

## **Conflict Handling Model to Improved Productivity in Schools, Batticaloa District, Sri Lanka.**

**Mr. Shandru Mariyadas**  
PhD Research scholar  
Dept. of Education, DDE  
Alagappa university  
Karaikudi, Tamil Nadu, India

**Dr. AR. Saravanakumar**  
Asst Professor  
Dept. of Education, DDE  
Alagappa university  
Karaikudi, Tamil Nadu, India.

### **Abstract**

*Conflict situations are a reasonably frequent realism in every organization and eat deep into the system and performance of an organization affected. Several scholars have previously studied the source and effects of conflict handling styles on the performance of staff and arguments has erupted on the destructive nature of conflict and as well as it productivity. This research was on the whole captured on Batticaloa district school principals as managers to ascertain how they deal with conflict which they already view as inevitable. Using a self-designed questionnaire 507 responses were obtained from Batticaloa district school principals and vice - principals across selected schools from the data it was discovered that traditional view of conflict ranks the highest in Batticaloa district schools as a work place. Four research questions were formulated for the research and data responses were analyzed using mean and standard deviation. From the study, Batticaloa schools principals are relevant more of collaborating, accommodating and compromising styles in handling conflict. The study further recommended 3D leadership model which is referred to as situational demand and the practical application of principle negotiation in dealing with conflict for improve productivity in Batticaloa district schools as a work place in Sri Lanka.*

**Keywords:** Conflict, Styles, Productivity, Model

### **1. INTRODUCTION**

Conflicts are ineluctable in any work environment; it is seen as part of working relationship between subordinates. For a work environment to be conducive and productive there must be cooperation between subordinates for positive results to be achieved. [1], opined that conflicts involve the total range of behaviors and attitudes that is in opposition between principals/managers, on the other hand employee. [2], states that conflict may be interpersonal or intergroup with interpersonal conflicts occurring between a supervisor and his subordinate or between individuals at the same level of organizational hierarchy. Nigeria has a diversified background, therefore its work environment comprises of individuals with different perception, personalities, interests, goal and values. [3], states that achievement of organization goals require cooperation among members but the inherent differences, the compatibility of goals and the competition for limited resources coupled with “complex relationship and high degree of tax interdependence” imply that conflict would be inevitable. [4], Refers to conflict as a situation in which there are incompatible goals, cognition or emotion within or between individuals

or groups that lead to opposition. This definition recognizes three basic types of conflict which are goal conflict which arises when the desired outcomes are incompatible between groups, cognitive and affective conflict. Conflict has both positive and negative effect on organization that is why there is a need for effective conflict management strategy. However, several scholars have defined conflict from different perspective, Wikipedia refers to conflict as some form of friction, or discord arising within a group when the beliefs or actions of one or more members of another group are either resisted by or unacceptable to one or more members of the group.

**1.1 Components of conflicts**

According to [5], ABC triangle is a useful tool for understanding the different components of conflict. With this tool the ingredient involved in a conflict can be distinguished, it also helps in understanding the significant aspect of conflict and provides clues on how to handle it.

**Fig.1.Components of conflicts**

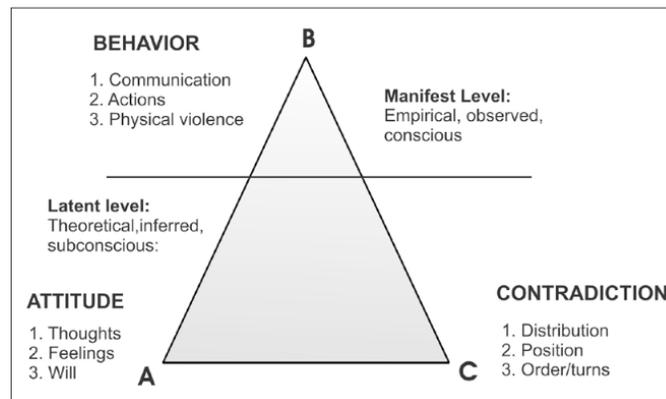


Fig. 1 Source: [6]

Fig. 1.shows the components placed in three corners of a triangle to illustrate the mutual relationship Furthermore [7], stated that the psychology behind the development of conflict is considered to be similar at the micro and macro levels. This implies that the triangle can be applied at all levels, groups, individual and states.

**1.2 Types of Conflicts**

Conflict can include clashing material interests, a lack of material benefits, differences in identity, ideological or spiritual outlook, stereotypes and prejudices, frustrations with interpersonal relations, or a lack of knowledge, skills and experience, culture, norms and values. Etc. There are many ways to classify conflict based on understanding as classification into type’s aids in understanding the nature of conflict and how to deal with it. It also provides ideas on what to consider when preparing for negotiation during conflict.

**Fig. 2: Types of conflict**

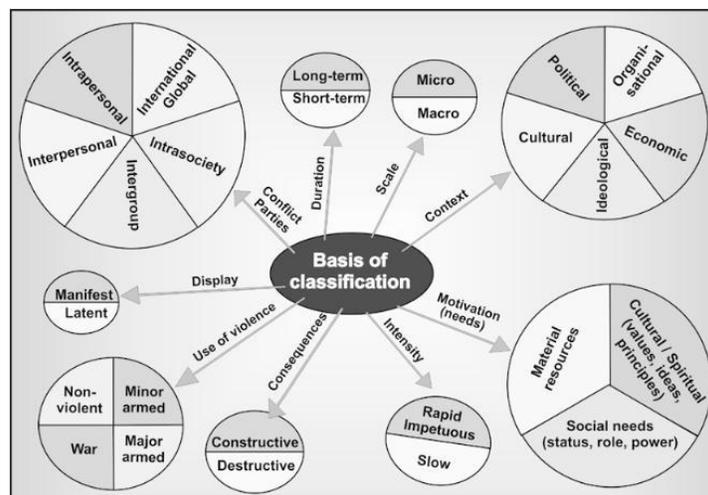


Fig 2 Source: [8]

Conflict handling is an attempt to control or regulate conflict through a number of applicable measures. [9], averred that conflict management strategies refer to the internal mechanisms used by the various authorities in resolving conflict. [10] states that constructively managed conflict induces a positive performance while poorly managed conflict heats up the environment to bring about dislocation of the entire group and polarization, reduced productivity on job performance, psychological and physical injury, emotional distress and inability to sleep, interference with problem activities, escalation of differences into antagonistic position and malice and increased hostility. [11] Emphasized that through an effective conflict management, a cooperative atmosphere is created to promote opportunities and movements are directed towards non-violent, reconciliation or basic clashing interest [12], opined that there are productive and destructive conflicts in workplace, “conflict is said to be positive when it is constructively discussed by the parties and amicable terms for settlement reached”. He stated that constructively managed conflict in schools as a workplace induces a positive staff (teachers) performance while poorly managed conflict lowers employees morale, reduces employees productivity, increase employee absenteeism, increase the chances of losing skilled personnel, leads to loss of man and machine hours, and may lead to an increase in the number of defective products produced due to lack of employees commitment to work. Batticaloa district is a “society with low synergy, with many in-groups and inter-groups conflicts”. He further explained that in-groups may be ethnic, religious or geo-political, which tend to keep and maintain relationship within their closed network, regarding all other strangers. Four types of school managements and different grades of principal appointments are included in this area. In this light, conflict is inevitable in Batticaloa schools. This study examines the conflict handling styles and to ascertain how it affects the productivity of school, staff and students, thereby recommending the best strategy to handle it effectively.

### 1.3 OBJECTIVE OF THE STUDY

#### Main Objective

The main objective of the study is to find the **Conflict Handling Model for Principals to Improved Productivity in Batticaloa District schools** effectiveness between staff satisfaction and principal’s management. **The specific objectives are as follows;**

- To identify the customs practiced conflict handling styles in Batticaloa district schools?
- To estimate the conflicts is common in Batticaloa schools.
- To evaluate, conflict affect the performance and productivity of Batticaloa school staff and students
- To call out the principal as a managers in Batticaloa district, discernment the inevitability of conflict

### 1.4 PURPOSE AND RATIONALE FOR THE STUDY

This study examines the conflict handling styles in Batticaloa schools and to ascertain how it affects the productivity of staff and students, thereby recommending the best working strategies to handle it effectively. Specifically, it is based on the conflict handling styles by principals (managers, superiors, supervisors) and how they manipulate the styles in any conflict situation in other not to affect the productivity of their staff (workers). Conflict is a threat that eats deep into any workplace that is affected. It’s also a deadly virus that affects the productivity and economic growth of an organization. Batticaloa district schools are not exempted as different forms of conflict evolve in the workplace due to diversified culture e.g. Religion, groups, political parties and individual. It is also on record that Sri Lankan economy fluctuates due to conflict between labor union and the government. However, it is pertinent that the best conflict handling style is studied and identified for peaceful co-existence, and improved productivity.

### 1.5 RESEARCH QUESTIONS

Below are the research questions for the study: \*what are the customs practiced conflict handling styles in Batticaloa schools? \*What kind of view of conflict is common in Batticaloa schools? \*Does conflict affect the performance and productivity of Batticaloa school staff and students? \*How does principal as managers in Batticaloa district, discernment the inevitability of conflict?

## 2. LITERATURE REVIEW

According to Thomas-kilman’s MODE instrument, there are five modes of handling conflicts and two dimensions of behavior. [14] Conflict handling styles are *competing* (assertive and uncooperative), it concerns individual that sacrifices his interest at the expense of the other party. *Collaborating* (assertive and cooperative), is the action and

willingness to work with the parties satisfactorily. *Compromising* (falls in the middle), is in-between assertive and cooperativeness, this mode applies an acceptance solution that satisfies the parties partially. *Avoiding* (unassertive and uncooperative) this mode has no concern for self or others. *Accommodating* (unassertive and cooperative) deals with self-sacrifice from individual to the detriment of own's interest.

[15], embark on a survey using the conflict communication model and discovered that managers are viewed disparately on their effectiveness and appropriateness in handling conflicts. They further pinpoint different handling styles after selected 100 students aired their views, that integrative style is most appropriate. [16], the research examined 3 types of conflict handling styles among teams in an organization, suggesting how teams should handle conflict that involves interpersonal issues, political, norms and values. As these conflicts were affect the effectiveness and satisfaction of teams in an organization. The researchers applied heterogeneous sample of team's performance to study collaborating, contending and avoiding styles of conflict management. It was discovered that relationship conflicts is negative to team effectiveness and functioning when collaborating and contending styles are applied. Avoiding style shows that the team effectiveness and functioned it on the high rate and also task are achievable. While [17] discovered that the use of more integrative conflict management strategies are likely to have higher commitment than teams using other styles while it was noted that a supportive leader engenders respect, job satisfaction and higher productivity from his staff or authoritarian leaders, even if productivity is higher in the short run, it is bound to fall in long run. [18], [19] commented on the integrating style of handling conflict which shows that this style results in high joint benefits for parties. [20], opined that the nature of leadership power in an organization mediates the needs of conflict management strategies. However [21], states that organizational stability may maintain even when the leader is low in conflict management because worker sometimes exhibit acceptance behavior over the supervisor's attitude thus reflecting apathy and subjugation with the little manifestation of aggression. [22], applied three simulated business negotiations to explore the nature of conflict management styles in china and to examine the effects of different styles in the negotiation process and outcomes. Thomas-kilman mode instrument was applied when measuring the styles while other methods were used for negotiation process and outcomes. During business negotiation in china, it was revealed that accommodating and competing results in more mutual understanding while compromising and avoiding are mostly the applicable style in handling conflict in Chinese organizations. In their study [23], pointed that trust in relationships are paramount in building team's productivity level. The study suggested that Cooperative management of conflict aids teams to believe and trust their teammates. Data analyses from 102 organizations in China indicates that the manner at which teams handles conflicts within themselves affects team conflict management. It was discovered that cooperative conflicts, assist teams in managing their conflicts cooperatively and this in turn improves team's performance. Recommending advised that support should be provided when handling conflicts; it's paramount to building trust, healthy and productive working relationship in china. [24], examined the effects of organizational conflict on performance in Batticaloa district schools as workplace, with the aim of suggesting tested methods that will enhance performance and productivity of staffs (workers). The study captured types, causes and strategies for handling conflicts in some organization namely insurance companies, transport companies and airlines. 96 managers were picked and the outcome from the investigation proved that finite resources were basically one of the main causes of conflict. Furthermore, they stated that conflict can affect an organization positively or negatively depending on how it is viewed and handled. When handle appropriately the result is seen on the cooperation of employee and the metamorphosis.

### **3. METHODOLOGY**

This study showcased the views of conflict by principals as a managers, the choice of handling styles, awareness of conflict inevitability and how it affects productivity. The survey research method were incorporated which captured the responses of 710 Batticaloa district school principals, deputy principals and Supervisors cut across organizations. 507 were properly responded and captured while 203 were not reachable due to the corona issues, schools as under taken by central government and provincial government located in Batticaloa district, Sri Lanka. Though, the research was not limited to the aforementioned, quality of experience and gender was not left out. The purpose for the circulation was to capture and analyze the response of principals as managers in Batticaloa district.

Sampling and Data collection

### 3.1 No. of Schools by Divisional Level according to Educational zone and Educational Division by District

Educational zone and Educational Division within Batticaloa District	Number of data selection				
	No of schools	No. of principals	No. of deputy principals	Total No. of school managers	Randomly selected principals
Paddiruppu zone	69	69	69	138	90
Batticaloa central zone	79	79	79	158	110
Batticaloa zone	64	64	64	128	90
Batticaloa west zone	65	65	65	130	90
Kalkudah zone	83	83	83	166	127

Source : divisional education office – Batticaloa district

**Note:** Situation was created to choose the schools which consists more number of staff as being the number of variables and factors are higher in this study. Through which, conflicts based on individual and managerial drawbacks have been collected as well. Therefore, 507 principals and deputy principals was selected by Random sampling method has encouraged to ensuring the possibilities of getting equal chances by individuals. Some Difficult areas schools almost 350 questionnaires were sent by through email and post, because of the schools which were situated more difficult area in Batticaloa district.

## 4. RESEARCH INSTRUMENTS AND ANALIZING

4.1 Respondent data are below According to Gender

Sex	Respondent	percentage
Male	316	62.3%
Female	168	37.7%
Total	507	100%

**Answers to research questions** Below are the research questions and the survey result

1. What are the custom practiced conflict handling styles in Batticaloa district schools for improved productivity?

Table 1.01 explains the mean and standard deviation of conflict handling styles in Batticaloa district schools.

**Table 1.01** Conflict handling styles in Batticaloa district schools

S/N	Management Styles	5	4	3	2	1	N	$\bar{x}$
1	Collaborating	267	141	89	8	-	505	4.32
2	Accommodating	88	185	155	60	15	503	3.53
3	Compromising	80	157	177	68	21	503	3.40
4	Dominating	35	124	181	133	31	504	3.00
5	Avoiding	58	89	179	128	49	503	2.96

Source: Computer Analysis of field survey data 2021

Key: N represents responses per style,  $\bar{x}$  represents mean.

The table above indicates that the custom practiced conflict handling styles in Batticaloa schools has collaborating as the most applied style with a mean 4.3 while 3.53 and 3.40 mean represents accommodating and compromising styles which is seen as fairly used from the data. Collaborating is generally the best conflict handling style worldwide but it solely depends on situation. Collaborating has the interest of both parties thereby making it mutually satisfactory and productive. Avoiding is kind of “cold war” where both parties do not care and believe that time will heal the wound. It is the least effective style and Batticaloa school principals hardly adopt the style as it destroys the productivity and motivation of the staff.

2. What kind of view of conflict is common in Batticaloa district schools? Response shown in Table 1.02

**Table 1.02** Views of conflict in Batticaloa schools as workplace.

S/N	Views of conflict	5	4	3	2	1	N	$\bar{x}$
1	Traditional	198	139	102	45	17	501	3.91
2	Behavioral	137	129	144	58	32	500	3.56
3	Interactions	76	158	199	51	16	500	3.45

Source: Computer Analysis of field survey data 2021

As seen from the table 1.02, traditional view ranks the highest in Batticaloa schools as workplace. It is also assumed that all conflicts are essentially dangerous and should be practically avoided at all cost. In the light of the above table, all 3 views are treated and handled differently in other not to affect productivity of staff.

3. Does conflict affect the productivity of school staff and students?

Response shown in Table 1.03

**Table 1.03** Effect of conflict on productivity

S/N	Effect of conflict	5	4	3	2	1	N	$\bar{x}$
1	Slightly affects productivity	79	66	201	128	30	504	3.07
2	Totally affect s productivity	170	139	133	48	10	500	3.82
3	Does not affect productivity	54	64	105	207	73	503	2.64

Source: Computer Analysis of field survey data 2021

From the field survey data analysis, it shows that conflict affects the productivity of Batticaloa school staff (workers); it can either affect productivity positively or negatively. The study corroborates with previous research embarked by [23] which states that conflicts not resolved properly can lead to poor performance, lack of cooperation, waste of resources and above all productivity but when resolved properly can build cooperation among teams, encourage organizational innovativeness.

4. How do principals in Batticaloa district discernment the inevitability of conflict in a workplace? Response shown in Table 1.04

**Table 1.04** Awareness of inevitability of conflict in a workplace

S/N	Awareness	5	4	3	2	1	N	$\bar{x}$
1	Aware of inevitability	78	202	163	59	24	502	3.64
2	Unaware of inevitability	28	61	247	128	36	500	2.83

Source: Computer Analysis of field survey data 2021

Both the staff (employee) and their principals (managers) strongly agree with the fact that conflicts are inevitable in Batticaloa district schools as a workplace. In other words, this propels them to put the right mechanism in place to either avoid it or handle it once it arises. The awareness does not in any way affect the workers performances rather it prepares them for the ineluctability. However, the result of this study have been supported by previous similar studies [26], [16], they observed that corporative conflict management strategies tends to yield beneficial outcomes in the workplace unlike the other management styles. And this study still concurs to that and also added that styles are prevalent to the manager and the parties involved. This study can be used as a resource material for further research in the future.

## 5. RECOMMENDATIONS & CONCLUSION

- **Conflict Handling Model**

Is very obvious from the findings and survey that Batticaloa district school principals (managers) apply collaborating style in handling conflicts at schools as a workplace for improved productivity. The traditional view

which is common in here sees conflict as a cankerworm that must be avoided. Productivity aspect is seen on the positive and negative dimensions which the managers must handle properly. Above all Nigerian managers have the mindset of conflict inevitability in a workplace; this prepares them to handle it. The purpose of this study is to look inward into the conflict handling styles of Nigerian managers with the aim to proffer and recommend an approved model that will handle the situation and improve the productivity of workers. The model styled is *3D leadership model* for handling conflicts; the model was developed by *Prof Bill Reddin*. The model is also known as “*situational demand*”, where the 3 dimensions represent *Task orientation, relationship orientation and effectiveness*. Managers differ and conflict changes, the Reddin method applies self-control to one’s behavior and thereby influences others in a positive way. The model theory states that managers must assess the problem and identify the action that is more likely to resolve it, and it also relates the effectiveness of the manager to the act of using the best style. This model implies that every conflict no matter the cause must be handled differently considering the situation. [27] Emphasized that principle negotiation shows how to obtain what you are entitled to and still be decent. It enables managers to be fair while protecting him against those who would take advantage of their fairness. Below are major strategies applicable to conflict handling by [27], managers must take note of these basic points.

**People:**-Separate the staff from the problem

**Interest:**-focus on interest not position

**Options:** - generate a variety of possibilities before deciding what to do (invent options for mutual gain)

**Criteria:**-Insist that the result be based on some objective standard (insist on using objective criteria)

**Stages of principle negotiation** *Analysis Stage:* - Principals (Managers) must diagnose the source of the problem, retrieve more information’s, this aspect helps the manager to view the situation in other to identify the style to handle it properly. *Planning Stage:* - Deals with the aforementioned basic point (staff, Interest, option & criteria) both generating ideas and deciding what to do. The principal at this point generate additional criteria for deciding among the parties involved.

*Discussion Stage:* - involves having a round table with the parties where both interest are considered using the above basic points during the discussion. Conflict is either functional or dysfunctional depending on the handling style the manager applied. The above strategies are applicable to 3D model of situational demand where the managers as principals effectiveness is viewed from the way the conflict is handled. The model is a guide and can be applied to any conflict at workplace as a school; feedback on the outcome of the conflict is also encouraged for a better understanding of the situation. Batticaloa school managers need to think like there is no box in when handling conflicts in other to achieve the desired result. However, a manager that is pronounced effective must know how to practically swing in between conflict handling styles in other to arrest the situation.

## References

- O.Azamosa, Industrial conflict in Nigeria universities: The case of the academic staff union of the university teacher’s strike of December 2002-June 2003. Department of Sociology, Anthropology and Applied Social Sciences, Bristol University, 2004.
- M.A.Rahim ,Managing conflicts in organization (Westport, C.T. Quorum 3rdEdition,2001).
- H.Weihrich, M.Cannice&H.Koontz, Management: A global and entrepreneurial perspective (13th ed., New Delhi: Tata McGraw Hill, 2011).
- O.Uya, Nigeria: The land and the people (Buenos Aires ; Edi Public S.A, 1992).
- J.Galtung, Conflict as a Way of Life, in Galtung J. (ed.), Peace and Social Structure: Essays in Peace Research, Vol. III (Ejlers, Copenhagen, 1978).
- J.Galtung , Peace by peaceful means: peace and conflict, development and civilization (Sage, London, p. 72, 1997).
- J. Galtung is a Norwegian sociologist and a principal founder of the discipline of peace and conflict studies. For more information, see [www.transcend.org](http://www.transcend.org).
- Understanding conflict - Council of Europe. Available from <https://pjp-eu.coe.int/...Understandingconflict.../0f63c846-6942-4e8f-83c0-3626f2f7>

- T.O.Adeyemi, and S.O.Ademilua, Conflict management strategies and administrative effectiveness in Nigeria universities. *Journal of Emerging Trends in Educational Research and policy: Scholar link Research Institute Journal*, 3(3), 2012, 368-37.
- T.Akaniji, Perspectives on Workplace Conflict Management and New Approaches for the Twenty- First Century. In Albert, I. O. (Ed) *Perspectives on Peace and Conflict in Africa Essays in Honour of General (Dr.) Abdusalami A. Abubakar*( Ibadan: John Arches Publishers 2005).
- C.CUchendu, F.N Anijaobi- Idem and F.N Odigwe , Conflict management and organizational performance in secondary schools in Cross River State:Research *Journal in Organizational Psychology and Educational Studies: Emerging Academy Resources*, 2(2), 2013, 67-71.
- I.O Albert, *Introduction to Third Party Intervention in Community Conflicts* (Ibadan: John Arches Publishers,2011)
- E.Ozkalp, Z.Sungur&A.AOzdemir ,Conflict management styles of Turkish managers, *Journal of European Industrial Training*, Vol.33, No.4, 2009,pp. 359-381.
- K.WThomas & R.H Kilmann, *Thomas-Kilmann Conflict Mode Instrument* (Mountain View, CA:CPP, Inc, 1974).
- M. A. Gross, L. K. Guerrero, Managing conflict appropriately and effectively: An application of the competence model to Rahim,,"s organizational conflict styles", *International Journal of ConflictManagement*, Vol. 11 Iss: 3, 2000, pp.200 – 226.
- C.K.W De Dreu, A. E.M. Van Vianen, Managing relationship conflict and the effectiveness of organizational teams, *Journal ofOrganizational Behavior*, Volume 22, Issue 3, 2001, pages 309–328.
- D.C Vigil-King, *Team conflict, integrative conflict-management strategies and team effectiveness*, unpublished doctoral dissertation, University of Tennessee, Knoxville, 2000.
- K.Korbanik, G.L Bari & C. Watson, Managers conflict management styles and leadership commitment: The moderating effects of gender Sex Roles ( 29, 1993), 405-420.
- V.D Wall (Jr) &G.Galanes, The SYMLOG dimensions and small group conflict centra States” *Speech Journal* Vol. 37, 1986,61-78.
- M.A Rahim, Leader power, followers,Conflict management strategies, and propensity to leave a Job: A cross-cultural study -Paper presented at the Annual Conference of the International Association for Conflict Management, Pittsburgh, PA, June 15-18, 2004.
- G.Gbadamosi and M.A Adebakin, *Organizational behavior: A basic introduction* (Pumark Ltd. Lagos,1996).
- Z. Ma, Chinese conflict management Styles and negotiation behaviour: An empirical test *International Journal of Cross Cultural Management*, Vol.7, No 1, 2007, pp.101-119.
- C.P.SHempel, Z. Zhang, D. Tjosvold, Conflict management between and within teams for trusting relationships and performance, *Journal of Organizational Behavior*, Volume 30, Issue 1, 2009, pages 41–65.
- Saravanakumar AR (2008). Effectiveness of Motivational Strategies on Enhancing Academic Achievement, *Journal of Research and Reflections on Education*, 16(2).
- W.G Cochran, *Sampling techniques* 3rd ed. (New York: John Wiley & Sons 1977).
- Sivakumar, I & Usha V.T. (2015). Gender Bias and Women's Education: Status of Illiterate Women in the management Community, *Indian Journal of Women’s Studies*, 8(8), 28-35.
- R. Fisher &W.Ury, *Getting to yes. Negotiating agreement without giving in* (Boston: Houghton Mifflin Co, 1981).

## ***Bibliography***

- Saravanakumar AR (2016). Role of ICT in transforming Sri Lankan Higher Education, *International Journal of Advanced Research Trends in Engineering and Technology*, 3(20).
- Saravanakumar AR., & Padmini Devi KR. (2020). Indian Higher Education: Issues and Opportunities, *Journal of Critical Reviews*. 7(2), 542-545.
- Saravanakumar AR, Paavizhi K., & Palanisamy P. (2019). Effectiveness of Video-Assisted Learning Module. *International Journal of Control and Automation*, 12(06), 268-275.
- Saravanakumar AR. (2018). Role of ICT on Enhancing Quality of Education, *International Journal of Innovative Science and Research Technology*, 3(12), 717-719.

- Sivakumar, I., & Usha V.T. (2013). Education and Women in India: In Theoretical Perspective, Development and Displacement: Social Justice Paradigm. (Ed) Gurusamy, S. APH: New Delhi; 141-148.
- Saravanakumar, A. R. (2014). Present Scenario and Future Prospects of Higher Education in India. Proceeding of the Social Sciences Research ICSSR, Kota Kinabalu, Sabah, Malaysia. Organized by <http://WorldConferences.net>.
- Saravanakumar, AR. (2014). Present Scenario and Future Prospects of Higher Education in India, *Proceeding of the Social Sciences Research ICSSR 2014* (e-ISBN 978-967-11768-7-0).
- Saravanakumar, AR., & Paniadima, A. (2017). Cognitive Dissonance, Locus of Control, Self-efficacy and Academic Performance of Novice Teachers, *Journal of Research and Reflection of Education*, 6.
- Sivakumar, I., & Anitha, M. (2012). Education and Girl Children in Puducherry Region: Problems and Perspective. *International Journal of Social Science and Interdisciplinary Research*, 1, 175-184.
- Sivakumar, I & Usha V.T. (2012). Gender discrimination among the girl children in Puducherry: A marine fishing community study, *ZENITH International Journal of Multidisciplinary Research*, 2(11), 93-101.
- Saravanakumar AR, Paavizhi K., & Balamurugesu KR. (2020). A Survey on Effectiveness of Video-Assisted Learning in Enhancing Knowledge Competencies for Teachers, *Test engineering and management*, 82, 5866–5872.