Developing a Research Instrument to Measure Conflict Resolution Skill among Elementary School Students

Ghulam Mustafa Ahmdani[1], Muhammad Zafar Iqbal[2]

Abstract
 Conflict resolution is an important skill for elementary school students to lead a successful life. A valid and reliable tool is necessary to measure conflict resolution. The objective of the present study was to develop a valid and reliable research instrument to measure the skill of conflict resolution among elementary school students. The process of developing the instrument consisted of review of related literature, preparation of table of specification and assessment of validity and reliability. The validity and reliability were found in an acceptable range. A valid and reliable research instrument was developed, which can be used to measure conflict resolution skill of elementary school students in Pakistan.
Keywords: Conflict Resolution, Communication, Social skill, Elementary Students, Measurement

1. Introduction

Conflict is a natural thing faced by everyone at workplace and in daily life activities. It has both positive and negative impacts on individuals involved in it or not. For a conflict to have positive impact, the individuals need to have the skills of knowing its sources and the solutions and strategies to resolve it in an effective way. The individuals having the positive impact of conflict have the skills of effective communication, problem solving and reasoning. In contrast to the individuals having the skills of good communication, problem solving, and reasoning, some individuals can have the negative impact of conflict (Erturk, 2021; Pickering, 2016; Xie & Jiang, 2022).

A clear concept of conflict enables individuals to understand the concept of conflict clearly. The students and the teachers having the knowledge of nature of conflict are able to resolve it effectively. The conflict resolution is a set of skills, which facilitates the individuals and groups to live all aspects of prosper life. The concept of conflict itself is not positive or negative, but it is seen as a result-oriented aspect of teachers and students in schools (Boyar, 2019; Simsek, 2019; Uchendu et al., 2013).

Conflicts offer competitive and cooperative context in the organization, but it varies according to the situation. Problems exist in the way to resolve conflict when the situation is competitive or cooperative. The effectiveness of a conflict resolution intervention may be limited when the context of school and classroom is not cooperative. Conflict resolution strategies can be effective tools in developing useful skills and avoiding aggressive behavior in academic and daily life activities (Bonache et al., 2017; Dreu & Vianen, 2021).

It becomes necessary in culturally diverse community and country. Pakistan is one of the culturally diverse countries. There are different traditions and prevailing rituals among the people of Pakistan. Therefore, research should be conducted on all aspects of conflict resolution among students. Students at elementary level in Pakistan lie between the ages of 10-14. This is the age of acquiring new skills and knowledge. The acquired skills help students to overcome and reduce different types of conflict among them. The measuring tools are basic necessity for the measurement of conflict resolution skills among elementary school students.

Therefore, Validated and reliable instruments should be developed by the researchers for the measurement of conflict resolution among the students. But the available literature reveals the absence of a valid and reliable measuring tool of conflict resolution among elementary school students in Pakistan. Considering the importance of measuring instrument, the researcher intended to develop a valid and reliable tool for the measurement of conflict resolution skill among elementary school students in Pakistan.

1.1. Objective of the Study

The objective of the study was to **develop a research instrument** to measure conflict resolution among elementary school students.

1.2. Research Question

What **type of instrument** is valid and reliable for measuring conflict resolution among elementary school students?

2. Literature Review

Conflict is an interactive process cooperated with disagreement and incompatibility and occurring among social creatures and an interpersonal dynamic process which is shaped according to the internal and external conditions of the parties, affecting individual and group achievement positive or negatively (Arslan, 2020). There are two aspects of conflict revealed in the literature: emotional and social. However, researchers believe that originally conflict is of emotional nature. Its second aspect the social aspect comes from the groups and their strategic options (Hackvoort et al., 2020; Todorowa et al., 2021).

---

[1] PhD Scholar, International Islamic University Islamabad, Pakistan, Email: ahmadanimustafa@gmail.com
[2] Assistant Professor, Department of Teacher Education, Faculty of Education, International Islamic University Islamabad, Pakistan

Conflict constitutes a range from similar difference to disagreement, dissonance, legal debate, violence and fight and conflict can swell from one phase to another (Keltner, 1994). In general, administrators are disturbed of conflict but most of the time the conflicts that interests them are apparent, disturbing the organization and hindering cooperation. At first, it is necessary to classify conflict in two as individual conflict, limited to interior world of a person and interpersonal deals with conflict as personal conflict and dual conflict (Olubunmi, 2019; Ramani & Zhimin, 2020).

There are several types of conflict described by different researchers. However, three types of conflict have been identified in schools by different researchers. These are: task conflicts, relationship conflicts and value conflicts. The differences relating to some sort of tasks become the reason of task conflict. The differences may be in opinions or perspectives of different peoples or group of peoples. Task conflict is also termed as cognitive conflict or substantive conflict. The conflict arising from the interpersonal differences is called as relationship conflict. The differences may be in the attitude, esteem, honesty, personality, or respect etc. The relationship conflict is also called as emotional or affective conflict (Arabaci, 2012; Ma et al., 2021; Tshabalala & Mapolisa, 2018).

Value conflict is a negative social process that occurs when an individual is exposed to two opposing, contradictory concepts that dictate different behaviors, thereby requiring that at least one of the values be violated. When conflicting values cannot be reconciled, tensions rise, resulting in unstable behavior and anxiety. The values are related to the issue but are conceptually separate from each other and from the issue itself. There are different types of value with different backgrounds i.e. freedom is a value, security is another value etc. It is notable that the values of freedom and national security have conflicting implications for an opinion of expanded use of wiretapping in response to terrorism, but the person's endorsement of these two abstract values are measures of, which is to say, the same thing as, his or her opinion of wiretapping (Akgoz, 2020; Valente & Lourenco, 2020).

The possible reasons of conflict are poor communication, competition for common but limited means, and irreconcilable aims etc. The individuals and groups have undeniable needs for identity, self-esteem, security, and fairness. Frustration of these basic needs become sources of social conflict. Conflict may originate from a number of sources, such as tasks, values, goals, and so on. It has been found appropriate to classify conflict on the basis of these sources for clear conception of its nature and implications (Brackett et al., 2019; Manesis et al., 2019; Korbonalievna & Adxamovna, 2021).

Conflict is inescapable between both teachers and students at schools having different culture, personality, values, beliefs, attitudes, needs, preferences, goals, interests, and power etc. This is an important problem faced especially by teachers followed by management, counseling and guidance teachers and parents. Nowadays we have several positive and negative inspirations in the form of social and cultural, environmental and individual aspects of life (Hussein & al-Mamary, 2019; Wilkinson & Bartoli, 2021).

At schools, conflicts may be experienced in many issues such as distribution of work among personnel, in and out of class teaching activities and practices, rewards, punishment, assessment practices, use of power-authority, being late for class, leave of absences, political views, negative personal attitudes, passing grade levels and scoring system, issues regarding the legislation, student behaviors, dress code, assignments and placements for staff and distribution of resources. It should be kept in mind that regardless of the type of conflict or the group that take part in it, conflicts will deepen and be more complicated unless they are resolved and people involved in the conflict will experience negative feelings (Civitillo, et al., 2021; Roper & Higgins, 2020).

3. Methodology

The present study involves research and development method. After literature review, the researcher tried to make clear concepts of all operational terms. Three constructs were finally selected for the tool, as most of the researchers used them. The constructs were: task conflict, relationship conflict, and value conflict. 10 statements were selected for each construct. In the light of related literature, three constructs of conflict resolution were selected for the development of the measuring tool. The tool was in the form of an inventory involving five point Likert scale. The options were: strongly agree (SA), Agree (A), Uncertain (U), Strongly Dis-agree (SDA), and Disagree (DA). An *example* of instrument item is; In case of disagreement I try to find a compromise. I respond to different disagreement in different ways. The students were asked to rate the statement according to their own will. The table of specification was prepared, which is as under.

Table 1: Table of Specification

Constructs	Task Conflict	Relationship Conflict	Value Conflict
Task Conflict	10	10	10
Relationship Conflict	10	10	10
Value Conflict	10	10	10

The process of tool development has been illustrated in the following figure.
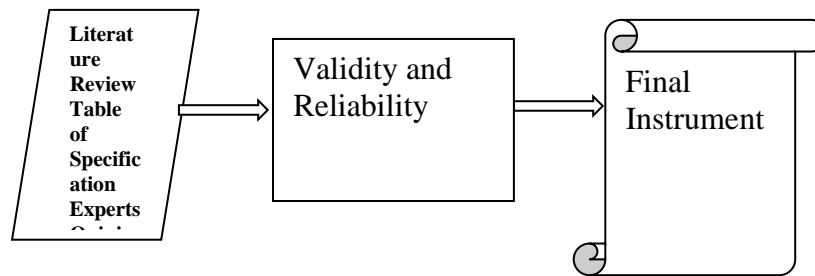
Figure 1. Process of Instrument Development

4. Validation of Tool

After developing the instrument, its validity was ensured. The researcher found its content and constructs validity. The tool was sent to the 10 experts for content validation. For content validation, 10 experts are considered as sufficient numbers (Polit et al., 2018). The experts were provided with the definitions of the terms used in the present study. A validation sheet was also provided to the experts. The definitions and terminologies used in the present study were provided to the subject experts along with a validation sheet. They were requested to rate the instrument items and deliver their written comments on the validation sheet to improve the relevancy of instrument items. The experts were requested to rate the instrument according to the degree of relevance as; the item is not relevant, the item is relevant to some extent, the item is quite relevant, and the item is therefore highly relevant. The experts were asked to rate the instrument item according to the following degree of relevance.

Table 2: Rating Scale Sheet for Experts

Item Relevancy	Rating
Item is not relevant	1
Item is relevant to some extent	2
Item is quite relevant	3
Item is highly relevant	4

The experts rated the items of the instrument and provided their written comments about the test items. Before calculating the content validity index, the experts' responses were recoded for relevance on a scale of 1-4. The number 1 was allotted for rating scale 3 or 4 and 0 was allotted for rating scale 1 or 2. Recoding of relevance rating facilitates the calculation of the content validity index (Drost, 2015; Field, 2013; Metin & Korkman, 2021; Ozair et al., 2017). Item–level content validity index (I-CVI) was calculated using the formula; the experts in agreement divided by the number of experts. The summary of analysis for content validity index has been given in the following table.

Table 3: Item Level Content Validity Index of the Instrument

Item	I-CVI	Item	I-CVI	Item	I-CVI
1	.8	11	.9	21	.9
2	.9	12	1	22	.8
3	1	13	.9	23	.9
4	.9	14	.8	24	.9
5	.8	15	.9	25	1
6	.9	16	1	26	1
7	1	17	.9	27	.9
8	.9	18	.8	28	1
9	.9	19	.9	29	.9
10	1	20	.9	30	.9

The table 3 shows item level content validity index of the instrument. It has been indicated that values of all items lie in an acceptable range (Polit et al., 2007; Taherdoost, 2016; Yusoff, 2019). These values indicated high validity. Therefore, all the items were remained in the instrument. Reliability of the instrument was also checked statistically using internal consistency method associated with Cronbach's Alpha coefficient. The summary of reliability statistics has been given in the table 4.

Table 4: Reliability Statistics of the Instrument

No. of Items	Cronbach's Alpha	Cronbach's Alpha based on standardized items
30	.85	.88

The table 4 indicates the value of Cronbach's Alpha coefficient, which is .85. This reveals that the reliability of the instrument was found in an acceptable range (Cronbach, 1951).

5. Conclusion

It has been found in the light of the experts' opinion a valid measuring instrument is developed for the measurement of conflict resolution skills among elementary school students. It can be concluded in the light of findings of the study that the instrument is a valid and reliable instrument to measure conflict resolution skills among elementary school students. Therefore, the instrument can be used as a standardized tool to measure the skill of conflict resolution among elementary school students.

References

Akgoz, E. E., & Cemaloglu, N. (2020). Views of administrators and teachers on conflict causes and resolution in secondary schools. *The Journal of International Education Science, 22*(7), 60-84.

Arabacı, B. I., Sunkur, M., & Simsek, F. Z. (2012). Teachers' views regarding gossip and rumour mechanism: A qualitative study. Educational Administration: *Theory and Practice, 18*(2), 171-190.

Arslan, G. (2020). *Perceptions on conflict management of school administrators and teachers. (Master's thesis).* Eskişehir Osmangazi University Institute of Educational Sciences, Eskişehir.

Bayar, A. (2015). The reasons of conflicts in school as an organization and finding some potential solutions in terms of school principals' perspective. *Sakarya University Journal of Education, 5*(3), 130-141.

Bonache, H., Gonzalez-Mendez, R., & Krahé, B. (2017). Rsomantic attachment, styles, and teen dating violence victimization. *Journal of Youth and Adolescence, 46*, 1905–1917.

Brackett, M. A., Bailey, C. S., Hoffmann, J. D., & Simmons, D. N. (2019). Tsheory driven, systemic approach to social, emotional, and academic learning. *Educational Psychologist, 54*(3),144-161.

Civitillo, S., Gobel, K., Preusche, Z., & Jugert, P. (2021). Disentangling the effects of perceived personal and group ethnic discrimination among secondary school students: The protective role of teacher–student relationship quality and school climate. *New Direction Child Adolescence Development, 21*, 77–99.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16(3)*, 297-334.

Dreu, C.K., & Vianen, A.E. (2021). Managing relationship conflict and the effectiveness of organizational teams. *Journal of Organization Behavior, 22*, 309–328

Drost, E. A. (2015). Validity and reliability in social science research. *Education Research and Perspectives, 38(*1), 105-123.

Erturk, R. (2021). Conflict in Schools: A Qualitative Study. *Participatory Educational Research, 9*(1), 251-270.

Field, A. (2013). Discovering statistics using IBM SPSS statistics. SAGE.

Hakvoort, I., Larsson, K., & Lundstrom, A(2020). Teachers' understandings of emerging conflicts. *Scandinavian Journal of Educational Research, 64*(1), 37-51.

Hussein, A. F., & Al-Mamary, Y. H. S. (2019). Conflicts: their types, and their negative and positive effects on organizations. *International Journal of Scientific & Technology Research, 8*(10), 11-20.

Kurbonalievna, I..G., & Adxamovna, B.G.(2021). Innovative solutions for effective conflict resolution in higher education institutions. *South Asian Journal of Marketing Management Resource, 11*, 33–37.

Ma, L., Liu, J.,& Li, B. The association between teacher-student relationship and academic achievement: The moderating effect of parental involvement. *Psychol. Sch.* **2021**, *59*, 281–296.

Manesis, N., Vlachou, E., & Mitropoulou, F. (2019). Greek teachers' perceptions about the types and the consequences of conflicts within school context. *European Journal of Educational Research, 8*(3), 781-799.

Metin, M., & Korkman, N. (2021). A valid and reliable scale development study to determine the problems encountered by teachers in the distance education process. *Journal of Educational Technology & Online Learning, 4 (*2), 215-235.

Olubunmi, A. (2019). School management assessment of teachers in secondary schools in Ondo State, Nigeria: Department of Science and Technical Education, Adekunle Ajasin University, Akungba – Akoko, Ondo State, Nigeria. *Journal of Education & Practic*e, 3(11), 98-118.

Ozair, M. M., Baharuddin, K. A., Mohamed, S. A., Esa, W., & Yusoff, M. S. B. (2017). Development and validation of the knowledge and clinical reasoning of acute asthma management in emergency department (K-CRAMED). *Education in Medicine Journal, 9(*2), 1–17.

Pickering, S. (2016). Introducing spatial grid builder: A new system for creating geo-coded datasets. *Conflict Management and Peace Science, 33*(4), 423-447.

Polit, D. F, Beck, C. T., & Owen, S. V. (2018). Is the CVI an acceptable indicator of content validity? *Appraisal and recommendations. Research in Nursing & Health, 23(*4), 459–467.

Ramani, K., & Zhimin, L. (2020). A survey on conflict resolution mechanisms in public secondary schools: A case of Nairobi province, Kenya. *Educational Research and Reviews*, 2(11), 22-26.

Roper, I., & Higgins, P. (2020). Hidden in plain sight? The human resource management practitioner's role in dealing with workplace conflict as a source of organisational–professional power. *Human Resource. Management Journal, 30,* 508–524.

Simsek, N. (2019). *Teachers'ideas about conflict resolution methods of primary and secondary schools'manager.* (Master thesis). Istanbul Okan University Institute of Social Sciences, Istanbul.

Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *International Journal of Academic Research in Management, 5*(3), 28-36.

Todorova, G., Goh, K.T., & Weingart, L.R. (2021). The effects of conflict type and conflict expression intensity on conflict management. *Int. J. Confl. Manag. 13*, 33–39.

Tshabalala. T., & Mapolisa, T. (2018). An investigation into the causes of conflict in Zimbabwean schools: A case study of Nkayi south circuit. *Journal of Humanities and Social Sciences, 2*(6), 31-42.

Uchendu, C.C., Anijaobi-Idem, F. N., & Odigwe, F. N. (2013). Conflict management and organisational performance in secondary schools in cross river state, Nigeria. *Research Journal in Organizational Psychology & Educational Studies 2*(2), 67-71.

Valente, S. & Lourenco, A. A. (2020). Conflict in the classroom: how teachers' emotional intelligence influences conflict management. *Frontiers in Education. 5*(5), 41-58.

Watkins, M. W. (2018). Exploratory factor analysis: A guide to best practice. *Journal of Black Psychology, 44*(3) 219–246

Wilkinson, H.R., & Bartoli, A.J. (2021). Antisocial behaviour and teacher–student relationship quality: The role of emotion-related abilities and callous–unemotional traits. *Journal of Educational Psychology, 91*, 482–499.

Xie, R., & Jiang,J.(2022). Creativity: The Effectiveness of Teacher–Student Conflict. *International Journal of Environmental Research and Public Health, 19*, 18-18.

Yusoff, M. S. B. (2019). ABC of content validation and content validity index calculation. *Education in Medicine Journal, 11*(2), 49–54.