose of this paper is to examine, by econometric analysis, whether the theoretical framework of Foreign Direct Investments (FDI) provide solid theoretical and empirical evidence in explaining different aspects and patterns of the Greek overseas production.

## 2. Theoretical Framework

A basic analysis of FDI theories is considered important in order to understand the motives and characteristics of Greek outward foreign direct investments. Dunning's eclectic paradigm (known mostly as Ownership-Location-Internalisation, OLI) constitutes a perfect combination of all FDI theories (Dunning 1977; 1988; 1993). It has emphasized that the decision of conducting outward FDI is determined by the firm-specific ownership characteristics (O) which provide the firm competitive-advantages and encourage it to expand its production overseas (Dunning, 1993, p.142). Furthermore firm's decision is influenced by locational characteristics (L) of the recipient country, such as cheap labor force, a variety of raw materials, which attract the foreign production. Finally internalization factor (I) encourages the firm to engage in FDI rather than license foreign firms to use its proprietary assets.

Dunning's OLI model provides the background for understanding and evaluating a country's growth through FDI. Thus, in a revised version of the Investment Development Path (IDP) theory, Dunning and Narula (1996) identify five main stages of development at a country level. These stages are distinguished by the different growth rates in the stocks of inward and outward investment which eventually underline the net outward investment (NOI) position of a country. Greece could be classified as a stage three country. The key characteristics of this stage include the deterioration of comparative advantage in domestic labor intensive industries (increase in domestic wages, low productivity) and the advent of outward investment in stage one and stage two countries which possess cheap labor and/or natural resources. Outward investments in this stage could be either market seeking or resource seeking which could eventually suggest the creation of export-processing zones in the host economy (Dunning, 1993, p.57). On the other hand, the growth rate of inward FDI has a tendency to decline.

As far as the Greek example is concerned, Table 1 depicts the emergence of Greece as an outward investor, although hesitant, compared to other peripheral EU economies.

**Table 1:** Inward and outward FDI flows as a percentage of gross fixed capital formation by country 1986-1996

Country	Year					
	1986-1991 (annual average)	1992	1993	1994	1995	1996
<b>World</b>						
Inward	3.6	3.3	4.4	4.5	5.6	5.6
Outward	4.1	3.7	4.9	5.3	5.9	5.5
<b>European Union</b>						
Inward	5.7	5.5	6.2	5.2	7.3	5.8
Outward	8.4	7.1	7.5	8.8	10.0	9.4
<b>Greece</b>						
Inward	5.9	5.5	5.2	5.3	4.8	4.4
Outward	-	0.2	0.1	0.5	0.3	-
<b>Portugal</b>						
Inward	9.9	8.3	7.9	6.1	2.7	2.7
Outward	0.9	3.0	0.8	1.4	2.8	2.9
<b>Spain</b>						
Inward	9.6	10.5	8.6	9.8	5.4	5.5
Outward	2.3	1.7	2.8	4.0	3.2	4.4
<b>Ireland</b>						
Inward	5.9	17.0	15.3	10.1	14.2	20.4
Outward	5.7	2.5	3.0	5.3	8.1	6.0

### 3. Cross-sectional Regression Analysis on Greek Outward FDI

The sample of this analysis is based on data for the year 1998, derived from The Bank of Greece. The interest is drawn upon the manufacturing sector, for firms that present significant investment activity in abroad. The total sample has 135 observations. These firms have operation in 27 countries, 10 of which are developed and the rest are less developing countries.

**Table 2:** Distribution of Greek FDI by host country in 1998

Country	Number of firms	Number of firms (% of total)	Invested capital (% of total)
Belgium	1	0.74	0.00
France	5	3.70	0.46
Germany	4	2.96	0.16
Ireland	1	0.74	0.00
Italy	6	4.44	0.29
Luxembourg	10	7.41	38.70
United Kingdom	4	2.96	5.25
Portugal	1	0.74	0.08
<b>Total EU</b>	<b>32</b>	<b>23.7</b>	<b>44.94</b>
<b>Total Rest of OECD</b>	<b>4</b>	<b>2.96</b>	<b>5.27</b>
Albania	7	5.19	0.34
Bulgaria	19	14.07	1.52
FYROM	8	5.93	0.44
Romania	21	15.56	2.19
Yugoslavia	2	1.48	4.00
<b>Total Balkans</b>	<b>57</b>	<b>42.22</b>	<b>8.50</b>
<b>Total CEE</b>	<b>8</b>	<b>5.93</b>	<b>0.15</b>
Cyprus	24	117.78	40.09
<b>Total rest of the world (including Cyprus)</b>	<b>34</b>	<b>25.18</b>	<b>43.29</b>
<b>Total developed countries</b>	<b>36</b>	<b>26.67</b>	<b>49.06</b>
<b>Total developing countries</b>	<b>99</b>	<b>73.33</b>	<b>50.94</b>
<b>Total</b>	<b>135</b>	<b>100.0</b>	<b>100.0</b>

Source: Bank of Greece (1999)

From the previous table it is observed that the presence of Greek FDI is important in the EU with 32 firms. 57 companies were established in the Balkans, 8 in the CEE and among the Mediterranean countries, 1 company is established in Portugal, 6 in Italy, 24 in Cyprus, 3 in Turkey, 1 in Egypt, 1 in Jordan and 2 in Algeria. In terms of the invested capital, 50.94% was directed to developing countries. Cyprus is in the lead with 40.42% of the total invested capital.

In order to determine the main factors of Greek FDI the following regression model is estimated:

$$FDI_{ij} = C_0 + C_1HOMESEC + C_2SERV + C_3SHARE + C_4HOSTC + e_i$$

The dependent variable of the model is the  $FDI_{ij}$ , the magnitude of foreign direct investments of Greek firms (expressed in Greek drachmas). The variable is transformed into log in order to make the series smoother.

The regressors used in this model are proxies for the basic components of OLI model, stated by Dunning:

$HOMESEC$  is a dummy variable representing the industrial sector that the firm operates in Greece. It takes the value of 1 for medium and high-tech sectors and 0 for low-tech. It is anticipated that this variable affects positively the dependent variable since capital and technology intensive sectors require greater amounts of investments to grow.

$SERV$  is a dummy that indicates the sector that the Greek firm operates in the foreign country. It takes the value of 0 for firms that continue their operation abroad in the manufacturing sector and 1 for firms that, even though they are manufacturing in Greece they change their operating activities into

trade or services. One could expect that there is a negative relationship between this regressor and FDI since Greek firms tend to expand their production overseas particularly in the same sector where they have experience and knowledge.

SHARE is a variable that measures the ownership participation of the investment. It takes values from 0 up to 100 which indicates total participation of Greek investors in the foreign subsidiary. The data for this variable has been extracted from the Annual Report of each firm. This variable is expected to influence negatively FDI, since the more is the commitment in the foreign firms the more risk Greek investors undertake.

HOSTC is a variable including locational elements, according to the OLI model of Dunning. It is a dummy representing recipient countries, taking the value of 1 for low income, 2 for middle income and 3 for high income countries. The Annual Report of the World Bank (2001) has been used for the classification of recipient countries. Ambiguous effects are anticipated, as far as HOSTC is concerned.

There are some kinds of firms that, possessing distinct ownership advantages -superior technology, marketing and management techniques, as well as local market experience with established trade links- direct their investments to countries with stronger infrastructure and more stable environment, while countries with weak infrastructure attract small-medium size firms.

#### 4. Research Results

The regression is estimated with Ordinary Least Square Method.

**Table 3:** Output of regression (1998)

<b>Dependent Variable: LOGFDI</b>				
<b>Method: Least Squares</b>				
<b>Date: 02/04/02 Time: 16:59</b>				
<b>Sample: 1 138</b>				
<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
HOMSECC	1.306251	0.523549	2.494992	0.0138
SERV	0.387059	0.357365	1.083092	0.2807
SHARE	-0.020153	0.008483	-2.375810	0.0189
HOSTC	0.613796	0.284561	2.156994	0.0328
C	10.68755	1.016121	10.51800	0.0000
R-squared	0.145531	Mean dependent var	11.99714	
Adjusted R-squared	0.119638	S.D. dependent var	2.808012	
S.E. of regression	2.634690	Akaike info criterion	4.811222	
Sum squared resid	916.2902	Schwarz criterion	4.917791	
Log likelihood	-324.5687	F-statistic	5.620481	
Durbin-Watson stat	1.649835	Prob(F-statistic)	0.000329	

As noticed, the overall performance of the model is satisfying indicating that the factors related to the OLI framework provide a solid background for the understanding of the Greek outward investments. Although the value of  $R^2$  (coefficient of determination which measures the proportion of the total variation of the dependent variable explained by the model) is relatively low, that is, the model has not great explanatory power, F statistic is significant. This statistic tests the overall significance of the regression. Thus, the hypothesis that the coefficients, except for the intercept, are jointly equal to zero is rejected.

In particular, the HOMSECC regression coefficient has a positive sign and it is statistically significant at 5% significant level, indicating that the medium and high-tech sectors tend to commit greater amounts of capital in foreign subsidiaries than low-tech sectors. This is obvious, since technology intensive sectors require more capital inflows for further development and growth while low-tech firms do not make large expenditure for research and development or for fixed assets.

In addition, the statistically significant negative sign of SHARE, indicates that the lower the ownership participation in the investment, the lower the uncertainty for the investing firm. Investing abroad encompasses a degree of uncertainty for the profitability of the undertaken investment (Dixit and Pindyck, 1994). Thus, the less a firm is committed to a project, the less the risk it faces regarding the prospects of the project.

HOSTC regression coefficient has a positive sign and is highly statistically significant. This means that Greek firms have a tendency to direct investments to highly income countries that most probably generate higher returns. Indeed, high-income countries provide a stable economic and political environment that allows firms to maximize their performance.

SECT variable can be considered as not statistically significant since the t-statistic is less than 2 and the p-value is high. Therefore, the sector of investing firm in the recipient country does not affect the magnitude of FDI.

As shown in Table 3, the value of Durbin-Watson d statistic is close to 2 which mean that there is no serial correlation in the residuals. Table 4 which presents the Langrange multiplier test (test for autocorrelation in the residuals) shows the same results. The null hypothesis is that the coefficients of the estimated error terms are jointly equal to zero. Thus, if the residuals follow an AR(p) process:

$$u_t = \phi_1 u_{t-1} + \dots + \phi_p u_{t-p} + e_t \text{ then } H_0: \phi_1 = \phi_2 = \dots = \phi_p = 0$$

**Table 4:** Breusch-Godfrey Serial Correlation Lagrange Multiplier Test

F-statistic	2.194637	Probability	0.115510	
Obs*R-squared	4.474543	Probability	0.106749	
<b>Test Equation:</b>				
<b>Dependent Variable: RESID</b>				
<b>Method: Least Squares</b>				
<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
HOMSECC	-0.028921	0.519425	-0.055679	0.9557
SERV	-0.037755	0.355156	-0.106305	0.9155
SHARE	6.10E-05	0.008413	0.007257	0.9942
HOSTC	-0.031735	0.282864	-0.112190	0.9108
C	0.155826	1.012756	0.153864	0.8780
RESID(-1)	0.152783	0.088945	1.717712	0.0882
RESID(-2)	0.077311	0.090413	0.855091	0.3941
R-squared	0.032661	Mean dependent var	4.69E-15	
Adjusted R-squared	-0.011986	S.D. dependent var	2.595656	
S.E. of regression	2.611164	Akaike info criterion	4.807213	
Sum squared resid	886.3633	Schwarz criterion	4.956409	
Log likelihood	-322.2941	F-statistic	0.731546	
Durbin-Watson stat	1.968935	Prob(F-statistic)	0.625035	

It is also noticed that the F statistic is insignificant at 5% significance level, so it is concluded that the null hypothesis is accepted and so there is no autocorrelation in the residuals of the initial model. Furthermore, it can be pointed out that the Durbin Watson statistic for this regression is approximately equal to 2 (no serial correlation).

The same result can be derived from the correlogram of the residuals.

**Table 5:** Correlogram of the residuals

<b>Sample: 1 138</b>				
<b>Included observations: 137</b>				
	<b>AC</b>	<b>PAC</b>	<b>Q-Stat</b>	<b>Prob</b>
1	0.155	0.155	3.3706	0.091
2	0.090	0.067	4.5022	0.105
3	0.010	-0.014	4.5158	0.211
4	-0.100	-0.109	5.9511	0.203
5	-0.036	-0.006	6.1354	0.293
6	0.010	0.035	6.1500	0.407
7	0.034	0.033	6.3167	0.503
8	0.138	0.119	6.1333	0.331
9	-0.155	-0.213	5.6860	0.177
10	-0.162	-0.140	5.6040	0.184
11	-0.093	-0.015	4.9001	0.184
12	-0.184	-0.118	4.0311	0.197
13	0.042	0.082	6.0522	0.108
14	0.045	0.016	8.5423	0.151
15	-0.010	-0.060	8.6579	0.172
16	0.090	0.064	8.4672	0.211
17	-0.062	-0.025	10.5497	0.223
18	-0.066	-0.045	11.2273	0.245
19	0.128	0.144	13.8743	0.218
20	0.009	-0.011	12.4698	0.180

From this table one can notice that the p-values are high so the Q-statistics are insignificant. Furthermore, it is observed that the correlation coefficients are inside the 95% confidence interval  $\pm 2/\sqrt{T}$ , which in this case is  $\pm 0.1721$ . This proves again that there is no serial correlation in the residuals.

At this point it is considered important to test for heteroscedasticity in the estimated error term. The test which is used is the White Heteroscedasticity test which, after the estimation of the residuals, implement a second regression of the squared residuals on 1, all the original regressors and all the own and cross-products of the regressors. The null hypothesis is that all the coefficients, in the auxiliary second regression, except the intercept, equal to zero. It can be observed that the F-value of the test is low while p-value is excessively high. This indicates that F statistic is insignificant and so the null hypothesis is accepted indicating that the residuals have constant variable.

---

<sup>1</sup> ©

**Table 6:** White Heteroscedasticity Test

F-statistic	0.720815	Probability	0.739888	
Obs*R-squared	9.698310	Probability	0.718399	
<b>Dependent Variable: RESID^2</b>				
<b>Method: Least Squares</b>				
<b>Sample: 1 138</b>				
<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
C	-5.910589	18.52818	-0.319005	0.7503
HOMESEC	-0.031586	14.04947	-0.002248	0.9982
HOMESEC*SERV	2.485590	5.943203	0.418224	0.6765
HOMESEC*SHARE	-0.020312	0.099342	-0.204465	0.8383
HOMESEC*HOSTC	0.553357	3.455493	0.160138	0.8730
SERV	0.948318	11.94870	0.079366	0.9369
SERV^2	1.037123	4.875148	0.212737	0.8319
SERV*SHARE	-0.043179	0.065062	-0.663662	0.5081
SERV*HOSTC	-0.176169	2.251692	-0.078239	0.9378
SHARE	0.028701	0.258769	0.110915	0.9119
SHARE^2	-4.47E-05	0.001663	-0.026875	0.9786
SHARE*HOSTC	0.026287	0.053991	0.486885	0.6272
HOSTC	5.983118	11.39350	0.525134	0.6004
HOSTC^2	-1.407443	2.541918	-0.553693	0.5808
R-squared	0.070791	Mean dependent var	6.688250	
Adjusted R-squared	-0.027419	S.D. dependent var	11.57841	
S.E. of regression	11.73607	Akaike info criterion	7.859794	
Sum squared resid	16941.45	Schwarz criterion	8.158186	
Log likelihood	-524.3959	F-statistic	0.720815	
Durbin-Watson stat	2.019947	Prob (F-statistic)	0.739888	

Furthermore, it must not be omitted the fact that the model does not present any particular problem of multicollinearity. The following table shows that there is no perfect correlation among the regressors so the results from the estimation are not misleading.

**Table 7:** Correlation Matrix

	<b>Homesec</b>	<b>Serv</b>	<b>Share</b>	<b>Hostc</b>	<b>Resid</b>
<b>Homesec</b>	1.000000	0.179966	-0.267498	-0.212514	8.88E-16
<b>Serv</b>	0.179966	1.000000	0.114701	0.265683	-4.18E-15
<b>Share</b>	-0.267498	0.114701	1.000000	0.093332	-4.95E-15
<b>Hostc</b>	-0.212514	0.265683	0.093332	1.000000	-6.16E-15
<b>Resid</b>	8.88E-16	-4.18E-15	-4.95E-15	-6.16E-15	1.000000

Furthermore, the above table shows that the independent variables are uncorrelated with the error term. Therefore, the assumption of the classical model, that the regressors and the equation error term must be orthogonal, is satisfied.

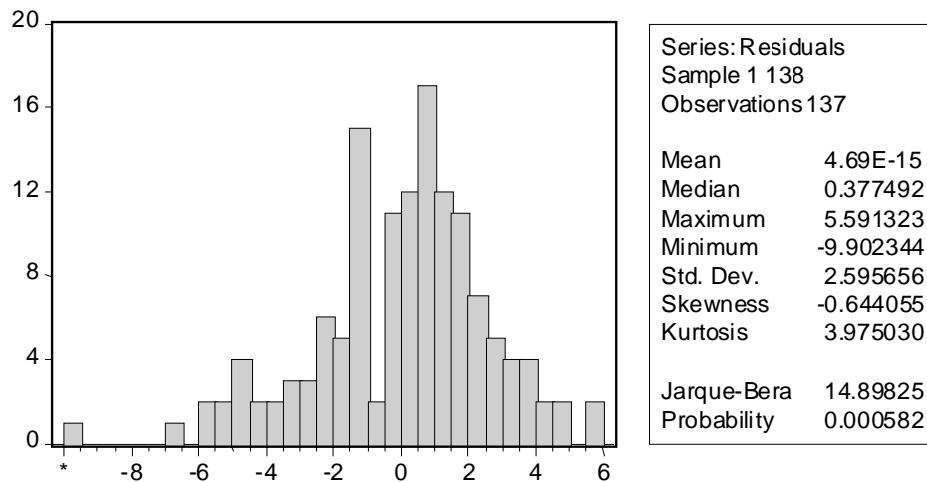
Moreover, the Reset test (Regression Specification Error test) is used to detect whether there is functional form misspecification, by adding polynomials in the OLS fitted values of the original model. The terms (FITTED^2 and FITTED^3), which are powers of fitted values attempt to include any relevant non-linear effects, omitted from the model. Table 8 shows that the partial regression coefficients of these terms have high p-values, so the non-linear functions of the independent variables are insignificant. Moreover, since the p-value of F statistic is high, the null hypothesis is accepted implying that the coefficients of the power of fitted values are all zero. Therefore, it is proved that there are no misspecification problems. The functional form of the original model is correctly specified.

**Table 8:** Ramsey RESET Test

F-statistic	1.163433	Probability		0.315643
Log likelihood ratio	2.430472	Probability		0.296640
<b>Dependent Variable: LOGFDI</b>				
<b>Method: Least Squares</b>				
<b>Sample: 1 138</b>				
<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
HOMSECC	74.70415	68.23575	1.094795	0.2756
SERV	22.08653	20.17488	1.094754	0.2756
SHARE	-1.154834	1.051754	-1.098008	0.2742
HOSTC	35.13204	32.01940	1.097211	0.2746
C	383.3966	353.7787	1.083719	0.2805
FITTED^2	-4.574685	4.419356	-1.035148	0.3025
FITTED^3	0.123077	0.124062	0.992059	0.3230
R-squared	0.160556	Mean dependent var	11.99714	
Adjusted R-squared	0.121813	S.D. dependent var	2.808012	
S.E. of regression	2.631434	Akaike info criterion	4.822678	
Sum squared resid	900.1779	Schwarz criterion	4.971874	
Log likelihood	-323.3535	F-statistic	4.144077	
Durbin-Watson stat	1.676463	Prob(F-statistic)	0.000765	

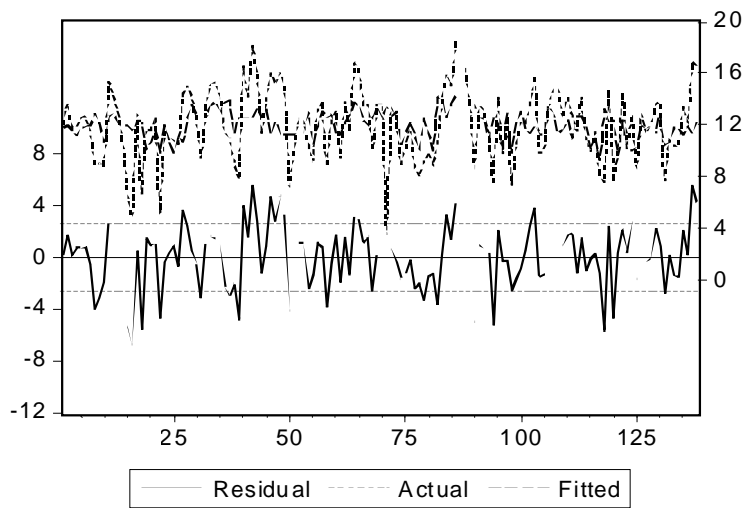
From the following figure one can infer that the residuals are not normally distributed. The probability of Jarque-Bera value is low so the null hypothesis of normality is rejected. This can be explained by the existence of some outliers that may be included in the model.

**Figure 1:** Histogram of Residuals



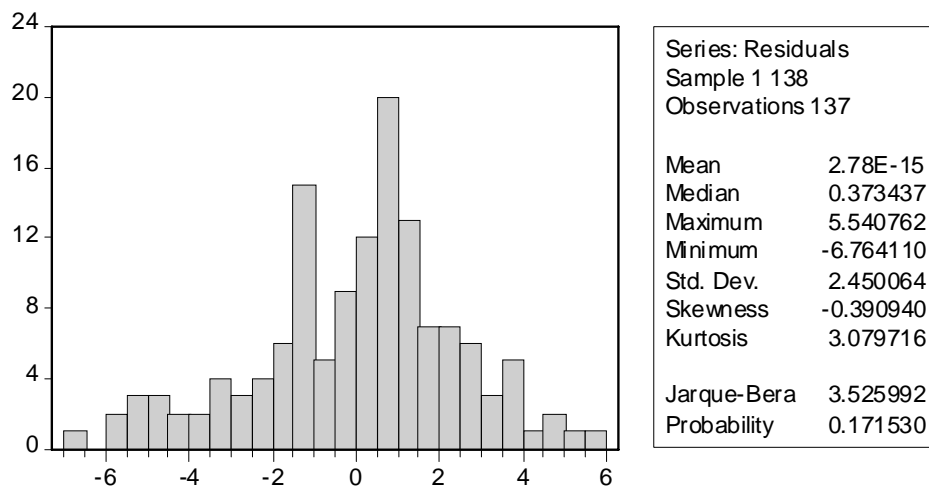
In fact, by the residual, actual, fitted graph it is noticed that there is a significant outlier between observations 70 and 75. From the data, it is found that observation 71 presents a very small value of logfdi. This observation is more likely to affect the normality of the residuals.

**Figure 2: Residuals, Actual, Fitted Graph**



It is attempted to re-estimate the initial model by removing this observation. It is now noticed that the residuals are normally distributed, since the J-B value is insignificant. Furthermore, with this new model all the other main assumptions of the classical regression model are not violated.

**Figure 3: Histogram of the Residuals of the adjusted model**



**Table 9:** Output of the regression without the outlier

<b>Dependent Variable: LOGFDI</b>				
<b>Method: Least Squares</b>				
<b>Date: 02/28/02 Time: 18:26</b>				
<b>Sample: 1 138</b>				
<b>Included observations: 137</b>				
<b>Excluded observations: 1</b>				
<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
HOMESec	1.418879	0.494287	2.870560	0.0048
SERV	0.419041	0.337097	1.243088	0.2160
SHARE	-0.021514	0.008003	-2.688092	0.0081
HOSTC	0.711437	0.269622	2.638648	0.0093
C	10.52226	0.959240	10.96938	0.0000
R-squared	0.184181	Mean dependent var	12.05659	
Adjusted R-squared	0.159459	S.D. dependent var	2.712567	
S.E. of regression	2.486909	Akaike info criterion	4.695772	
Sum squared resid	816.3828	Schwarz criterion	4.802341	
Log likelihood	-316.6604	F-statistic	7.450124	
Durbin-Watson stat	1.612620	Prob(F-statistic)	0.000019	

From the regression it is proved that, without the outlier, the significant variables remain the same and again SERV variable is insignificant. The  $R^2$  is slightly better than before so the new model has greater explanatory power. Overall, it is proved the outlier influences only the normality of the residuals but all the other assumptions and tests are unaffected.

## 5. Abnormal Returns of Stock Prices due to FDI

This section attempts to empirically test whether the decision for outward FDI of Greek based investing firms participating in the Athens Stock Exchange (ASE) has an effect on the market value of the firm.

The analysis is focused on the abnormal return of a stock after a formal announcement of FDI is made. With the term abnormal return is meant that the actual *ex post* return of the security over the event window minus the normal return of the firm's stock over the same event window. The normal return is defined as the return that would have been expected if the event had not taken place. The most widely accepted methodology for measuring the effect of a certain event on the market value of a firm is the event study analysis. The estimation model used in this analysis is based on the CAPM and is defined as follows:

$$R_{it} = a_i + \beta_i R_{mt} + \varepsilon_{it}$$

where:  $R_{it}, R_{mt}$  are the excess returns of each security  $i$  and market at time  $t$ .

Event is considered any formal corporate announcement in the Daily Report of the ASE concerning FDI. The precise time of these events is very difficult to be determined because firms are not obliged to announce corporate decisions formally. The selection of firms has been made based on their participation in ASE and only manufacturing firms are included. Firms in the sample include both domestic and subsidiaries of multinational firms located in Greece. The estimation window is one year before the day of the announcement (52 weeks), on a weekly basis. As market portfolio, an equally weighted average index of the 84 firms included in the sample, was applied. For 18 of them an event or events were qualified for testing. Finally, the interest rate of the 3-month Treasury Bills of Greek State is used as a benchmark for the risk-free return. Following the above criteria 76 events formed the final sample.

As shown in Table 10, the number of outward FDI announcements increases with year. In particular in the last two years, i.e. 1998 and 1999, half of the announcements have been realized. This

may imply that Greek investors, after the mid-1990s, acquired experience and knowledge of their neighboring markets allowing them to inject capital confidently in these economies. Regarding the sectoral distribution of the investments, the food and drink sector as well as metals and textiles account for almost half of the population.

**Table 10:** Sectoral Distribution of the sample by date of announcement

Sector	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
<b>Food &amp; Drink</b>	0	0	1	0	2	4	5	2	7	2	<b>23</b>
<b>Metals</b>	0	0	1	1	3	0	1	2	3	2	<b>13</b>
<b>Pharmaceutical &amp; Cosmetics</b>	0	0	0	0	1	0	2	1	1	0	<b>5</b>
<b>Chemicals</b>	0	0	0	0	0	2	1	0	1	1	<b>5</b>
<b>Packaging</b>	0	0	0	0	0	1	0	2	2	2	<b>7</b>
<b>Textiles</b>	0	0	0	0	0	2	1	0	3	0	<b>6</b>
<b>Flour Mills</b>	0	0	0	0	0	0	0	2	3	1	<b>6</b>
<b>Construction Materials</b>	0	0	1	0	0	0	0	0	2	2	<b>5</b>
<b>Holding</b>	0	0	0	0	0	0	0	0	1	1	<b>2</b>
<b>Informatics</b>	0	0	0	0	0	0	0	0	1	1	<b>2</b>
<b>Various</b>	0	0	0	0	0	0	0	0	2	0	<b>2</b>
<b>Total</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>6</b>	<b>9</b>	<b>10</b>	<b>9</b>	<b>26</b>	<b>12</b>	<b>76</b>

The underlying hypothesis of the empirical results is that Greek investing firms in their pursuit of outward FDI seek to maximize their market value. Results in Table 11 indicate that the formal announcement of FDI has, indeed, a positive impact on the share prices of the firms included in the sample.

**Table 11:** Aggregate Results of the Estimated Abnormal Returns

	Value
<b>Average Abnormal Return</b>	3.430%
<b>Number of Observations</b>	76
<b>Value of J</b>	5.7489*
<b>Level of Significance</b>	0.001

\*Comparable to Standard Normal N (0,1)

The fact that the results for Greek firms show systematically strong abnormal returns may indicate that the marginal return of an outward FDI announcement for a newly established MNE is higher than that of mature multinationals with an already well established network of overseas operations.

## 6. Conclusions

This paper attempts to prove that the key components of Ownership-Location-Internalisation (OLI) framework (stated by Dunning, 1977, 1983) provide solid theoretical and empirical evidence in explaining different aspects and patterns of the Greek overseas production.

According to the empirical analysis one can distinguish two categories of Greek firms involved in outward FDI: the first category includes leading domestic firms and subsidiaries of foreign Multinational Enterprises (MNEs) that are based in Greece and possess distinct ownership advantages which allow them to expand with confidence into countries with stable political and economic environment. These companies, through their expansion, either seek new markets for their mature and technologically standardised products or they intend to take advantage of creative local factors of production and introduce new products. Companies in this category thus follow either market or strategic asset seeking strategies (Dunning, 1993). This fact derives from the influence of HOMESEC

and HOSTC on the dependent variable FDI. The second category includes small and medium sized Greek companies involved in the production of labor intensive goods, with a fragile comparative advantage in the Greek market, which simply detect opportunities for both survival and expansion in markets that are sources of cheap labor and raw materials, such as Balkans. Thus they follow efficient seeking operations.

At this point, it must be pointed out that the model presents satisfying overall performance and also all the classical assumptions are not violated. The equation is correctly specified and there is no omitted variable bias or functional form misspecification. The explanatory variables are not linearly dependent and the residuals do not present any problems of autocorrelation or heteroscedasticity. In order to correct the non-normality of the residuals the same regression is run removing the outlier observation that causes the main problem. The new model satisfies all the classical assumptions and so one can claim that all the t and F tests are valid and the results from the estimation are not misleading. Furthermore the OLS estimators are BLUE (Best Linear Unbiased Estimators).

Finally, the empirical results from the analysis of the abnormal returns of the firms participating in the Athens Stock Exchange shows that there is a statistically significant positive relationship between an FDI announcement and the variation in the share prices.

## References

- [1] Bank of Greece (2001), “Published data on Greek foreign direct investment”, Athens
- [2] Barlett, C.A. and Ghoshal, S. (1989), “Managing across borders –The transnational solution”, London: Hutchinson Business Books
- [3] Billington N. (1999), “The Location of Foreign Direct Investment: An Empirical Analysis”, *Applied Economics*, 31, pp. 65-76
- [4] Buckley, P.J., and Casson, M.C. (1976), “The Future of the Multinational Enterprise”, London: Macmillan
- [5] Coase, R. (1996), “The Nature of the Firm”, *Economica*, pp. 386-405
- [6] Dunning, J.H. (1973), “The Determinants of International Production”, *Oxford Economic Papers*, 25(3), November, pp. 289-336
- [7] Dunning, J.H. (1988), “The eclectic paradigm of international production: an updated and some possible extensions”, *Journal of International Business Studies*, 19(1)
- [8] Gujarati, N. (1995), “Basic Econometrics”, McGraw-Hill
- [9] Hirsch, S. (1967), “The location of industry and international competitiveness”, Oxford: *Oxford University Press*
- [10] Horst, T. (1972), “Firm and Industry Determinants of the decision to invest abroad: an empirical study”, *Review of Economics and Statistics*, 54, 258-266
- [11] Maddala, G. S. (2001), “Introduction to Econometrics”, Wiley, 3<sup>rd</sup> edition
- [12] Patterson, K. (2000), “An Introduction to Applied Econometrics”, Macmillan
- [13] Porter, M. (1986), “Competition in Global Industries: A Conceptual Framework”, (eds) *Competition in Global Industries*, Boston: *Harvard Business School Press*
- [14] Vernon, R. (1966), “International Investment and International Trade in the Product Cycle”, *Quarterly Journal of Economics*, Vol. 80, pp. 190-207

# Darfur Crisis: Implications of the United States Policy and the Reality of Genocide

**Michael O. Adams**

*Professor of Public Affairs and Political Science  
Barbara Jordan – Mickey Leland (BJ – ML) School of Public Affairs  
Texas Southern University  
E-mail: adams\_mo@tsu.edu*

**Gbolahan S. Osho**

*Professor of Public Affairs and Political Science  
Barbara Jordan – Mickey Leland (BJ – ML) School of Public Affairs  
Texas Southern University  
E-mail: oshogs@tsu.edu*

## Abstract

The Darfur is in the Western part of the Sudan, and it is made up of three major African ethnic groups the Fur, the Zaghawa and the Massaleit. The situation with the civil war is still ongoing and that combined with the genocide taking place in the Darfur makes the country's plight a nightmare to conflict resolution. The role of the government of the Sudan has been said to be unhelpful to the situation and this is the bane of the issue that has characterized the conflict in Sudan. The United States policy so far as commendable as it has been needs a little more. There should be additional assistance from financial, to strategic the involvement of other regional leaders in the region. They share a common link in Islam, are will be better able to act as negotiators of a lasting peace. For military, financial and humanitarian aid has not been known to maintain ceasefires and civil wars, but the ability of good negotiators and good conference.

**Keywords:** Darfur Crisis, U.S. foreign policy, Sudan, Christians and Muslims, Foreign Aid, Humanitarian crisis, economy, military, UN peacekeeping

**Jel Classification Codes:** G34, G14.

## 1. Introduction

The Darfur is in the Western part of the Sudan, and it is made up of three major African ethnic groups the Fur, The Zaghawa and the Massaleit. The conflict that has engulfed the historically troubled and restless country of the Sudan has Nomadic Arabs fighting the ethnic African farming tribes of the Darfur. Fighting and civil strife is not new to the Sudan, civil war has been a part of the Sudan since independence in 1955. This pitted the North against the South and it was typically amongst Christians and Muslims.

The situation with the civil war is still ongoing and that combined with the genocide taking place in the Darfur makes the country's plight a nightmare to conflict resolution. The role of the government of the Sudan has been said to be unhelpful to the situation. According to the international Religious freedom report the Sudanese government, "continuous to place many restrictions on non-Muslims, on Arab Muslims and Muslims from tribes or sects not affiliated to the ruling party" This is the bane of the issue that has characterized the conflict in Sudan.

This civil war is separate from the conflict in the Darfur which is amongst nomadic Arabs and African traditionalist Arabs of the Darfur, and it is based on amongst many complains of the ethnic tribes African an issue of segregation and marginalization. The reason for the conflict could be traced to the fighting for grazing land by the nomadic Arabs and the ethnic Africans than live in the Darfur like the Massalat and the Zaghawa. What this means is that the Peoples of the Darfur feel their farmland is being hijacked, by the Nomads and their cattle, and this coupled with a feeling of marginalization by government of the Sudan and the led them to form rebel groups decided in a way to assert themselves decided to attack the Nomadic Arab tribes and some government posts. The government of the Sudan responded by attacking these farmland tribes and killing the people and forcing the displacement of people from the region that comprises the Darfur.

Another group involved in this conflict and a very controversial one is the Janjaweed. They are supposed riding on horseback and committing heinous acts on the inhabitants of the Darfur. It is said that the inability of the inability of the Bashir government to control the Janjaweed has led many to believe they are being armed by the government. Hence, the primary objective of this research is to investigate the crisis in Darfur with specific interest in the United States policy in Sudan and its implications in Darfur. The word Janjaweed is literally means "Devils on Horseback". This is to show the intensity of the dislike the ethnic tribes if the Darfur has for the Janjaweed. The Darfur area is located in the Northern part of the Sudan, and it is on the borders of Chad and Libya with Egypt to the North. And according to Ray Bush "by Since pacification by condominium troops in 1916, and the subsequent end of Ali Dinar's sultanate Darfur has been neglected by a Unified Sudan in the distribution of national resources".

## **2. Literature Review**

At the core of what makes the Darfur region critical is the ongoing unrest that has characterized the Sudan since independence and at the core of this was an intended federal states for and according to Monica kathina Juma "The genesis of the conflict was a failure by the Sudan government to honor an agreement that provided for a federal system of administration" and this led to war from 1955 to 1972. In addition to this North South divide there is also a the fact that the Darfur region is characterized by famine and hunger and according to Safe The Children's Fund deaths (U.K) (SCF) estimated that there were between 50 and 150,000 deaths due starvation in Darfur for the period 1984/5 .Also a United Nations report in August 1984 reported that 25 per cent of Darfur's total population was classified as 'seriously affected by famine. Famine is not new to Western Sudan." Ray Bush the as such the humanitarian crisis that ensures after this included with the war raged by the rebels against the Janjaweed.

According to the international Religious freedom report Sudanese government "continuous to place many restrictions on non-Muslims, Non Arab Muslims and Muslims from tribes or sects not affiliated to the ruling party" This is the bane of the issue that has characterized the conflict in Sudan. The Sudan has been plagued in fighting since independence and the fight has been a North South fight. This fight is separate from the conflict in the Darfur which is amongst Islamist in the North and the fight is more about segregation by one group Darfur is said to be the size of France, and the current conflict in the region has displaced a total of about 1.9 million people. About 213,000 were displaced and sought refuge in Chad. It is purported that within 2years 300,000 people were killed. This information when it was given to congress and the Bush administration led them to declare the situation in the Darfur area of the Sudan genocide. Further support for the idea of the situation in the Darfur being a genocide was supplied, by the USAID, in 2004 Administrator Natsios of the USAID, described the situation as follows "There are villages that are in fine condition, no problem at all, but if there are four village Massaleit village or Zaghawa village which are the three tribes that make up the revolt their villages are burnt to the ground so there is a clear pattern of ethnic cleansing".

The case for genocide can be empirically supported by data from a survey carried out by (MSF) Medecins Sans Frontier; a French humanitarian group. The survey was carried out on 4 villages in the West Darfur. These four villages Zalingei, Mumei, Niertiti and El-Geneina. It was carried out by Evelyn Deportee, epicenter members and MSF workers. The survey was carried out on a population of 500,800 and it showed that 215,400 were internally displaced. That is an estimated 43%.It showed a pattern on the death rate and the age of most of the victims of the raids. Death rate was highest amongst men fifteen and above. These deaths were also mainly or majority civilians.

**Table 1:** Number of displaced people

	<b>Zalingei</b>	<b>Mumei</b>	<b>Neirtiti</b>	<b>El Geneina</b>
Estimated IDB population	34600	74900	25600	80300
Household sampled (Clusters)	460	912	903	900
Population sampled (present on survey date)	2386	4754	5188	5191
children younger than 5years	467	1025	1060	936
male-to-female ratio	0.82	0.79	0.96	0.94
Mean household size	2-May	5.2	5.7	5.8
Deaths	100	322	116	115
Disappeared people	21	79	-	-
Absent People	253	458	-	-

**Source:** Violence and mortality in West Darfur, Sudan: epidemiological evidence from four surveys. Medecins Sans Frontieres. IDP-Internally displaced people.\*Includes 10200 residents include 1426 residents

In conclusion the survey proves death, but did not as a matter of fact call the situation genocide. The data also tracked the death rate and rates of displacement of these four villages'. The data in some instances were not conclusive due to the inability to access the data in some villages but overall a pattern was observed that was track able in these four villages that comprise West Darfur.

The crisis in the Darfur region has been complicated by a legion of factors. This in one word can be termed a geopolitical crisis. The reason it can be termed as such is the combination of factors that are part and parcel of the Sudan. There is famine, desertification, and this combined with a lack of inclusive leadership has led to region into a human calamity that till this day is ongoing. The government of President Al Bashir is a dictatorial regime, which typifies failed states, the Darfur is a region with very little rainfall and as such famine is part of the problems that confront the people. It sometimes takes four days to travel from Khartoum which is the capital city to Darfur, what this translates to is the physical distance of government from the people as such reduces the impact of government to actually succeed not only in accessing this area to govern. These extreme conditions and hardships the people of Darfur face makes the case for the need of responsible leadership. People are in need of supplies during long periods of rainfall and the aid cannot get to them on time. The government should play a bigger role in assisting the people of this region. This as a matter of fact highlights the case of failed States. Tribes or people who feel desolate and marginalized fine it easy to turn to violence against the source of such. In this case the inability of the government to address their plight.

**Table 2:** Absolute Numbers of Death

	Zalingei	Mumei	Neirtiti	El Geneina
Number of deaths				
Village and flight period				
Crude (all ages, causes)	55	234	25	
under 5 years	5	11	1	
cause violence	46	222	17	
Camp period				
Crude	45	84	91	115
under 5 years	11	21	32	50
cause violence	3	18	13	11
Overall				
crude	100	322	116	115
under 5 years	16	32	33	50
cause violence	49	240	30	11

**Source:** Violence and mortality in West Darfur, Sudan: epidemiological evidence from four surveys. Medecins Sans Frontieres.

The United States in its policy should do a lot more to address this problem. According to Robert I Rothberg “ Failed States are tense, dangerous deeply conflicted, dangerous, and bitterly contested by warring factions Official authorities in most failed States sometimes face two or more insurgencies, varieties of civil unrest”. The country of Sudan is a typical example of a failed State, and the current crisis in the Darfur coupled with the long existing history of civil wars that have ravaged the Sudan more than makes it a perfect candidate. From this instability that can be blamed on the geopolitical problems that face the Sudan, did arise the creation of rebel factions in the Darfur region. In the case of the civil war Sudan saw the birth of factions like the Sudan Liberation Army (SLA), Sudan Liberation Movement (SLM) and the Sudan People Liberation Army (SPLA) and in the case of the Darfur was the crisis led to the formation and growth of rebel factions like the Darfur Liberation Front (DLF), Justice and Equality Movement, (JEM).

**Table 3:** Population and Population Density Increase

Year	Population	Density Person/ km <sup>2</sup>
1956	1,080,000	3
1973	1,340,000	4
1983	3,500,000	10
1993	5,600,000	15
2003	6,480,000	18

**Source:** Population figure, department of Statistics as reported by Abdul-Jabbar (2004)

As the case might be 2002, was the year when the supposed invasion of ethnic farmyards by Nomadic Arabs, and this led to the formation of this rebel groups. Rebel factions started by attacking government garrisons and police controlled police stations. The first official real attack by rebels was when the newly formed Darfur Liberation Front in 2003 attacked the town of Golo. The Sudanese government was aware of an earlier attack on a police station in the same town of Golo. Golo is said to be the headquarters of the Jebel Marra District. So the government in Khartoum had to react and in retaliation the government sponsored attacks on villages in the Darfur area. Later on an armed group known as the Janjaweed who ride on horseback continued these attacks on the innocent civilians in the Darfur villages. The Janjaweed are said to be armed by the National Islamic Front (NIF), which happens to be the government in Sudan.

**Table 4:** Humanitarian Situation at a Glance

2.61 million	Conflict-Affected persons in Darfur/Chad
1.8 million	Internal Displaced persons (IDPs)
200,000	Refugees
70,000	Deaths (U.N.)
300,000-400,000	Other Mortality Estimates
\$767.9 million	U.S. assistance (FY 2003-FY 2005, as of 2/10/06)
\$1.030 billion	U.S. humanitarian assistance to Sudan and Eastern Chad (FY2005-FY2006, as of 4/7/06)

The population of the Darfur is about 7 million. And the crisis that has loomed in this area, since 2002 has led to mass killings, human displacement and a succession of failure to adhere to peace agreements. So the question can be reliably asked why the theory of failed states is important, and the answer lies in the fact that if understood it should be part of the solution to the crisis in the Darfur in particular, and the Sudan as a whole. It is imperative for the United States in its quest for a solution to the crisis to look far and beyond at the big picture. For it is common knowledge though not in all cases, that failed States are typical breeding ground for negativism, hatred and the formation of small armed factions that if left unchecked leads to the creation of warlords.

The prevention of these dictatorships that comprise most third world countries should be addressed as critical to the fight on terrorism. In the case of the Sudan and the Darfur the apparent failure of the Bashir government to respond to the demands of the people, and their apparent discontent can be blamed for the crisis. The killing of innocent civilians by government troops and the Janjaweed has led to chaos in the region. The apparent rise in the statue of the warlords into cult figures that carry some overwhelming power to influence the thoughts of his or her followers, can sometimes lead them to form strong and irreversible opinions over time. In the minds of these poor and destitute citizens is a fertile ground to breed terrorism. All this is as a result of poverty, destitution and the failure of government to take care of its people social and economic needs. What these different groups in the Darfur signify is a discordant chord amongst the Arabs that make up the Sudan. Most people understand the conflict in the Darfur is between Christian in the South and Muslims or the Arabs, in the North. It is a fight for regional control by the African Muslim tribes that make up the Darfur region, who believed they are being marginalized both economically and is not being amply represented by the government in Khartoum.

This pattern of discrimination was said to have been since independence in 1956, when the British the colonial masters of the Sudan developed Khartoum and the Blue Nile areas and the other areas like the Darfur were left underdeveloped. This is all the more so in the fact that even aid and relief to the Darfur region is made complicated by the roads during rainy seasons .It takes too long for aid to arrive and the notion of failed states is very important if not critical in a proper resolution of the crisis in the Darfur. Now there is a humanitarian crisis in the region, and as important as that is the solution to this region should not forget what is at the root of the crisis and also how to prevent future crisis of this nature, for they might in the end have far reaching effects not only in the Sudan but the world at large.

The United States, the United Nations and the humanitarian organizations have taken steps to address the crisis in the Darfur. This attention though successful to a certain extent on the humanitarian end has left done little as regards conflict resolution in this area. There is little doubt that the attention of the United States is focused on the war in Iraq and Afghanistan against terrorism, and the installation of a democracy in these regions. Also foreign policy of he United States is also involved in looking for a solution to an apparent nuclear threat posed by Iran and North Korea. Well with all this put together and the fact that there is a dire situation in the Darfur. This region needs help and quick. There is a genocide taking place in the region and this has left behind a humanitarian crisis. The case of the Darfur is not unbeknownst to the United States government.

The United States in the past as in Rwanda did not recognize the crisis as a genocide. In the case of the Darfur it has been properly identified by the United States congress and the Bush administration as genocide. Albeit the proper nomenclature and the financial assistance and efforts of the US, the United Nations and the African Union has changed, the Janjaweed are still causing atrocities in the Darfur and peace agreements are adhered to by some groups and not by others. The crisis is still ongoing and peace treaties are being violated every time. Help has been more in the direction of humanitarian aid with the United States being the largest single donor to the Darfur region. Most of the aid to this area has been on humanitarian bases and this aid has been hampered in many instances by the government forces and the Janjaweed.

The United States policy in the Darfur is guided by a two fold strategy. At the one hand providing the humanitarian problems that the fighting in the Darfur has imposed on the people of the region. And on the other hand and significantly important addressing the threat this quagmire poses to the region. According to the congressional research service Sudan has been considered since 1993 as a rogue state. Sudan is an Islamic State that shares ties with Hamas in Palestine and the Mujahedeen and Osama Bin laden the alleged master mind of the United States September 11<sup>th</sup> attacks was known to have made Sudan his hideout. He later left in 1996 due to world pressure. In the year 1996 Osama Bin Laden was termed “one of the most significant financial sponsors of Islamic extremist’s activities in the world” by the State department. And the government of Sudan says they sent out Bin laden in response to pressures from the Middle East and the United States. Sudan is considered a rogue State by the United States for aiding international terrorism. But in 2004 the United States took Sudan off the list of Nations that were non cooperative on the war against terrorism. Richard Boucher stated “Sudan has taken a number of steps in cooperation against terrorism over the past few years”.

So the Darfur region is strategic to United States foreign policy. It not only impacts the notion that the United States is a champion for helping struggling democracies as is typical of the Bush doctrine in Iraq and Afghanistan, it also sends the right message that dictatorships that bring about failed states even not nipped at the bud tend to be breeding grounds for terrorism as was the case of Afghanistan and Iraq. It is not to say that all terrorist are from failed states it is just that they provide the chaos needed for acts of terrorism thrive, and as such are looked upon as breeding grounds for terrorist and their nefarious activities.

On September 21 2004, in an address to the General Assembly, President Bush called the atrocities in the Darfur a genocide “terrible suffering and horrible crimes in the Darfur region of Sudan, crimes my government has concluded are genocide”. To engage in the crisis in the Darfur, it will meet its goals both way and it will not only alleviate the humanitarian crisis it will help to bring down this process that emanates from such chaos.

So far the United States under George Bush and Colin Powel in 2003 engaged in a addressing the situation in the Darfur. How the United States has responded to the proper identification of this phenomenon should be expressed in policy that seeks to address the specific issues that make up this crisis. The solution should be one that has direct impact on the crisis as a whole from the genesis of the conflict, conflict resolution, the humanitarian crisis and finally post genocide Sudan. Late in February 2007 was the first indictment of acts of genocide in the Darfur. “On July 22, 2004, the U.S House of Representatives and the Senate unanimously passed resolutions (H.Con.Res.467, S.Con.Res.133) declaring the crisis in Darfur to be a genocide, based on the five criteria for genocide enumerated in Article 2 of the Convention on the Prevention and Punishment of the Crime of Genocide” Congressional Research Service (CRS). This was followed by address by Colin Powel to the United Nations ordering an investigation of the situation in the Darfur. The United Nations came back with a resolution that fell short of describing the situation as genocide. The United Nations in January 2005 accused the government of the Sudan of genocidal intent and not genocide.

The United States is also known to have imposed some sanctions on the government of the Sudan, on October 13 US President George Bush imposed sanctions on those who are said to have committed atrocities against the people of the Darfur, under the Darfur Peace and Accountability Act

of 2006. United States companies had had to abide to sanctions in conducting oil transactions with the Sudan. There had been a ban prior in 1997 that froze assets of companies that were doing business in the Sudan in violation of these sanctions. The United States in May of 2006 had participated in orchestrating the Darfur Peace Agreement. This agreement was significant because it involved both parties the governmental of National Unity and the largest rebel group and the Sudan Liberation Movement led by Mini Menawi. On January 2007 the governor of New Mexico Bill Richardson and the President of Sudan Bashir did agree to a ceasefire, in which “government and rebel troops will cease hostilities for a period of 60 days while they work towards a lasting peace”. This package also included an increase in humanitarian aid.

The United States policy according to the State department,” United States is committed to ending the violence and providing assistance to the suffering people of Darfur, as well as ensuring the peaceful democratic transformation throughout Sudan”. In order to implement this policy the United States to re-opened the USAID mission to the Sudan. The United States policy in the Sudan according to the Sudan is totaled as a four phased assistance. This included assisting in the Darfur peace agreement (DPA), together with the African Union to address issues of marginalization and power sharing amongst the people of the Sudan. Secondly, the United States participated with the United Nations in (AMIS) African Union Mission in Sudan up of African soldiers from Rwanda, Senegal Nigeria and the Congo to assist in the security of the Darfur region. Thirdly the United States is working with NATO to assure the security of the Sudan and especially the Darfur region.

The United States has given aid to the African Union, and congress in March 2005 approved 242.4 million for the Darfur and also the USAID has given a lot of aid to the region especially on Humanitarian grounds. The USAID Administrator Andrew Natsios describes the Darfur region in an interview in 2004 saying that he was in the Darfur region in 1991 when the conflict was amongst farmers and herders for grazing land. Today he contends the conflict has changed into a humanitarian crisis where hundreds of thousands were displaced. Now that the world has accepted there is genocide in Sudan the response not withstanding as regards policy on paper has been positive. But there is still a humanitarian crisis in the Darfur and the region still is still facing ethnic cleansing and displacement of civilians. The reasons for these failures notwithstanding the world response are emblematic and make the situation in the Darfur unique. The inability of the global concern to be transformed to concrete action is many folds. There is a lot of blame to throw around. The situation in the Darfur is like no other situation due to the problematic geopolitical situation of the country. There is perceived lack coordination when it comes to peaceful resolution to the crisis due to a cocktail of issues.

### **3. Conclusion**

The African Union and AMIS have been unable stop the Janjaweed and the government forces from committing atrocious acts on civilian villages. For the United States policy in this are to be effective it will have to address not only the issue of the Genocide but the amalgamation of issues that inherent in the Sudan. This country has a long history of civil war since 1955, with tensions amongst the North and the South, the marginalization of the ethnic groups that compose the tribes that make up the Darfur region and also a Janjaweed group supposedly armed by the government and responsible for the killings in the Darfur region. The United States involvement in the war on terrorism in both Afghanistan and Iraq has left little will for the government to address the issue in the Darfur there is the saturation of the American public of the notion of the United States being a global policeman .This is coupled with the failure of the warring factions to agree to and maintain a ceasefire. That not withstanding should not act as an impediment to the government of the United States to take an active role in the genocide taking place in the Darfur. The role of the United States should be geared towards more aid to the needy. Sanctions on the government in cases where ceasefires do not work, and everything should be done to prevent the collapse of the Sudan into a failed state with Arab armed factions running around, with civilians the target of the wrath of the government and the Janjaweed. In

March 2007 President Mahmoud Ahmadinejad of Iran was in Sudan for a State visit. What this thus is bolster the president of Sudan, to defy the United States .this also can be seen to promote the idea of terrorism and terrorist because it sends a message that the Sudan and the Iran are in cohorts. Iran it has been said is sponsoring terrorist acts in Iraq.

They should not be allowed under the guise of hate to allow lawlessness and chaos to continue in the Sudan by providing aid to a government that is being imposed sanctions.

What in effect is needed in the Sudan is a committed effort by all parties, the United States, the United Nations, the African Union and AMIS. They United States failed to respond to the crisis in Rwanda, for the situation was perceived as a civil war, not genocide. This is a unique opportunity to make that not happen again. For as a matter of fact this is genocide under the watch of the United States. The US should be actively engaged in making sure the situation is controlled. The Clinton administration regrets not having aptly described the situation in Rwanda as genocide, and as such that was blamed for the lackluster response to the crisis. Darfur offers a perfect scenario for the United States to right their inability to intervene in Rwanda.

The United States policy so far as commendable as it has been needs a little more. There should be additional assistance from financial, to strategic the involvement of other regional leaders in the region. They share a common link in Islam, are will be better able to act as negotiators of a lasting peace. For military, financial and humanitarian aid has not been known to maintain ceasefires and civil wars, but the ability of good negotiators and good conference. Key to this will be the inclusion of the neighboring countries of Chad and Eritrea, the government of the Sudan, the rebels and the Janjaweed. The influence of Chad is important, because the Zaghawa tribe that makes up part of the Darfur has the same tribe in Chad also. The government of Sudan has accused the government of Chad of supporting and funding the rebels. As for Eritrea they government of Sudan is a friend to Eritrea and this can help in the formulation of a more involving peace process.

## References

- [1] Dealing with conflict in Africa; The United Nations and Regional Organizations Ed. By Jane Boulden 2003 Palgrave Macmillan 175 fifth Avenue New York, NY.10010.
- [2] President George Bush, address to the UN General assembly (Sept 21,2004)
- [3] <http://www.whitehouse.gov/newsreleases>
- [4] The Southern Sudan from conflict to Peace Mohamed Omer Beshir 1975 Harper and Row publishers Inc Hunger in Sudan: The case of Darfur
- [5] The New Nature of Nation State Failure by Robert I Rotberg copyright 2002 The center for Strategic and International Studies and the Massachusetts Institute of Technology The Washington Quaterly.25.3 pp 85-96
- [6] <http://www.state.gov/documents/organization/67933.pdf> United States Policy in the Sudan
- [7] <http://www.state.gov/p/af/rls/rm/31856.htm> Washington DC April 27,2004,Andrew Natsios interview USAID Administrator.
- [8] <http://www.unsudanig.org/darfurjam/trackII/data/preliminary/development> source of data on population of the Darfur.

# An Algorithm for Evaluating the Distribution of Labor Turnover

**Ben-David Nissim**

*Department of Economics*

*University of Haifa and Emek Yezreel Academic College, 31905 Haifa Israel*

E-mail: NissimB@yvc.ac.il

Tel: 972-4-6398847; Fax: 972-4-6291452

## **Abstract**

An algorithm for evaluating the number of controls in a trigger – target model is applied for evaluating the distribution of the labor turnover on a certain job within a certain time period. The applied Algorithm is corrected to fit a trigger – target model with a pause after the trigger is hit. The pause is needed here since after a worker is laid off the firm doesn't find a new worker immediately. The firm search process takes time. During this time, the firm offers a vacancy and only after it finds a new worker, the profitability of the job jumps to the target level.

**Keywords:** Labor Turnover, Trigger-Target Model.

## **1. Introduction**

The flow out of employment can be initiated either by firms because of job destruction, or replacement of workers at the same job, or by workers because of quits from the jobs.

My intention is to concentrate on evaluating the number of replacements that are initiated by the firms. I will apply an algorithm for evaluating the number of controls in trigger-target models for evaluating the distribution of labor turnover. Labor turnover includes quits and layoffs, but here I use the term referring only to replacements because of layoffs. Labor turnover may be defined as the number of times a firm replaces a worker on a certain job within a certain time period.

Let us assume that the actual profit from a new occupied job is depleted because of reduction in worker motivation or because of wage increase that occurs during the employment period, factors that decrease the profit from a filled job. We should also assume that training on the job would offset some of the reductions in profitability. Depletion is, however, uncertain and might be effected by factors such as workers ability to get wage raise, workers ability to accumulate human capital during employment etc.

The well-known Baumol-Tobin model of money demand in its stochastic version, may be applied here to evaluate the worker substitutions in a job within a certain time period. In the Baumol-Tobin model, cash flow follows a Brownian motion process. Whenever money holdings, the state variable, is depleted to trigger level  $s$ , it is adjusted to a target level  $S$ . The model is an example of an economic application of regulation of Brownian motion within the context of an inventories model. The state variable is depleted stochastically between controls. The presence of concave adjustment costs yield a control in the form of impulse control, or trigger-target ( $S-s$ ) control <sup>2</sup>.

---

<sup>2</sup> Concave cost of adjusting the state variable  $x(t)$  implies that the  $(S,s)$  rule is optimal. The optimality of this rule in discrete time was proved by Scarf (1960). The extension to continuous time is in Constantinides and Richard (1978).

## Applying the Algorithm

At first I will assume that after laying off a low producing worker a new worker can be employed immediately. Assuming that a worker can be replaced immediately by a more profitable worker, we can use the algorithm presented in Bar Ilan and Ben David (1996) for calculating the distribution of workers turn over within a given time period.

Given a depleted profit from a filled job, whenever the profit from a filled job, the state variable, is depleted to a trigger level  $s$ , the old worker is laid off and the firm employs a new worker.

We would get that after the firm employs a new worker, the profit from the filled job is adjusted to an expected target level  $S$ .

The old worker is not laid off as long as  $s < X$  (for  $X$  the actual profit of a job filled with an old worker)

Define the state variable as the actual profit from a filled job and,

$Z(t)$  – The depletion of the state variable up to time  $t$ .

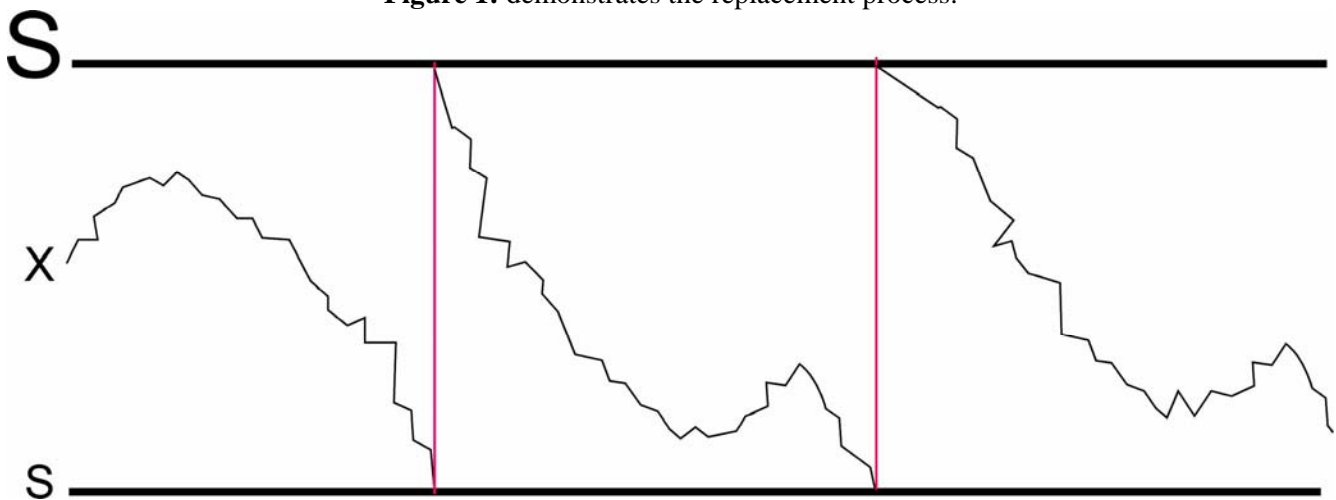
$g$  – The expected depletion of the state variable.

$\sigma$  – The standard deviation of depletion among workers.

If the firm could find a new worker immediately after laying off the old worker, we would get that the cumulative distribution function for the number of replacements would be defined by

$$P(Z(T)) = \int_0^{Z(T)} p(v)dv = \Phi\left(\frac{Z - gT}{\sigma\sqrt{T}}\right) - \exp\left(\frac{2gZ}{\sigma^2}\right)\Phi\left(\frac{-Z - gT}{\sigma\sqrt{T}}\right) \quad (1)$$

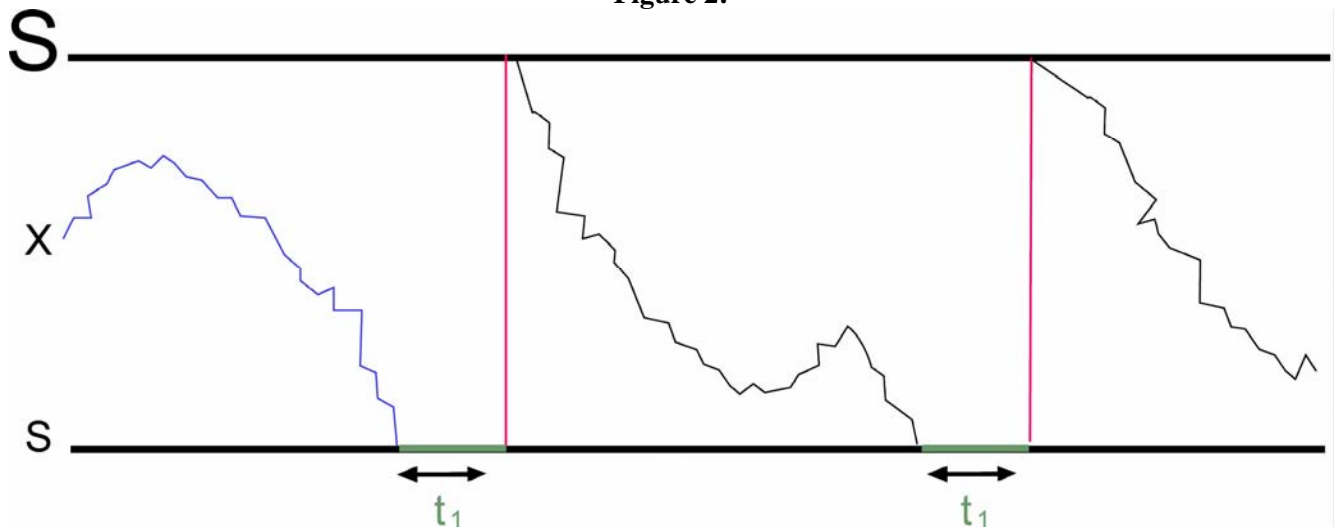
**Figure 1:** demonstrates the replacement process.



When ever the profit from a job filled with an old worker hits the trigger level  $s$ , he is immediately replaced by a new worker with an expected profit of  $S$ .

In reality when an old worker is laid off, the firm start searching for a new worker and the substitution does not take place immediately. Lets assume that it takes  $t_1$  period of time to find a new worker so that the vacant job will be filled after  $t_1$  period of time. As the new worker fills the job, the profit jumps to the expected level  $S$ , as is shown by figure 2.

Figure 2:



The cumulative distribution function for the number of replacements is now corrected to be

$$P(Z(T)) = \int_0^{Z(T-it_1)} p(v)dv = \Phi\left(\frac{Z - g(T-it_1)}{\sigma\sqrt{T-it_1}}\right) - \exp\left(\frac{2gZ}{\sigma^2}\right)\Phi\left(\frac{-Z - g(T-it_1)}{\sigma\sqrt{T-it_1}}\right) \quad (2)$$

For  $i$  – the number of replacements within time period  $T$ .

Notice that within a time period  $T$ , if we have  $i$  replacements, the Weiner process is active during  $T-it_1$  period of time.

### Example

I will start with an example for an immediate substitution (no search time is needed)

And then expand it to a situation where a search time is involved.

Define the state variable  $x(t)$  as the actual profitability of a filled job including the current depletion, at time  $t$  and define,

$S$  – the expected profit from a job filled by a new worker.

$X$ - the actual profit of an old worker.

$s$  - the reservation profit for the replacement of an old worker.

Suppose that depletion follows a Brownian motion with an annual expected depletion of 300. Thus, the parameter  $g$  in equation (1) is  $g=300$ . Assume also that the expected profit of a new filled job  $S$  is 1400 and the trigger  $s$  is 500.

The replacement of the first worker depends on the initial profit of the filled job  $x(0)=X$ .

Assume that  $X=1100$  to get that the expected time for replacing the first worker is  $\frac{X-s}{g} = 2$  years.

After the first worker is replaced, the next worker would be replaced after 3 years on average.

A new worker replaces an old worker and increase the expected profit from the job by  $S-s=900$ .

Given a yearly depletion of  $g=300$ , a worker would be replaced every  $\frac{S-s}{g} = 3$  years.

The analysis of the deterministic model shows that a worker would be replaced every  $t=2, 5, 8, 11\dots$

If the time horizon is, say, 10 years, the distribution function assigned therefore probability 1 to 3 replacements and 0 otherwise.

Table 1 presents the distribution  $G(i)$  of the number of replacements  $i$ , for values of the standard deviation  $\sigma$  that vary from 0 (The deterministic case) to 500, in jumps of 100.

As expected, more uncertainty flattens the distribution by giving more weight to values of  $i$  away from the deterministic value  $i=3$  replacements. Notice that the average number of replacements  $E(i)$  rises with uncertainty.

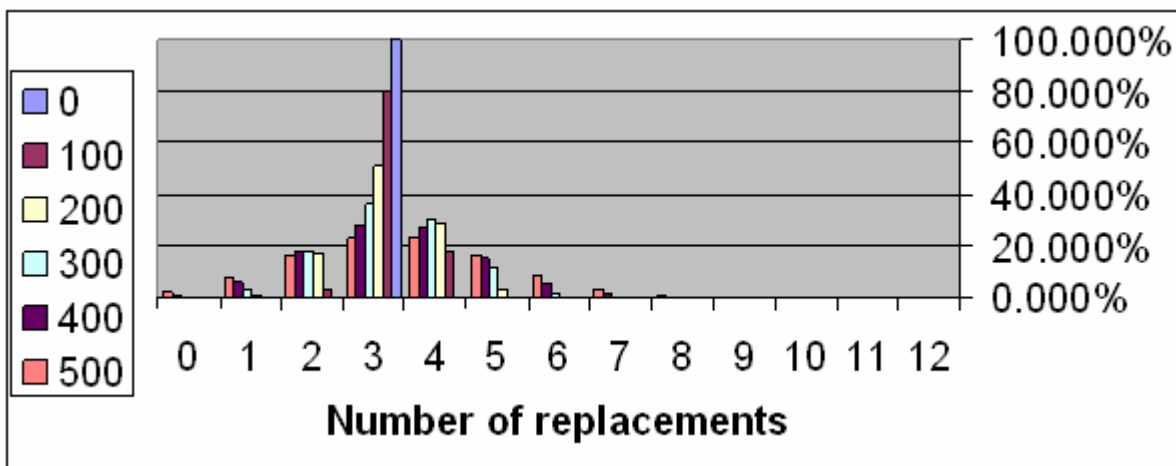
**Table 1:**

Std. dev.	0	1	2	3	4	5	6	7	8	9	10	11	12	E(i)
0	0.000%	0.000%	0.000%	100.00%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	3.00
100	0.000%	0.000%	2.889%	79.972%	17.132%	0.007%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	3.14
200	0.002%	0.550%	16.586%	51.098%	28.874%	2.844%	0.045%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	3.17
300	0.167%	3.208%	17.388%	36.023%	30.575%	11.297%	1.265%	0.076%	0.002%	0.000%	0.000%	0.000%	0.000%	3.33
400	0.789%	5.805%	17.211%	28.052%	26.650%	15.108%	5.167%	1.071%	0.139%	0.007%	0.000%	0.000%	0.000%	3.46
500	1.641%	7.397%	16.066%	23.110%	23.096%	16.365%	8.307%	3.038%	0.803%	0.154%	0.021%	0.002%	0.000%	3.62

This is because  $Z(T)$  is the maximum value of a Wiener process, and it therefore rises, on average, with  $\sigma^3$ .

As we saw in the example above, when  $t_1=0$ , so that replacement of an old worker with a new one takes place immediately, we can use equation (1) for evaluating the distribution for the number of replacements. The distribution is presented in table 1 and figure 3:

**Figure 3:**



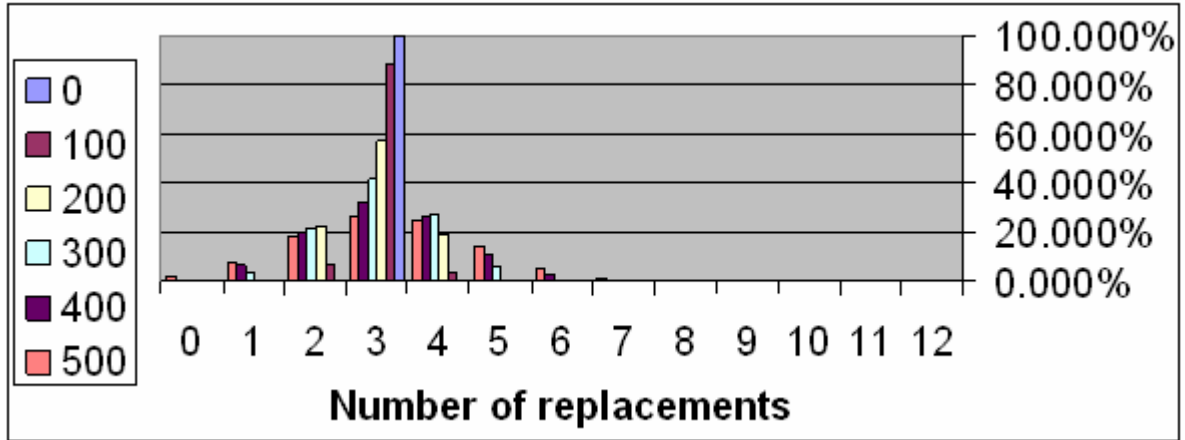
Suppose now that we take into consideration the time period  $t_1$  needed to find a new worker. By using equation (2) to evaluate the distribution for the number of replacements, we get for  $t_1=0.25$  the distribution in table 2 and in figure 4

**Table 2:**

std.dev.	0	1	2	3	4	5	6	7	8	9	10	11	12	E(i)
0	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%	0%	0%	3
100	0.00%	0.00%	7.21%	88.57%	4.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0%	0%	0%	2.97
200	0.00%	0.71%	22.56%	57.33%	18.78%	0.62%	0.00%	0.00%	0.00%	0.00%	0%	0%	0%	2.9604
300	0.17%	3.69%	21.39%	41.51%	27.18%	5.80%	0.26%	0.00%	0.00%	0.00%	0%	0%	0%	3.1031
400	0.79%	6.42%	20.20%	32.26%	26.67%	11.17%	2.27%	0.21%	0.01%	0.00%	0%	0%	0%	3.2132
500	1.64%	8.02%	18.41%	26.52%	24.49%	14.37%	5.24%	1.15%	0.14%	0.01%	0%	0%	0%	3.3494

<sup>3</sup> The expected value of  $Z(T)$  increases with  $\sigma$ , as can be seen from equation (5) in Appendix 1.

Figure 4:

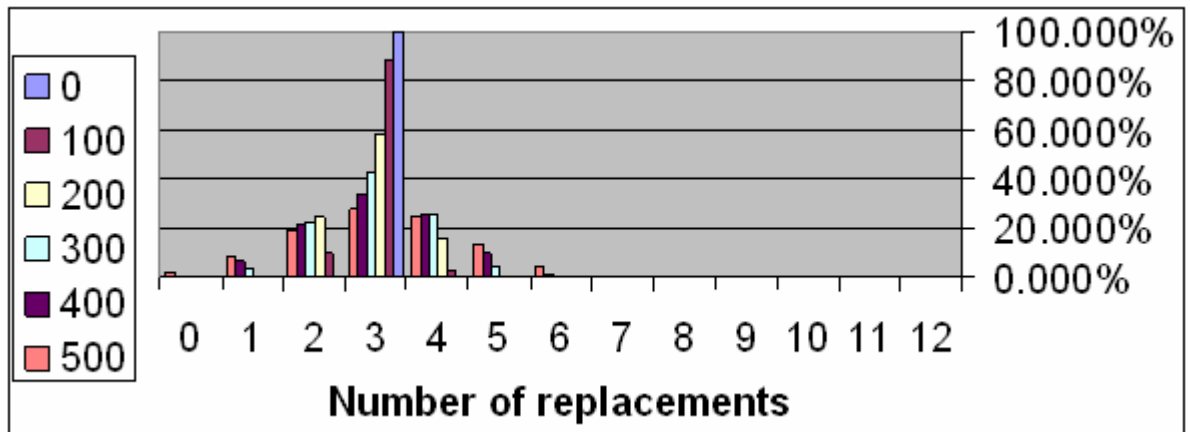


The analysis of the deterministic case (std. dev=0) in table 2 (where searching time is  $t_1=0.25$ ) shows that a worker would be replaced every  $t=2.25, 5.5, 8.75, 12\dots$ . The search time for 3 replacements is 0.75 years ( $it_1=3*0.25$ ), so that within a time period of 10 years we still have 3 replacements (see also the distribution for  $t_1=0.333$  in table 3 and figure 5).

Table 3:

Std.dev.	0	1	2	3	4	5	6	7	8	9	10	11	12	E(i)
0	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%	0%	0%	0%	3
100	0.00%	0.00%	9.52%	88.20%	2.28%	0.00%	0.00%	0.00%	0.00%	0%	0%	0%	0%	2.928
200	0.00%	0.77%	24.86%	58.50%	15.54%	0.33%	0.00%	0.00%	0.00%	0%	0%	0%	0%	2.898
300	0.17%	3.87%	22.86%	43.14%	25.47%	4.36%	0.13%	0.00%	0.00%	0%	0%	0%	0%	3.035
400	0.79%	6.63%	21.28%	33.64%	26.26%	9.70%	1.58%	0.11%	0.00%	0%	0%	0%	0%	3.139
500	1.64%	8.24%	19.26%	27.68%	24.73%	13.41%	4.23%	0.73%	0.07%	0%	0%	0%	0%	3.269

Figure 5:



## 2. Conclusions

In this paper I demonstrate that labor turnover can be evaluated theoretically by applying an algorithm to evaluate the number of controls in a trigger – target model. The algorithm is corrected so that the time needed to find a new worker after laying off an old worker is taken into consideration. The evaluation shows that as search time grows, expected labor turnover decrease.

The main contribution of this paper is in adjusting an acceptable model of immediate stock adjustment to fit economic situations where the adjustment process is not immediate, but involves a pause after the trigger is hit.

## References

- [1] Bar Ilan, A. and Ben David, N. (1996), "An Algorithm for Evaluating the Number of Controls in Trigger- Target Models", *Journal of Economics Dynamics and Control*, 1367-1371.
- [2] Constantinides, G. and Richards, S. (1978), "Existence of Optimal Simple Policies for Discounted Cost Inventories and Cash Management in Continuous Time", *Operation Research* 26, 620-636.
- [3] Scarf, H. (1960), "*The Optimality of (S,s) Policies in the Dynamic Inventory Model*", in K.J. Arrow, Karlin, S. and Suppes, P., eds.", *Mathematical Methods in the Social Sciences*, Stanford University Press, Stanford, CA.
- [4] Shepp, L.A. (1979), "The Joint Density of the Maximum and Its Location for Weiner Process With Drift", *Journal of Applied Probability* 16, 423-427.

## Appendix 1

– An Algorithm for Evaluating the Number of controls in Trigger – Target Models as presented in Shepp (1979) and Bar-Ilan and Ben David (1996)

Consider a state variable at time  $t$  denoted by  $x(t)$ . The dynamics of  $x(t)$ , when it evolves freely between controls, is described by  $z(t)$  a Weiner process (Brownian motion). With mean  $g$  and standard deviation  $\sigma$ . That is,

$$dx(t) = -gdt + \sigma du(t) \quad (3)$$

The parameter  $g$  is the expected depletion of state variable,  $\sigma$  is a nonnegative parameter, and  $u(t)$  is a standard Wiener process<sup>4</sup>. When a control of  $x(t)$  takes place, it is of the (S,s) rule. That is, when  $x(t) \leq s$  then the instantaneous change in  $x(t)$  is  $dx(t) = (S - x)$ .

Define  $Z(t)$  as the maximum value, attained at or before time  $T$ , of a wiener process, starting at  $z(t=0)=0$ . That is  $Z(T) = \max(z(t), 0 \leq t \leq T, z(0) = 0)$ . Denote the initial value of the state variable  $x(t=0)$ , by  $X \geq S$ .<sup>5</sup> Without any controls, the state variable is depleted as described in Eq.(1). This implies that the minimum value attained by the state variable at time  $T$  or earlier is  $X - Z(T)$ . That is, without replacing a worker,  $X - Z(T)$  is the lowest asset value of a filled job with an old worker up to time  $T$ .

As long as  $Z(T) < X - s$  the state variable  $x(t)$ ,  $0 \leq t \leq T$ , is above the trigger level  $s$ . No control takes place in this case at or before time  $T$ . The probability of this event is  $P(X-s)$ , where  $P(Z(T))$  is the cumulative distribution function of  $Z(T)$ . When  $Z(T)$  is at the range  $X - s < Z(T) < X - s + S - s$ , then the state variable  $x(t)$  hits the trigger level  $s$  just once. In this case there is one control at or before time  $T$ . The probability of this event is  $P(X - s + S - s) - P(X - s)$ .

In general, the number of controls up to time  $T$ , implied by the (S,s) rule is given by the smallest integer larger than  $\frac{(Z(T) - (X - s))}{(S - s)}$ . Hence the probability of  $i \geq 1$  controls is given by  $P(X - s + i(S - s)) - P(X - s + (i - 1)(S - s))$ .

<sup>4</sup> The state variable is the money stock, capital stock, or the price level for the demand for money, investment or price control problems, respectively. Similarly,  $g$  denote the average cash outflow, capital depreciation, or inflation rate, respectively.

<sup>5</sup> When  $X(t=0) < s$  a control takes place at once and  $X = S > s$ .

The expected number of controls up to time T is,

$$\sum_{i=1}^{\infty} i[P(X - s + i(S - s)) - P(X - s + (i - 1)(S - s))] \quad (4)$$

The expected addition to the state variable at or before time T is the expected number of controls, Eq.(6), times (S-s), the size of each control. This can allow for analyzing the number of replacements on the job. But in order to do that we need to have an explicit expression of P(Z(T)). Shepp (1979) shows that the probability density function p(Z(T)) is

$$P(Z(T)) = \frac{2}{\sigma\sqrt{T}} \phi\left(\frac{Z - gT}{\sigma\sqrt{T}}\right) - \frac{2g}{\sigma^2} \exp\left(\frac{2gZ}{\sigma^2}\right) \Phi\left(\frac{-Z - gT}{\sigma\sqrt{T}}\right) \quad (5)$$

where  $\phi(\cdot)$  represents the standard normal density and  $\Phi(\cdot)$  the cumulative normal distribution. Bar-Ilan and Ben David (1996) showed that integration by parts of p(Z(T)) yields the cumulative distribution function  $P(Z(T))$  as,

$$P(Z(T)) = \int_0^{Z(T)} p(v)dv = \Phi\left(\frac{Z - gT}{\sigma\sqrt{T}}\right) - \exp\left(\frac{2gZ}{\sigma^2}\right) \Phi\left(\frac{-Z - gT}{\sigma\sqrt{T}}\right) \quad (6)$$

# The Status of Communication Management Education in Malaysia: Meeting A Global Standard

**Zulhamri Abdullah**

*Department of Communication*

*Faculty of Modern Languages & Communication, University Putra Malaysia*

*43400 UPM Serdang, Selangor, Malaysia*

E-mail: zulhamri@fbmk.upm.edu.my

Tel: 603 – 89468775; Fax: 603 - 89485950

## **Abstract**

The primary aim of this paper is to determine academics and practitioners' perceptions on the status and development of public relations management in Malaysia. Several key themes of communication management education were explored: cultural diversity in local PR education, core competencies for PR graduates, PR curricular in the public and private universities and PR publications and research development. This study also is concerned with what professional practice that desired and the professional practice that exists in the real world. Qualitative research methods, in-depth interviews and document review, were employed. The findings revealed that local PR curriculum did not match with the professional practice that exists in the real world. There is a perceptual distance between academic and practitioners' views on what distinctive knowledge and professional skills should be taught in a University. Discussing on this topic may reduce the gap between PR theory and practice. It is suggested that PR education should be viewed beyond a sub-discipline of mass communication or marketing; instead, it should be a complex strategic management discipline in order to venture into globalisation challenges.

**Keywords:** Professionalism, cultural diversity, business acumen and international relations.

## **Introduction**

In Malaysia, PR education began in 1939 when PR practice was supported by some underlying factors such as the development of mass media, international alliance with other countries and the growth of commerce industries (Idid, 2004, in Sriramesh, 2004: 211). Since independence, public relations has successfully been practised by the government to influence general public with regards to the implementation of their public policies. Thus, there is an increase interest to study and practise this profession in several domains such as government relations, public affairs, marketing communication, and corporate social responsibility. However, it is doubtful that public relations has been vigorously practised as a strategic way in the government and commerce industries. Public relations is still being seen as technical functions for public and corporate organisations focusing on editorial publication, publicity and event management (e.g. press relations, campaigns and launches). In turbulent business environment, public relations management (is also known as corporate communication or communication management) needs to improve their strategic and managerial roles in contributing to the internal and external strategy development of public and corporate organisations. Specifically, every public and private organisation should develop a full-fledged strategic division determining strategic planning for short and long terms to build a strategic relationship between organisations and public. Thus, this paper examines academics and practitioners' perceptions on the development of PR education and research development in Malaysia. Prior to discussing the findings of this study, the literature review is discussed in the next section.

## Literature Review

The First World Assembly of the International Public Relations Association in Mexico City produced a clear and comprehensive definition of public relations in August 1978: 'The art and science of analysing trends, predicting their consequences, counselling organisation leaders, and implementing planned programs of action which will serve both the organisation's and the public's interest' (cited in Grunig & Hunt, 1984: 7). Furthermore, considering concepts of multiculturalism, Banks (1995: 21) points out that public relations is:

"The management of formal communication between organisations and their relevant publics to create and maintain communities of interest and action that favor the organisation, taking full account of the normal human variation in the systems of meaning by which groups understand and enact their everyday lives".

This definition comes close to describing best practice in public relations, which is concerned with mutual understanding between an organisation and its publics and also stresses the importance of culture and diversity for different communities in different locations. An added definition initiated by Hutton (1999: 211) describes public relations as 'managing strategic relationships'. This definition may seem simple but it has a great deal of substance, as it focuses on management, leadership and mutual understanding. The combination of Banks' and Hutton's definitions and the consideration of diversity management may yield a highly comprehensive public relations definition to prepare for major new challenges in future public relations roles.

In discussing the identity of PR, generally, the body of the PR knowledge, pioneered by US foremost scholars, has been widely adopted by academics and practitioners in the other developed countries, especially in Britain, and developing countries, particularly in the Asian countries. For instance, despite the growth of the Philippine PR industry, the industry, controlled by male, is more likely an adoption of US western model and urban-centred (Panol, 2000).

Although the rigorous development of the body of the US PR knowledge, surprisingly, a study by Culbertson and Chen (1996) revealed that mastering journalistic skill in the PR education in the America is overemphasised and there is also redundancy in the PR curriculum, especially communication courses, offered by 15 schools and departments of journalism. In fact, although a new curriculum, International Public Relations has been studied, many relatively relate to journalism studies. Therefore, in the PR curricula, public relations academics need to design a comprehensive programme, more than publicity techniques focusing merely on journalistic skills (Ehling, 1992).

In their contribution to this discussion, L'Etang and Pieczka (1996:13) argued that there is a great discrepancy between educational development of public relations in the Europe, especially in the United Kingdom, and in the America. They opposing the US PR curriculum argued that public relations education should be integrated and interdisciplinary by observing from traditional disciplines, such as "moral philosophy, philosophy of language, sociology, epistemology, and media studies, and also from specific disciplines such as psychology, management and marketing".

Further study indicated that although the US PR model is also greatly adopted in the Thai PR education, PR academics at private universities perceive that the PR curricular is somewhat lacking. This study proposed more comprehensive courses such as "interpersonal communication, intercultural/international communication, integrated marketing communication and new media technology" (Ekachai et al, 1998:1).

In addition to this argument, van Ruler (2003) has urged European PR scholars to produce their own body of the PR knowledge, not replicate US model, by arguing that research is one of the most important factors in improving the quality of professionalism in Europe (Hansen, 2003).

Besides emphasising the importance of research, it has been said that academic education is an ultimate instrument in attaining the professional status of public relations that leads to the contribution of the body of the PR knowledge (L'Etang, 1999; Ehling, 1992; Singh & Smyth, 2000; Stacks et al, 1999). In contrast, top management officers of the Chartered Institute of Public Relations, UK, Smith (1990) and Mallison (1996), obviously opposing the academic notions perceive that PR professionals should importantly possess sufficient and vocational training in the field (L'Etang, 1999). In fact, PR practitioners and academics agree that the special elements such as training, experience and expertise outcomes are important for career development in public relations (Stacks et al, 1999).

Thus, this paper attempts to explore some underlying patterns of PR education in Malaysia from strategic management and multiculturalism. Specifically, (1) to what extent western PR theories influence

Malaysian PR education and how importance cultural diversity is to PR education; (2) whether core competency being offered for communication graduates match realistic communication practice in the real world (including the location of courses of public relations - whether in media/mass communication or business schools); (3) how effective the structure and design of PR curricular being offered in public and private universities; and finally, (4) how extensive Malaysian PR research and publication is developed. In order to measure the research questions described, a qualitative research method was employed as discussed in the next section.

## Research Method

In-depth interviews were employed in the Klang Valley between March and May 2004 to seek communication academics and practitioners' perceptions on several key themes of communication management education: cultural diversity in local PR education, core competencies for PR graduates, PR curricular in the public and private universities and PR publications and research development. Of 20 selected PR academics and practitioners, only 12 of them replied and agreed to be interviewed. The interviews were conducted in English and/or Malay - depending on which language they preferred. All participants were randomly selected from a database of the latest edition (2003) of the Directory of Malaysian Companies (*Buku Merah*). Due to the political concerns, interviewees requested some of their personal information (e.g. names of interviewees and organisations) remain at its discretion.

In order to gain an overview of the educational system and its implications for society, an interview with an alternative (in the sense of not being directly in the field of PR) party, the Director of Educational State Divisions, Ministry of Education, Malaysia, was carried out.

In order to supplement the in-depth interviews used in this study, the researcher gathered and reviewed the desired information as well as possible information about how PR is practised in the selected organisations in the Klang Valley. This technique involved the analysis of two sets of documents: organisational documents emerging from PR practitioners' work, such as business plans, key performance indicators, annual reports, as well as operational reports, letters, press releases, organisational newsletters, bulletins and relevant documents; whilst academic documents included course outlines, journal papers, conference papers, publications, news releases regarding the PR curriculum and relevant documents.

## Findings

The system of training for a public relations profession must be refined and formalised based on the global and national practices. There is a need to formalise academic and professional qualifications that are delivered by higher learning institutions (e.g. a University) and the professional association (e.g. CIPR, PRSA and IPRM).

### Cultural Diversity in Local PR Education

In general, based on the findings of this study, PR education in Malaysia can be interpreted as being at 'an adolescent stage of development' and having a long way to go to achieve excellent public relations practice. Further to the existing PR knowledge in both the public and private university, some PR academics argued that it seems Malaysian PR education has been too much influenced by Western PR education, especially from the United States of America and the United Kingdom. Most academics realised that the curriculum should be set up in accordance with local needs and norms as well as to deal with cultural values and diversity. Importantly, it is true that concerning cultural values and diversity, it is important to develop multicultural public relations, but the structure and context of the PR curriculum must be developed based on the global and international theory of public relations.

In fact, this study found that public relations in Malaysia has gone global, as there are also influences from Middle Eastern countries such as Saudi Arabia, Turkey, and Egypt, as well as from Northeast Asian countries such as Japan and Thailand. A professor of communication from the public university argued:

"Our curriculum has been influenced by western PR knowledge. For example, we are now using a US PR textbook on *Effective Public Relations* written by Cutlip, Broom and Center. Actually, the influence is not only from the US or Europe, but also from Arab Saudi, Egypt, Turkey, Japan and Thailand. Thus, we have a core value and diversity of PR knowledge. I think that our PR education is up to the standard and should continually be housed in the media school. I don't agree if the PR curriculum is housed in the

business school as in that school, you will train students to be business people. However public relations goes beyond making business, it is also about having knowledge of political and social issues such as the role of non-government of organisations”.

With great concern about cultural sensitivity among PR practitioners, one PR academic thought that there is a need to have cultural diversity in the PR curriculum. A PR academic from the private university added that:

“Here, we use Australian textbooks to teach public relations. Actually, our PR curriculum has been influenced by the US PR knowledge. Importantly, we should understand Malaysian culture. I think foreigners do not sensitive enough to Malaysian culture, which differs from their culture. Western knowledge should be adapted to our own culture. That’s why, we are also offering courses related to diversity and nationality”.

Apart from emphasising the importance of adapting Malaysian culture to PR knowledge, most PR academics are also concerned about the shortage of qualified PR scholars in this field. One of the PR academics from the public university pointed out that:

“Actually, Malaysian PR education is substantially influenced from the US or Europe as many Malaysian PR academic staff were graduated from those universities. I see that there is a rapid development of public relations in those countries. But Australian and New Zealand PR education have also been influenced from the US and Europe. In fact, the government of Malaysia has sponsored a bunch of academic staff to study in overseas universities every year. But many PR graduates like choosing different careers. You see that there are limited numbers of PR academics working in a local university. That’s why knowledge of public relations is still inbreeding within the local universities”.

By arguing that local PR academics have only delivered purely Western PR knowledge, a professional informant suggested that there is a need for a Malaysian PR paradigm to practise public relations. A PR practitioner from the commercial corporation argued that:

“I believe that every country has its own culture. We cannot simply adopt the Western theories and apply them to our own country. I did a paper on a comparative study between Malaysian Chinese and Chinese in the mainland, China. I found that different nationality has different culture. Many PR academics think that knowledge is universal and simply copy those Western theories and then, apply this to the classroom. But I think it is quite wrong to do like this. We should have our own identity or our own model. In Malaysia, cultural sensitivity among Chinese, Malays and Indians should be considered when we run PR programmes for local community”.

Having discussed the importance of multiculturalism to local PR education, knowledge of cultural diversity management should become one of underlying aspects needs to be taught to PR students. Core competencies for PR graduates are explored in the next section.

### **Core Competencies for PR graduates**

Most academic and professional informants agreed that PR graduates are largely working within the private sector, rather than the public sector. There are a limited number of PR vacancies in the government sector because no in-house public relations department has yet been established. However, some argued that Malay graduates chose to work within the public sector, whilst Chinese and Indian PR graduates preferred to look for a job in the private sector. This trend might occur due to poor communication skills in English among Malay PR graduates compared to their counterparts. Most private sectors use English as a principal language of administration, while it is government policy to use the Malay language as an official language. In fact, both academics and practitioners also stressed the importance of mastering the English language and other foreign languages because Malaysian corporations have strong international relations with multinational companies throughout the world.

In Malaysia, poor communication skills in English among university graduates has become a key issue of communication competency; hence, it may hinder the business relationships with international clients, as foreign investors are increasingly keeping an eye on the growing market of Asian countries, including Malaysia (e.g. Walter, 2001 & Newell, 2004). One of PR academics from the public university pointed out that:

“Due to the language barrier especially mastering English, many Malay graduates choose to work for the public sector, and Chinese and Indian graduates prefer to work for the

private sector. Generally, many Chinese and Indians can speak and write well in English as compared to their Malay counterpart. Malay graduates choose other careers, as there are limited numbers of vacancies in public relations in the public sector. However, in the private sector, PR graduates have a lot of opportunities as they may work for corporations or consultancies. An internship aspect is also another issue. Different a University offers different a length of internship for PR students. For example, the private university, the University of Tuanku Abdul Rahman (UTAR) offers one semester for internship, whilst here, we offers only 2 months. I think that internship is very important for students, as they are required to have practical experience prior to entering the career world. So that, in the University, they learn theories, then, they may practise them in the real world”.

Commenting on the issues of communication competency, one senior PR academic from the international university argued that:

“Students should master multi-languages. I understand that English is important for students, if they work for the private sector. However, it always depends on the sector in which students will work for. If you work for local community such as a local government body, you will speak Malay only. If you go to Japan, you speak Japanese, not English. Importantly, you should master linguistic proficiency, so that, you may write and speak well in the languages that demanded by the sector in which you work for”.

As part of the issue of competencies among PR graduates, professional informants argued that the PR curriculum should be housed in the business school, rather than in the media and communication school. One of the reasons why they wanted to see the transition from the media school to the business school was PR students should be equipped with in-depth knowledge of business acumen (e.g. corporate strategy, general management and basic accounting) to prepare them to work in the rapidly changing business environment. Unlike in the developed countries, where there are many media and communication schools in privileged universities such as Cardiff University, Stirling University, Bournemouth University, Lancaster University and many more, in Malaysia, of 13 universities, there are only two schools of media/journalism located in the University of Technology Mara and the University of Sciences Malaysia. The rest of the universities in Malaysia have the media department under the school of social sciences or the school of languages and linguistics. Another reason given by informants was, generally, business students are more likely to achieve excellent performance than are media students in Malaysia. In fact, the best possible students who chose to study business and management can be interpreted as ‘first-class students’; they also have a good command of English prior to starting their first semester at university.

Besides stressing the need for a transition of the PR curriculum from the media school to the business school, an academic informant also stressed an accredited PR curriculum should be developed. This is important for the PR industry, as the PR curriculum that is being taught at universities has not yet been accredited by any PR professional body. One of PR academics from the public university pointed out that:

“Generally, the PR curriculum that is being taught in the public university and private university is not much different. But the private university is concerned with profit oriented. I see that the private university has designed the PR curriculum based on market demands. But in the public university, we are still having problems to design the proper PR curriculum, as some lecturers wanted some irrelevant courses to be included in the PR curriculum due to their personal interests. Other issue is in the public university, we offer a bachelor’s degree of mass communication majoring in public relations, whilst, in the private universities and colleges, they provide a bachelor’s degree of public relations. That’s why we are having problems in accrediting the PR curriculum in the public universities. I think that the time has come to offer the PR curriculum under the business school, as under the media school, public relations cannot survive anymore. I think that public relations should be integrated with corporate management and corporate strategy to improve the value of public relations”.

When asked in which training school the PR curricula should be housed, a PR practitioner from the banking institution noted that:

“I think that the PR curriculum should be housed in the business school, as PR practitioners really need to possess knowledge of business acumen. They should know about financial aspects as well. If the PR curriculum is housed in the media school, the University should

endorse some business courses to be taken by PR students. On top of that, internship should be extended from six months to one year”.

In contrast, a number of academic informants stressed that the PR curriculum should be housed in the Media School, as grasping in-depth knowledge of mass media and cultural studies and journalism enables students to act like activists rather than being profit-oriented business students. However, it is difficult to find a philosophical and cultural studies curriculum in any Media School in the Klang Valley, Malaysia. Thus, in the media school, the students are only trained technically to prepare them to become potential journalists and broadcasters, but rarely PR professionals. As one PR educator pointed out, the PR curriculum might be ‘varnished’ in the media school and then would be re-developed in the business school, as this would give strong awareness among top business leaders of the importance of the role of public relations in their organisation (Khattab, 2000).

The notion of turning non-professional people into highly skilled professional staff can be daunting. However, the focus lies on how the universities propose programmes of study. There is a need to have a double major or multidisciplinary course to allow PR students to excel. The thought of ‘first-class and second-class students’ may jeopardise the future careers of students regardless of whether they are studying in the business or media school. Importantly, a responsible department which offers a PR curriculum should review and modify the pedagogy of the curriculum based on research development. Coombs and Rybacki (1999) argued that there is a need to improve the pedagogy of public relations, as there are a number of US PR academics lacking competency in delivering an effective PR curriculum.

In fact, it is not enough to say that the media school has only delivered a fundamental knowledge of public relations to students. Indeed, schools and universities have a huge responsibility to educate the students by offering curricula that are more structured, coupled with student development programmes facilitated by professional companies specialising in training and development, such as Pricewaterhouse Coopers. Indeed, the best suggestion here is that the PR curriculum should be housed in its own school. Alternatively, media schools that offer a PR curriculum should collaborate with business and management schools by developing joint programmes; hence, PR students would be able to take appropriate business and management courses such as marketing strategies, strategy management, corporate strategy, investor relations and suchlike. As one PR academic from the private university pointed out:

“PR practitioners cannot survive (in a corporate world) if they have knowledge of public relations (publicity) only. They should also know about multi-disciplines such as marketing, advertising, management, and information technology. In an organisational context, PR practitioners need to know about the functions of management particularly management policies. They should liaise their duties with all top managers to achieve organisational objectives”.

Commenting on the issues of the knowledge and skills required for PR practitioners, a senior PR practitioner from the petroleum company remarked that:

“Perhaps, in the past, PR practitioners may have needed to master merely journalistic skills. Today, mastering knowledge of communication is not enough for competent PR practitioners. We are expected to do beyond arranging events, launches, or media relations. We also need to manage a PR strategy and handle organisational issues. It requires analytical thinking. Today’s PR practitioners should also be equipped with knowledge of business operation and also capable of managing a PR strategy to support strategy development of our companies. I think that people who interested in joining this profession, need to think their career seriously”.

Indeed, there is no agreement regarding the perception of PR education between academics and practitioners. Academics thought that many practitioners do not have proper qualifications in public relations, though they are practising public relations, whilst practitioners questioned the quality of local PR education by arguing that academics solely deliver fundamental knowledge of public relations rather than teach students how best it can be practised in the real world.

## **PR Curricular in the Public and Private Universities**

Surprisingly, many practitioners and academics agreed that the private universities offered better PR curriculum to potential PR practitioners than public universities. This finding is probably due to the changing demands of the PR workforce in the growing Malaysian PR industry. It is claimed that private universities have designed a

more structured and interesting PR curriculum, which is more competitive, based on the high market demand. The more PR graduates are employed by major corporations, the more students may study in public relations in their universities, as one of private universities' ultimate goals is profit maximization. For example, a private university like the University Tunku Abdul Rahman (UTAR) is, it seems, able to afford to offer an undergraduate degree in public relations, while many public universities can only offer a major in public relations as part of an undergraduate degree in mass communications in general. One PR academic from the private university noted that:

"I think that undergoing internship is important for students to prepare them to be competent PR practitioners. Students should be exposed to the real situation. (As the private university), we are more structured in setting our curriculum, whilst, in the public university, academics themselves do not clear their responsibility. We always evaluate our performance based on teaching and research. In the public university, the PR curriculum needs to be improved. Regarding the issue of English proficiency, prior to commencing their study, students are required to sit English examination to determine their level of proficiency. Those who don't achieve the certain standards are required to take an intensive language input. Through this process, we believe that we have produced the great output and they are up to the market. As far as I am concerned, many PR graduates have worked for the private sector and very few works in the public sector".

In addition, many public universities which offer a PR curriculum in their mass communication programme need to follow rigid procedures to obtain approval from the senate of the university to remove or modify the curriculum. Thus, these procedures may result in a slow process of updating the curriculum, as it is difficult to propose a revised curriculum to the senate of the university without having concrete reasons. It has frequently happened that the heads of the schools of mass communication who chair the senate meetings are not specialists in public relations. Due to the shortage of PR academics, it is very difficult to defend a revised curriculum in a senate meeting. Therefore, a professional body like the Institute of Public Relations Malaysia should play an important role in accrediting the PR curriculum; hence, this association should propose high standards for the PR curriculum to be taught in public universities. The associations proposals, which would be rigorously developed based on PR research, can be discussed with the heads of school and would be presented to the senate of the university to obtain official approval.

The role of the government, particularly the Ministry of Education, seems very important in supporting the development of PR education. My interview with Yusoff Harun, the Director of Education (2004), emphasised that the Malaysian government has always monitored and approved of the enhancement of the level of professionalism in any profession in the higher education institutions. Under the corporatisation of public universities, some educational policies have been improved with regard to the high standards of professionalism in the public services. Strengthening competency training programmes and introducing a newly created employees' competency system, '*Sistem Saraan Malaysia*' (SSM), formerly known as '*Sistem Saraan Baru*' (SSB), are the top priority policies to improve the '*Penilaian Tahap Kecekapan*' (PTK) (Competency Level Assessment) of employees, including academics (The Department of Public Services, 2004). Yusoff Harun pointed out that:

"Malaysian education is now becoming a business sector. But we have a National Education Accreditation, which is a structured benchmarking to control the development of our education. We now adopt an open system. You see that many private universities have been set up here. We train qualified lecturers by sending them to overseas to further their studies. If we don't have local lecturers, then, we may hire foreign lecturers to fulfil our goals. So far, we've got many diverse foreign lecturers. They come from Europe, Indonesia, Arab Saudi, Australia and Singapore. I believe that our education system is very good".

Due to the changing educational development in this country, universities tend to focus on the employees' competencies, especially with regard to self-development; hence, universities may produce highly competent academics. He claimed, however, that there is a general tendency for some educators who still have backward thinking to be complacent and reluctant to strengthen their professional work to the highest standards. He felt that the government would be able to combat this problem by reinforcing the importance of staff development programmes in their educational policy. As he mentioned:

"We understand that people need to be developed. In order to develop people, we do a lot of staff development programmes. Every state must have (this programme) and it should

also be compulsory for all staff. They have to undergo the training courses. Every school also needs an MS ISO (quality measurement standards) – we have a Malaysian standard through MAMPU (The Malaysian Administrative Modernisation and Management Planning Unit). It is very structured. We should follow this measurement. The system has very high quality. I believe that we have produced great outputs”.

He added a comment on factors that may affect the development of the Malaysian education system:

“Developing greater professionalism, we should have a benchmarking standard. Malaysia comes to the stage where we have produced many graduates. If you have good academics, then you will get good outputs. If we can produce qualified academics, we may enhance the level of professionalism. Due to the changing policies in an education system, we receive many complaints. So, issues must be solved effectively. But some policies did not function very well because of our employees’ attitude and their core values that refuse to change. Everybody needs to play his role. For example, the issue of English proficiency among graduates. We want teacher to teach in English. When they teach in English, our society also will learn English too. We have expertise to create the PC software, but academics refuse to use it. We need to do a short and long term planning”.

Although his comments were not focused on specific elements of PR education, generally, the statement from the representative of the Ministry of Education seemed definitely to support enhanced standards of PR professionalism, as the government are now eagerly producing a knowledge society in order to achieve their vision of the nation by 2020. In the next section, PR publication and research development is discussed.

## **PR Publications and Research Development**

Further to this discussion, it is worth noting how PR academics and practitioners view PR publications and research development. Clearly, this key theme is rather lacking, as PR academics have published a limited number of academic publications about public relations. Surprisingly, it seems that practitioners neither value local PR research nor use academic research as a key reference in performing their duties. Apparently, the perceptual gap between scholarship and practice seems to be increasing, as new generations are more likely to work in professional practice rather than becoming PR academics. In fact, many PR academics are considered busy working as the ‘typical teacher’ who is responsible for delivering fundamental knowledge to students but not educating them with appropriate and rigorous practical knowledge with which each student may practise in the real world. Moreover, this ‘typical teacher’ may not be interested in producing research articles, particularly in the public relations field. Thus, there is a dire need to improve PR education and research development, as it may directly impact on the standards of PR professionalism in Malaysia. PR research should be integrated with established and dominant professions such as sociology of profession, political science, international relations, and law (regulation and legislation), and additionally, with complex core management models such as management of balance scorecard, total quality management, risk management, and other realistic organisational theories.

## **Discussion and Conclusion**

The Malaysian PR industry has been improved only slightly in this decade and has a bright future. In the future, the improvement of this industry will largely depend on the core competencies PR practitioners and scholars possess to increase their professionalism.

In the 21<sup>st</sup> century, the way corporations carry out their business has changed. Corporations have come particularly to value public opinion, compared to the last few decades. This trend requires two-way communication (counsel management) rather than one-way communication (publicity). In addition, the role of PR practitioners has also changed from handling publicity in the production line to being involved in policy making in the dominant coalition within an organisation. These changing trends need to be understood by PR practitioners and academics. Thus, the changing role of public relations has become important to build a favourable relationship between an organisation and its public. However, the challenge depends on higher educational preparation developed by a university and continuing education organised by a PR professional body. This study has shown that the distinctive knowledge and skills demanded by the Malaysian PR industry do not match the PR curriculum offered by local universities and the Institute of Public Relations Malaysia.

In relation to the capabilities of PR scholars in Malaysia, this study showed that Malaysian PR scholarship is still far from excellent in educating and researching theories of public relations. Although some Malaysian PR scholars have articulated the need to develop a serious body of PR knowledge, there is little evidence of new theories or of research on public relations and communication management in public relations practice in Malaysia. There is no clear evidence on which to develop new thinking in public relations in Malaysia. Somewhat regressively, some Malaysian PR scholars are still articulating the same PR or communication theories to describe even current public relations practice (with regard to press agency or publicity). One of the possible reasons is the extreme shortage of PR academics in this field. Each local university may have only one or two PR scholars, and many of these perceive public relations as part of media studies. This shortcoming is one of the reasons for the serious need for a global standard to be adapted to Malaysian public relations education, which would be in line with the aspirations of universities to achieve world-class status in the future.

The findings of this study indicate that the PR curriculum has not been updated to meet the essential requirements of corporate employers in Malaysia. Thus, the PR curriculum needs to be revamped in order to equip PR practitioners with the specific knowledge and skills required. In addition, media schools which offer the PR curriculum should develop more collaboration with schools of business and economics in providing knowledge of business management. Therefore, a Bachelor of Public Relations and Communication Management degree should be introduced for future PR students, rather than merely allowing the Bachelor of Mass Communication students to major in public relations. Alternatively, it would be useful to introduce double majors. Thus, having a specialised degree in this field, PR graduates will be well equipped with distinctive knowledge and professional skills, as they are able to compete with other management graduates in the turbulent business environment.

## References

- [1] Banks, S. P. (1995). *Multicultural Public Relations: A Social-Interpretive Approach*. London: Sage Publication.
- [2] Coombs, W. T. & Rybacki, K. (1999, Spring). *Public Relations Education: Where is Pedagogy?*. *Public Relations Review*, 25(1): 55-63.
- [3] Culbertson, H. M. & Chen, N. (1996). *International Public Relations: A Comparative Analysis*. New Jersey. Lawrence Erlbaum Associates.
- [4] Department of Public Services, Malaysia. (2004). An Official Homepage. Available online: (<http://www.jpa.gov.my>). Accessed on 2 November 2004.
- [5] Ehling, W. (1992). *Public Relations Education and Professionalism*. Excellence in Public Relations and Communication Management (in Grunig, J.). New Jersey: Lawrence Erlbaum.
- [6] Ekachai, D. & Komolsevin, R. (1998, Summer). *Public Relations in Thailand*. Vol. 24. Issue 2, pp.219-234. *Public Relations Review*. Available online ([www.sciencedirect.com](http://www.sciencedirect.com)). Accessed on 29 March 2003.
- [7] Grunig, L. A. & Grunig, J.E. (2003). Public Relations in the United States: A Generation of Maturation. In Sriramesh, K. & Vercic, D. *The Global Public Relations Handbook*. New Jersey: Lawrence Erlbaum Associates.
- [8] Grunig, J. E. & Hunt, T. (1984). *Managing Public Relations*. Forth Worth, Unites States. Harcourt Brace Jovanovich College Publishers.
- [9] Hansen, G. E. (2003, June). *Defrosting Europe: The Learning Zone*. Profile. Issue 37. London. The Institute of Public Relations, UK.
- [10] Hutton, J. G. (1999). *The Definition, Dimensions, and Domain of Public Relations*. *Public Relations Review*. Vol. 25 (2), pp. 199-214. Elsevier Science Inc.
- [11] Idid, S. A. (2004). Public Relations in Malaysia its Colonial Past to Current Practice. In Sriramesh, K. (2004). *Public Relations in Asia*. Australia: Thomson Learning Pte Ltd.
- [12] Khattab, U. (2000). *Perhubungan Awam dalam Iklim Panas: Nama Baru, Wajah Lama; Pindah Randah, Papa Kedana?* (Public Relations in Malaysia: New Name, Old face). *Journal of Communication*. Department of Communication, National University of Malaysia.
- [13] L'Etang, J. (1999, Fall). *Public Relations Education in Britain: A Historical Review in the Context of Professionalisation*. *Public Relations Review*, 25(3):261-289. Elsevier Science Inc.
- [14] L 'Etang, J. & Pieczka, M. (1996). *Critical Perspectives in Public Relations*. London. International Thompson Business Press.
- [15] Mallison, B. (1996). Public Lies and Private Truths: An Anatomy of Public Relations: London. In L'Etang, J. (1999, Fall). *Public Relations Education in Britain: A Historical Review in the Context of Professionalisation*. *Public Relations Review*, 25(3):261-289. Elsevier Science Inc.
- [16] Newell, S. (2004, 20 August). *Looking East*. Corporate Reputation Management. PR Week. London: Haymarket Business Publications Limited.
- [17] Panol, Z. S. (2000). *Philippine Public Relations: An Industry and Practitioner Profile*. *Public Relations Review*. 26(2):237-254. Singh, R. & Smyth, R. (2000, Winter). *Australian Public Relations: Status at The turn of the 21<sup>st</sup> Century*. Vol. 26. Issue 4, pp 387-401. *Public Relations Review*. Available online ([www.sciencedirect.com](http://www.sciencedirect.com)). Accessed on 29 March 2003.
- [18] Smith, D. (1990). Public Lies and Private Truths: An Anatomy of Public Relations: London. In L'Etang, J. (1999, Fall). *Public Relations Education in Britain: A Historical Review in the Context of Professionalisation*. *Public Relations Review*, 25(3):261-289. Elsevier Science Inc.
- [19] Stacks, D. W., Botan, C. & Turk, J. V. (1999, Spring). *Perceptions of Public Relations Education*. Vol. 25. Issue 1, pp.9-28. *Public Relations Review*. Available online ([www.sciencedirect.com](http://www.sciencedirect.com)). Accessed on 29 March 2003.
- [20] Walter, N. (2001, 3 August). *Global Ranking: Asia*. PR Week. London. Haymarket Business Publications Limited.
- [21] Van Ruler, B. (2003). Public Relations in the Polder: The Case of the Netherlands. In Sriramesh, K. & Vercic, D. *The Global Public Relations Handbook*. New Jersey: Lawrence Erlbaum Associates.

# Application of Peace Counseling in the Management of Anger

**Ayoka Mopelola Olusakin**

*Department of Educational Foundations*

*Faculty of Education, University of Lagos, Akoka-Lagos, Nigeria*

E-mail: mopeolusakin@yahoo.com

## **Abstract**

This study was carried out to examine the applicability of peace counseling in the management of a very common human reaction called 'anger'. 67(37 female and 30 male) graduate students of University of Lagos participated in the study. 34 participants were in the treatment group exposed to peace counseling while 33 participants were in the delayed-treatment/control group. The results obtained from comparing the pre- and post-test scores of both groups using the analysis of variance and the General Linear Modal statistics showed that there was a significant difference in the mean scores and then specifically, those who went through treatment reported a significant reduction in their manifestations of anger than those in the control group. However, no significant gender-based difference was found in the analyses. This shows that whether female or male, people manifest anger that could be disruptive and that they could equally benefit from peace counseling.

## **Introduction**

Life does not always go smoothly. Every day you face situations where your self-control will be challenged. Everybody experiences anger and everybody expresses it. Some people manage their anger in healthy ways. According to Dahlen and Deffenbacher (2001), some people really are more "hotheaded" than others are; they get angry more easily and more intensely than the average person does. There are also those who don't show their anger in loud spectacular ways but are chronically irritable. Easily angered people don't always curse and throw things; sometimes they withdraw socially, sulk, or get physically ill.

People who are easily angered generally have what some psychologists call a low tolerance for frustration, meaning simply that they feel that they should not have to be subjected to frustration, inconvenience, or annoyance. They can't take things in stride, and they're particularly infuriated if the situation seems somehow unjust: for example, being corrected for a minor mistake. A number of things could make people to be this way. One cause may be genetic or physiological: There is evidence that some children are born irritable, touchy, and easily angered, and that these signs are present from a very early age. Another may be socio-cultural. Because anger is often regarded as negative, people are taught that it's all right to express anxiety, depression, or other emotions but not to express anger. As a result, they do not bother to learn how to handle it or channel it constructively. Family background can also play an important role. According to Goldstein and Glick (1987) observed that people who are easily angered come from families that are disruptive, chaotic, and not skilled at emotional communications.

However, it is a dangerous to express anger without boundaries. Some people use this as a license to hurt others or even hurt themselves. Outburst of anger could lead to aggression and does nothing to help either the angry person or the person he/she is angry with in resolving the problem. It's best to find out what it is that triggers the anger, and then to deal with such from the root. Peace defeats anger, because anger, even when it's justified, can quickly become irrational. Some strategies that have been found to be useful in managing anger effectively include avoiding situations that make one angry, changing environments, focusing on something positive, engaging in substitute positive activities, and improving communication and social skills. Any of these could be employed with 'peace' as the overall undertone.

**What is Peace?** Peace is commonly defined as the absence of war. But it is much more than that, it is all encompassing. To affirm that someone has peace, the person should have peace in his/her body, soul, and spirit. The peace of the body is the harmonious functioning of its parts; the peace of the soul is the well regulated rest

of its appetites and the good coordination of the thoughts and actions; the peace of the spirit is a well-ordered life according to the commandments of God. It is often a problem in one of these areas that brings a client in for counseling, either on a voluntary or a mandated basis.

Paymar (1993) is of the opinion that the peace of the individual would also affect and be affected by the environmental/situational conditions in the school/place of work, community, village/city, nation, and the world. Every 'normal' human being wants peace and anyone who wants peace must give /sow peace to the lives of others around him or her.

## **What is Counseling?**

Counseling is a process of helping people to find solutions to their challenges (problems) through the exploration and utilization of their potentials. This is professionally done by trained counselors who make use of appropriate counseling techniques in helping the counselees/clients.

The counselor in addition to being educated should possess accurate empathy, non-possessive warm, and genuineness (Rogers, 1951). For the counseling process to be effective, Frank and Frank (1991, p.44) identify six things the counselor has to do as follow: develops and maintain a good relationship with the client; links hope to the process of counseling; offers new learning experience; arouses the client's emotions; enhances the client's sense of self-efficacy and confidence; and provides opportunities for practicing new ways of responding and behaving. Underlying all these responsibilities is the fact that the counselor must be able to observe well and listen well. According to Carkhuff (2000), counselors observe body movements, facial expressions, body build, grooming and posture; and they listen by suspending personal judgment, focusing on the client, resisting distractions, recalling the client's expressions accurately, and noticing common themes in the client's talk.

The clients seek for counseling because they have some conflicts. These conflicts may be within the client (intrapersonal), between the client and other people (interpersonal), or between the client and the society as a whole. The client is the primary change agent in that the success of the counseling process depends on his/her cooperation. It is the client who has to take what is offered and work with it to make it work.

## **Peace Counseling**

Therefore, is the utilization of peace-related principles in helping people in the process of solving their problems or managing their challenges in nonviolent ways. Peace Counseling is simple, and easy to learn. It shows the clients how to access their natural ability to let go of any negative thought or feeling on the spot, including all forms of anger and rage. It's not just about controlling their anger, but it's about replacing the anger with peace.

## **Definition of anger**

Anger is a normal, natural human emotion experienced and expressed by everyone in one way or the other. It could be healthy when managed effectively. But when it gets out of control, it becomes destructive, and can be a source of various mental, physical, emotional, social, or legal problems. It could lead to problems at work, in personal relationships, and in the overall quality of life when not rightly managed. And it can make the person feel as though he/she is at the mercy of an unpredictable and powerful emotion. Angry people tend to jump to conclusions, and quickly act on such conclusions whereas some of those conclusions can be very inaccurate.

Dahlen and Deffenbacher (2001) identify three main stages of anger as follow:

- (a) Anger-eliciting stimulus, typically an easily-identifiable external source or internal source. The former has to do with what the angry person perceived others to have done to him/her while the latter is related to the emotional state- worrying or brooding about personal problems or having memories of traumatic or enraging events.
- (b) There is a pre-anger state, which includes the physical, emotional, and cognitive, state at the time of provocation; the person's enduring psychological characteristics; and the cultural messages about anger and about expressing anger.
- (c) The person's appraisal of the anger-eliciting stimulus and his/her ability to cope with the stimulus.

All these stages interact to create a state of being angry. These authors also identify four related domains in which anger exists.

First is the emotional and experiential domain in which anger is a feeling state ranging in intensity from mild annoyance to rage and fury.

Second, is the physiological domain where anger is associated with adrenal release, increased muscle tension, and activation of the sympathetic nervous system.

Third, is the cognitive domain where anger is associated with biased information processing.

Fourth, is the behavior domain in which anger can be either functional such as being assertive or dysfunctional by being aggressive, withdrawing, using alcohol and drugs.

Potter-Efron (1994) ascertains that a single episode of uncontrolled anger can have a devastating impact on the person's life and the lives of his/her loved ones for years to come. In an instant, anger can destroy careers, health, and relationships such a person has spent years nourishing. Engaging in a series of uncontrolled anger episodes would jeopardize happiness and financial security, and can lead to fines and imprisonment.

## **Expression of Anger**

The instinctive, natural way to express anger is to respond aggressively. Anger is a natural, adaptive response to threats; it inspires powerful, often aggressive, feelings and behaviors, which allow us to fight and to defend ourselves when we are attacked. A certain amount of anger, therefore, is a necessary antecedent to our survival. On the other hand, however, we can't physically lash out at every person or object that irritates or annoys us; laws, social norms, and common sense place limits on how far we can get away with our anger.

According to Marion (1997), the expression of anger can take many forms such as seeking revenge, venting, resisting, expressing dislike, avoiding the source of the anger, and seeking help. However, in many cultures, people are made to believe that while expressing anxiety, depression or other emotions could be acceptable, expressing anger is not. Because of this belief, many people never learn how to handle their own or others' anger effectively or to channel it constructively.

Gorkin (2000) distinguishes between the intention and the usefulness of expression of anger. In terms of intention, the expression of anger can be purposeful or spontaneous. The purposeful expression of anger is intentional, has a significant degree of consideration or calculation, and yields a high degree of self-control. The spontaneous expression of anger is immediate, has little premeditation, and yields little self-control. In terms of usefulness, the expression of anger can be constructive or destructive. Constructive expression of anger affirms and acknowledges one's integrity and boundaries without intention to threaten another person. Destructive expression of anger defensively projects and rigidly fortifies one's vulnerable identity and boundaries. These distinctions provide for four basic expressions of anger. Purposeful and constructive expression leads to assertion. Purposeful and destructive expression leads to hostility. Spontaneous and constructive expression leads to passion and suffering. And spontaneous and destructive expression leads to rage, violence, screaming, and hitting. With respect to rage, one can be outraged, by a seemingly clear and external target, or by a reaction to still unresolved internal hurts and humiliations brought about by actual, immediate stimulus-and-response provocation. (Sonkin & Durphy, 1992).

Although a lot of the works in anger management focus on helping people understand what triggers their anger and on learning a healthier response, or expression of that anger, the debate continues regarding the healthiest ways to express anger.

Schwartz (1990) indicates that repressing anger can be adaptive for coping with certain emotions. But for some people, suppression of anger can lead to headaches, hypertension, high blood pressure, depression, emotional disturbances, gastrointestinal disorders, respiratory disorders, skin disorders, genitourinary disorders, arthritis, disabilities of the nervous system, circulatory disorders, and even suicide. That is why it is important to identify whether or not a client's reactions to and expressions of anger are positive or negative.

People use a variety of both conscious and unconscious processes to deal with their angry feelings. According to Navaco (1975) the three main approaches are expressing, suppressing, and calming. Expressing your angry feelings in a peaceful assertive manner is quite healthy. To do this, you have to make clear what your needs are, and how to get them met, without hurting others. Being assertive doesn't mean being pushy or demanding; it means being respectful of yourself and others.

Anger can be suppressed temporarily, and then be converted or redirected into more constructive behavior. The danger in this type of response, declares Ellis (1985) is that if it is not allowed outward expression, your anger can turn inward on yourself and may cause hypertension, high blood pressure, or depression.

Hauk (1974) affirms that unexpressed anger can create other problems. It can lead to pathological expressions of anger, such as passive-aggressive behavior (getting back at people indirectly, without telling them why, rather than confronting them head-on) or a personality that seems perpetually cynical and hostile. People who are constantly putting others down, criticizing everything, and making cynical comments haven't learned how to constructively express their anger.

According to Wellness Reproductions (1991), there are three main methods of dealing with anger. First, there is "stuffing" of one's anger, a process in which a person may or may not admit his or her anger to self or others and in which one avoids direct confrontations. A person may stuff his or her anger out of fear of hurting someone, fear of rejection, fear of damaging relationships or fear of losing control. Often, a person who stuffs anger is unable to cope with strong, intense emotions and thinks that anger is inappropriate or unacceptable. Stuffing of one's anger typically results in impaired relationships and compromised physical and mental health. Second, there is escalating one's anger, a process in which a person provokes blame and shame. The purpose is to demonstrate power and strength while avoiding the expression of underlying emotions. A person who escalates his or her anger is often afraid of getting close to other people and lacks effective communication skills. Escalating one's anger typically yields short-term results, impaired relationships, and compromised physical and mental health. Sometimes, escalating one's anger also leads to physical destruction of property or to abusive situations, thus adding the potential for legal ramifications. Third, there is managing one's anger, a process in which a person is open, honest, and direct and in which one mobilizes oneself in a positive direction. The focus is on the specific behavior that triggered the anger and on the present. A person who manages his or her anger avoids black and white thinking, uses effective communication skills to share feelings and needs, checks for possible compromises, and assesses what is at stake by choosing to stay angry versus dealing with the anger. Managing one's anger results in an increased energy level, effective communication skills, strengthened relationships, improved physical and mental health, and boosted self-esteem.

### **Basic considerations in anger management**

Cultural Impact of Client's Natural Environment. Howells and Day (2003) highlight the importance of understanding the culture a client returns to upon leaving a counseling or training session. Will the culture support the behavior changes and thinking processes that the client has been learning? In some cases, the culture the client lives in day-to-day will not necessarily support the kinds of changes a client may be trying to make. Daily survival may be based on vastly different modes of operation than a client may be practicing in counseling. It is important to clarify which culture is in charge of the client's daily life and how it may affect a client's success in learning to manage anger more effectively.

Another consideration is the adequate transfer of skills learned in counseling to one's natural environment. This could be the classroom, the workplace, or even one's home. Besley (1999) conducted an experiment on transferring skills to the classroom environment of a student client and reported that change begins at a teachable moment, and four conditions are necessary for change: 1) the person is in an environment where he or she feels safe, 2) the person is supported and encouraged during the change process, 3) the environment is relevant to the person, and 4) the person is involved and has some degree of control in the change process. In a school setting, when a counselor has been working with a student individually to develop more effective anger management skills, there still remains the issue of encouraging the student to use the new skills outside the counseling sessions. One proven way to do this is to have the counselor sit in the classroom (or cafeteria or playground) with the student and be available to coach the student right at the moment(s) he or she becomes angry (Besley, 1999). The counselor can then coach the student's cognitive processes and help the student cope with impulsivity and, at the same time, model effective and useful skills for the other students and even the teacher.

### **Readiness for Anger Management Intervention**

The best anger management training delivered by the most qualified counselor will be ineffective if the client is not ready for anger management training. According to Howells & Day (2003), there are several different things that can impact readiness for anger management. Sometimes there are complex array of factors presenting with the anger problem. People with certain mental and personality disorders may also have an anger management problem. Or anger management and control may be a symptom of a serious mental or personality disorder.

Existing client inferences about their anger "problem" can impact their readiness. Some clients may view anger as an appropriate response to many situations and may believe that catharsis is the best approach (expressing anger is considered better than controlling it) or that angry responses get results (in reality, although angry outbursts sometimes generate desired short-term results, they rarely result in long-term change). According to Smedes (1984) attitudes of self-righteousness, low personal responsibility, blaming others, and condemning others also reduce readiness. For some clients, anger may not even be considered a problem. In fact, anger may be adaptive in certain settings for the client: it may bring with it many social benefits such as perceptions of higher status, strength, and competence. Unfortunately, these types of beliefs and perceptions can be difficult to uncover and assess.

The client's skill level also impacts readiness for effective treatment. People need certain cognitive processes with which to think about consequences and choices in order to improve anger management skills. Sometimes a person's impulsive nature will interfere with the application of such cognitive processes. Hankins (1993) observes that other issues that impact a client's readiness are difficulty judging the intent of others, underestimating one's own reaction to anger-provoking situations, wanting to blame conflict on others, an inability to distinguish one's feelings, and poor social and problem-solving skills.

Finally, the client's beliefs about treatment impact readiness. Even in coerced or mandatory treatment, if the client concurs with the need for treatment and perceives the treatment as likely to be helpful in meeting his or her goals, then coercion would not be a big issue. However, if the client believes the treatment is not likely to fulfill his or her personal goals, then coercion could definitely impact readiness.

### **Making use of peace counseling in managing anger:**

The goal of Peace Counseling in anger management is to reduce both the destructive emotional feelings and the dangerous physiological arousal caused by anger in conjunction with any of the appropriate counseling techniques. Even though it is not always possible to get rid of, or avoid, the things or the people that enrage you, neither is it possible for you to change them, but you can learn to control your own reactions. Many different strategies and skills for anger management intervention have been tried and tested. (Weisinger, 1985). The ones employed in this study are cognitive-behavioral interventions including relaxation coping skills, cognitive interventions, behavioral coping and social skills training, and problem-solving skills training.

**Research Questions:** Two questions were asked to guide the expected outcome of this study. These are:

- (1) Would Peace Counseling have significant effect on those who are exposed to it?
- (2) Would female participants benefit more from the treatment than male participants?

**Procedure:** 67 graduate students voluntarily participated in the study (80 students were involved initially). 37 of them were female while 30 were male. All of them had indicated high level of anger. They were randomly assigned into two groups of Treatment and Delayed Treatment/Control Groups after they had all responded to the questionnaire to collect the pre-test data. Those in treatment group (34 of them; 19 female and 15 male) were exposed to 5 sessions of Peace Counseling as a group. Those in delayed treatment were not exposed to Peace Counseling until later when the study had been completed. All the participants were given the same questionnaire again to respond to. The data gathered again was used as post-test scores (See Tables 1 and 2 for sampling distribution).

**Table 1:** Between-Subjects Factors

		<b>Value Label</b>	<b>N</b>
<b>Group</b>	1.00	treatment	34
	2.00	Control	33
<b>Gender</b>	1.00	Female	37
	2.00	Male	30

**Table 2:** Descriptive Statistics; Dependent Variable: posttest

Group	gender	Mean	Std. Deviation	N
Treatment	female	8.0000	2.35702	19
	male	7.1333	2.41622	15
	Total	7.6176	2.38702	34
Control	female	16.4444	5.13606	18
	male	17.6000	2.79796	15
	Total	16.9697	4.21667	33
Total	female	12.1081	5.79168	37
	male	12.3667	5.91015	30
	Total	12.2239	5.80183	67

### The index of anger questionnaire (IAQ)

Consists of 22 questions (apart from the biographical data which was optional except for the gender) that require the participants to answer either 'yes' or 'no' to each of the questions. IAQ was constructed by the researcher. It has a construct validity of .79 and test re-tests reliability of .82

- (a) Does your anger easily and quickly evolve into deep feelings of resentment?
- (b) Is your anger coupled with intense aggression or explosiveness?
- (c) Is the impact of anger on your emotions intense and situation-specific?
- (d) Is the impact of your anger on your emotions chronic and generalized?
- (e) Are you usually angry with people around you when you think they have done something wrong?
- (f) Is your anger a cover-up for fear, being used as a shield to keep other people at a distance so they are unable to see your insecurities and weaknesses?
- (g) Do you fail to assess repercussions before acting in different types of situations?
- (h) Do you excuse your anger?
- (i) Does it take you long time to recover from your initial anger reactions?
- (j) Has your anger become uncontrollable?
- (k) Do feelings of frustration and stress become outbursts of anger?
- (l) Do you wish you had more control over your emotions in stressful situations?
- (m) Do you often regret your actions when you loose your temper and wish you had handled the situation differently?
- (n) Do other students or lecturers view your anger as unbecoming?
- (o) Are angry outbursts and confrontations straining your relationship with your family?
- (p) Does your anger disrupt your thinking?
- (q) Does your anger affect your academic performance?
- (r) Do you withdraw socially from family and friends when you are angry?
- (s) Do you beat people when you are angry?
- (t) Do you engage in self-injury when angry?
- (u) Do you destroy things when angry?
- (v) Do you experience increased heart beat when you are angry?

The participants in the Treatment Group were exposed to group counseling for 5 sessions. A session was 2 hours, once a week. The first session was used for introduction and explanation of the treatment program-the purpose and the process. Then they were taught some relaxation techniques because according to Dahlen and Deffenbacher (2001), relaxation coping skills target both the emotional and physiological arousal associated with anger with the intent being to lower the anger arousal. The participants were asked to do deep breathing and to engage in visualizing relaxing imagery. Some of the instructions include:

- Sit at ease and relax your body.
- Breathe deeply, from your diaphragm because breathing from your chest won't relax you. Picture your breath coming up and out
- Slowly repeat a calm word or phrase such as "peace." Repeat it to yourself while breathing deeply.
- Use imagery; visualize a relaxing experience, from either your memory or your imagination.
- Move your hands slowly; then your legs slowly; slow exercises to relax your muscles and make you feel much calmer.

Participants were asked to practice these techniques daily and were told to use them automatically when they are in a tense situation.

The second session was used to practice what was learnt at the first session and then they were taught how to use cognitive restructuring. This involves changing the way they think because angry people tend to curse, swear, or speak harshly. Behavioral coping and social skills training target the actual expression of anger. When someone is angry, his/her thinking can become exaggerated and overly dramatic. So the participants in the treatment group were taught to replace violent thoughts with more peaceful ones. For instance, instead of saying, "oh, this is terrible, everything is ruined," they should say something like, "Well, it's not the way I want it to be, and it's understandable that I'm upset about it, but it's not the end of the world and getting angry is not going to solve the problem anyhow, so I need to relax and move on". They were instructed to be careful of words like "never" or "always" when talking about themselves or someone else.

The third session of Peace Counseling was for further teachings and the practice of peaceful communication. The group revised what had been done in the last two sessions and practice using peaceful words on themselves and others.

The first thing they were asked to do in a heated discussion is to slow down and think through their responses. They are not to say the first thing that comes into their mind, but to slow down and think carefully about what they want to say. At the same time, to listen carefully to what the other person is saying and take time before answering.

Humor was the subject matter of the fourth session after the revision of the previous process. This is because humor has also been found to be helpful when it is used constructively to help face problems but sarcastic humor according to Goldstein and Glick, (1987), is just another form of unhealthy anger expression. The participants were told to picture themselves as the leader in the school striding alone and having their way in all situations while others just look on like robots, then they should also realize how unimportant the things they are angry about really are. They were told to be cautious in using humor. They are not to just be "laughing off" their problems; rather, they are to use humor to help them face their problems more constructively. Also they are not to give in to harsh expression.

During the fifth and last session, a recap of what had been learnt was done and the participants were asked to comment freely. Afterwards, the IAQ was administered again to obtain post-test scores.

The pre-test and the post-test scores of both the Treatment and the Control Groups were computer-analysed using the Analysis of Covariance (ANCOVA) and the General Linear Modal statistics. A response of 'Yes' attracted a score of 1 point anger whereas 'No' attracted 0 point anger. The low mean score is better for the participants.

**The results:** The comparison of the Treatment and the control groups with tests of between subjects showed a significant difference with  $F = 71.816$  (Table 3). This was further supported by Tables 5 which shows that the Treatment group had a mean of 13.12 while the Control group had a mean of 17.91; Table 6 which indicates the Pairwise Comparison of the difference between the 2 group means; and Table 7 that also shows the General Linear Modal F to be 71.816

**Table 3:** Tests of Between-Subjects Effects; Transformed Variable: Average

Source	Type III Sum of Squares	DF	Mean Square	F	Sig.
Intercept	31920.304	1	31920.304	3009.095	.000
gender	.062	1	.062	.006	.939
group	761.818	1	761.818	71.816	.000
gender * group	12.094	1	12.094	1.140	.290
Error	668.300	63	10.608		

**Table 5:** Measure of the Treatment and the Control Group Means and the Standard Error at 95% Confidence Level

Group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Treatment	13.125	.398	12.329	13.918
control	17.91	.403	17.115	18.724

**Table 6:** Pairwise Comparison of the Difference between the Treatment and the control Group means

Goup1	Group2	Mean Diff.	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
Treatment	Control	-4.796	.566	.000*	-5.927	-3.665
Control	Treatment	4.796	.566	.000*	3.665	5.927

The mean difference is significant at the .05 level.

**Table 7:** The F test of the group effect

	Sum of Squares	DF	Mean Square	F	Sig.
Contrast	380.909	1	380.909	71.816	.000
Error	334.150	63	5.304		

The F tests the effect of group and is based on the linearly independent pairwise comparisons among the estimated marginal means.

Also for pre- and post means, a significant difference was revealed as shown in Table 4 where the tests of within subjects contrasts pre- and post-test shows  $F=232.44$ ; Table 8 that shows the pre- and post-test means to be 18.749 and 12.294 respectively; Table 9 that indicates the Pairwise Comparison of the difference between the pre- and post-test means to be 6.454; and Table 10 that shows the Multivariate F tests of the pre- and post-test means to be the same  $F=232.494$

**Table 4:** Tests of Within-Subjects Contrasts

Source	time	Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Linear	1379.832	1	1379.832	232.494	.000
time * gender	Linear	1.165	1	1.165	.196	.659
time * group	Linear	719.233	1	719.233	121.187	.000
time * gender * group	Linear	5.483	1	5.483	.924	.340
Error(time)	Linear	373.900	63	5.935		

**Table 8:** Pre-and post-test Means

Time	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Pre-test	18.749	.269	18.211	19.287
Post-test	12.294	.421	11.453	13.136

**Table 9:** Pairwise Comparison of the Difference between the Pre-and Post-test means

Goup1	Group2	Mean Diff.	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
Pre-test	Post-test	6.454	.423	.000*	5.608	7.301
Post-test	Pre-test	-6.454	.423	.000*	-7.301	-5.608

The mean difference is significant at the .05 level.

**Table 10:** Multivariate F Tests of Pre- and Post-test Means

	Value	F	Hypothesis df	Error df	Sig.
Pillai's trace	.787	232.494(a)	1.000	63.000	.000
Wilks' lambda	.213	232.494(a)	1.000	63.000	.000
Hotelling's trace	3.690	232.494(a)	1.000	63.000	.000
Roy's largest root	3.690	232.494(a)	1.000	63.000	.000

Each F tests the multivariate effect of time. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.  
A=Exact statistic

Finally, the results reveal no significant difference due to gender. Tables 3 and 4 that indicate the between and the within groups difference of  $F= .006$  and  $F= .196$ ; Table 11 shows the overall female and male mean of 15.543 and 15.500 respectively; Table 12 highlights the Pairwise comparison of the difference between

the mean for the female and the male, which is just .043; Table 13 contains the F test that measure the effect of gender to also be  $F=.006$ ; The General Linear Modal also show no significant difference due to gender with the female in the Treatment group having a mean of 13.447 and standard error of .528 while the male in that group had 12.800 with standard error of .595, the female in the Control group had a mean of 17.639 with a standard error of .543 while the male in that same group also had a mean of 18.200 with a standard error of .595. All of these at 95% confidence interval for difference.

**Table 11:** Comparisons of Means based on Gender

Gender	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Female	15.543	.379	14.786	16.300
Male	15.500	.420	14.660	16.340

**Table 12:** Pairwise Comparison of the Difference between the Mean of the Scores of Female and the Male Participants in the Treatment and the Control Group.

Gender1	Gender2	Mean Diff.	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
Female	Male	.043	.566	.939	-1.088	1.174
Male	Female	.043	.566	.939	-1.174	1.088

The mean difference is not significant. Based on estimated marginal means, adjustment for multiple comparisons showed least significant difference equivalent to no adjustment

**Table 13:** The F test Measuring the Effect of Gender

	Sum of Squares	Degree of Freedom	Mean Square	F	Sig.
Contrast	.031	1	.031	.006	.939
Error	334.150	63	5.304		

This test is based on the linearly independent pairwise comparisons among the estimated marginal means. No significant difference emerged.

**Table 14:** Analysis of the Gender Means within the Groups

Gender	Group	Mean	Std. Error	95% Confidence Interval for Difference	
				Lower Bound	Upper Bound
Female	Treatment	13.447	.528	12.392	14.503
	Control	17.639	.543	16.554	18.724
Male	Treatment	12.800	.595	11.612	13.988
	Control	18.200	.595	17.012	19.388

## Discussion of the results

The results showed a statistically significant difference in the pre- and post-test means of the participants and specifically indicated that there was a significant difference in the post-test means of the Treatment group compared with the Control group. This implies that Peace Counseling helped to reduce the manifestations of anger. This finding is in agreement with Wampold (2001) who found out that counseling works. He recorded that the average client who gets counseling is better off than 79% of similar people who do not receive counseling. He based this figure on a statistical technique called meta-analysis that allows researcher to put together the results of many studies that compare treatment with no treatment. Furthermore, Nicholas and Berman (1983) declared that the gains clients make in therapy are immense.

Counselors can explore the personal goals of the client and help the client become aware of any discrepancies between the actual social consequences of their anger expression and the pursuit of their personal goals. Counselors can work to incorporate the client's goals and treatment plan into the values and goals of the existing informal culture of the client. Counselors can also help clients build appropriate interpersonal and cognitive skills and develop an appropriate vocabulary for communicating triggers, thoughts, emotions, and behaviors. You can use Peace counseling techniques to get immediate relief from the effects of anger and hate

whenever you feel you are losing control of your anger. It also helps you to easily break the patterns of thought and behavior that cause this form of self-sabotage to reoccur. When you perceive you are about to lose control, simply speak to yourself some peaceful statements that form the basis of Peace Counseling, and you will feel the tightness leaving your stomach, shoulders and chest. In its place, you will feel peace, relaxation and confidence. You will no longer feel angry and out of control, stressed and frustrated. When you are more relaxed, you will be able to handle whatever life brings across your path more easily. The noise of your mind will subside, and you will have the clarity of mind to say and do things in nonviolent ways. You can calm down inside and have peace within. This means not just controlling your outward behavior, but also controlling your internal responses, taking steps to lower your heart rate, calm yourself down, and let the feelings of anger subside and give way to peaceful feelings.

## **Conclusion**

Peace is an antidote for anger. Whereas anger is a common natural experience when expressed in a healthy manner but some people are managed by their anger in unhealthy ways. There are many skills, strategies, and structured programs known to help people improve how they deal with anger, there are many factors to consider when selecting an effective intervention. In addition to understanding the expression, function, source, and resulting problems of a client's anger, Counselors can also attempt to understand the client's cultural needs with respect to dealing with the problem, the ability of the client to transfer new skills to their daily environments, and the client's readiness and skill level for dealing with the problem.

The process of managing one's anger in a peaceful way is the primary goal of Peace counseling. The expected outcome is for people to effectively deal with their anger. After a client acknowledges he or she is angry, a counselor can help the client learn how to reduce the emotional and physiological arousal that anger causes and learn to control its effects on himself/herself, on other people, and the environment. To be more effective counselors should endeavor to understand the domain the problems occur in, whether emotional, physiological, or cognitive. Prevention is better and easier than cure attempted after the damage has been done. The recognition of the predictors of anger and taking steps to modify the behavior patterns before it is too late is therefore of great importance. You need to be aware of the pattern of your anger. Anger can not be totally eliminated because in spite of all efforts, things will happen that will cause anger; and sometimes it will be justifiable anger but it could be put under control and be peacefully expressed. Life is filled with series of frustrating events, pain, loss, and the unpredictable actions of others. Even though you can't change that; but you can change the way you let such events affect you. You can choose to be a peaceful person.

## References

- [1] Besley, K. R. (1999) Anger management: Immediate intervention by Counselor coach. *Professional school counseling*, 3 (2), 81-90.
- [2] Carkhuff, R.R. (2000) *The art of helping in the 21<sup>st</sup> century (8<sup>th</sup> Edn)* (Amherst MA, Human Resource Development Press).
- [3] Dahlen, E. R. & Deffenbacher, J. L. (2001) Anger management, in W. J. Lyddon & J.V. Jones, Jr. (Eds) *Empirically supported cognitive therapies: Current and future applications* (New York, Springer Publishing Company), 163-181.
- [4] Ellis, A. (1985) *Anger: How to live with and without it* (Secaucus NJ, Carol Publishing Group).
- [5] Frank, J. D., and Frank, J.B. (1991) *Persuasion and healing: A comparative study of psychotherapy (3<sup>rd</sup> Edn)* (Baltimore, John Hopkins University Press).
- [6] Goldstein, A. P. & Glick, B. (1987) *Aggression replacement training: A comprehensive intervention for aggressive youth*, (Champaign IL, Research Press).
- [7] Gorkin, M. (2000) The four faces of anger. Available on line at <http://www.selfhelpmagazine.com/articles/growth/facesofanger.html> (accessed 30 September 2005).
- [8] Hankins, G. (1993) *Prescription for anger* (New York, Warner Books).
- [9] Hauck, P. (1974) *Overcoming frustration and anger* (Philadelphia PA, Westminster Press).
- [10] Howells, K. & Day, A. (2003) Readiness for anger management: Clinical and theoretical issues, *Clinical Psychology Review*, 23, 319-337.
- [11] Marion, M. (1997) Guiding young children's understanding and management of anger, *Young Children*, 52 (7), 62-67. Messina, J. J. (1989) *Tools for anger workout* (Tampa FA, Advanced Development Systems, Inc).
- [12] Navaco, R. (1975) *Anger control: The development and evaluation of an experimental treatment* (Lexington Mass., Lexington Books).
- [13] Nicholas, R.A & Berman, J.S. (1983) Is follow up necessary in evaluating psychotherapy? *Psychological Bulletin*, 93, 261-278.
- [14] Paymar, M. (1993) *Violent no more* (Alameda CA, Hunter House).
- [15] Potter-Efron, R. (1994) *Angry all the time: An emergency guide to anger control* (Oakland CA, New Harbinger Press).
- [16] Rogers, C. (1951) *Client-centered therapy: Its current practice, implications and theory* (Boston, Houghton Mifflin).
- [17] Schwartz, G. E. (1990). Psychobiology of repression and health: A systems approach. In J. L. Singer (Ed) *Repression and dissociation: Implications for personality theory, psychopathology, and health*. (Chicago, University of Chicago Press).
- [18] Smedes, L. (1984) *Forgive and forget: Healing the hurts we don't deserve*. (San Francisco, Harper & Row, Inc).
- [19] Sonkin, D. J. & Durphy, M. (1992) *Learning to live without violence: A handbook for men* (Volcano CA, Volcano Press).
- [20] Wampold, B.E. (2001) *The great psychotherapy debate; Models, methods, and findings* (Mahwah NJ, Lawrence Erlbaum Associates).
- [21] Weisinger, H. D. (1985) *Dr. Weisinger's anger work-out book* (New York, William Morrow).
- [22] Wellness Reproductions (1991) Anger management. Available on line at <http://www.mun.ca/student/answers/wellnessed/angermanagement.php> (accessed 30 September 2005).