Determining the Effect of Peace Education on Knowledge and Attitude of Prospective Teachers: An Experimental Study

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Abstract

Peace education contribute to promote peace by changing the thinking of people. Education is a tool to impart peace by changing the mind of people. Teacher can solve the problems of peace by developing the peaceful minds of youth through peace education. This study was conducted to determine the peace education's effect on knowledge and attitude of future teachers. It was a quantitative study and followed the quasi-experimental design i.e. A pretest posttest nonequivalent group design. Researchers develop two tools for data collection: A Test for Knowledge of Peace Education (TKPE) and a Scale for Peace Attitude (SPA). Five themes of peace education were selected to developed the TKPE and SPA, i.e. peace, conflict resolution, human rights, social justice, cultural diversity. A Test for Knowledge of Peace Education (TKPE) was developed by reviewing the literature. This objective type test comprised 25 Multiple Choice Questions (MCQs). The attitude scale consisted of 80 statements related to the themes of peace education. Reliability of TKPE was insured by applying Kuder Richardson 21. The value of Kuder Richardson 21 was 72.1. The reliability of SPA was insured by applying Cronbach Alpha. The value of Cronbach Alpha was 91.2. Peace Education Intervention (PEI) was prepared. Two groups of prospective teachers were selected as control and experimental group for experiment. PEI was given for one semester to prospective teachers. Prospective teachers take keen interest in the peace education lectures. Data collected through pretest and posttest measure was analyzed by applying descriptive statistics and ANCOVA. The findings of study shows that the peace education intervention remained successful in achieving its objectives. Improvement in the knowledge and attitude of participants towards peace was observed. On the basis of findings, the inclusion of peace education is strongly suggested into the teacher education curriculum.

Keywords: Peace education, Themes of peace, Teacher education, Knowledge of peace, Attitude towards peace.

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Introduction

The concept of peace implies to respect human rights and human life, working cooperatively to resolve conflicts nonviolently, training of citizens for positive contribution in their governments (Harris & Morrison, 2003). People use various strategies to establish the means of peace. Education is one of powerful strategy that can help to establish long term and sustainable peace by educating and training citizens for matters to achieve peace. The role of teacher is important in this regard being the key player in system of education.

Peace education means a global effort to change the way people think and act in promoting peace and education is a major tool for promoting peace in the world (UNESCO, 1998). Harris (2002) elaborates the objectives for effective peace education program i.e., appreciation of peace, understanding of violent behaviors, develop intercultural understanding, teaching of social justice and respect for life. Salomon (2002) suggests the four categories of peace education: "as a matter of changing mindset, cultivating a set of skills and attitudes conducive for peace, promoting human rights' and, finally, peace education as a 'matter of environmentalism, disarmament, and the promotion of a culture of peace" (p. 4).

The curriculum of peace education emphasis that the students of peace education have to learn and practice the basic concept of peace education. Peace education provides curriculum in which students will learn and practice concepts, such as respect for; human rights, social responsibility, rule of law, and democratic attitude. It promotes acceptance for cultural diversity, and equality as an essential component of curriculum. The content of peace education emphasis to inculcate the values of freedom equality and respect for global community (Yemenici, 2016). Students of peace education impart the knowledge of certain peace values such as, personal wellbeing, human rights, diversity, conflict resolution skills, democratic attitude, and social justice (Carter, 2015). The knowledge of peace values prepares the students to acquire and practice skills and attitude necessary to become peaceful citizens. Reflections of peace become evident in their personalities. The content related to peace concepts should be included into the peace curriculum according to the level of students (Yemenici, 2016).

Peace education influence the students' attitude and thoughts about peace that will help to move towards peaceful future (Harris& Morrison, 2003). Peace education cultivated the attitude of respect for; self and others and also understanding for sufferings of people living in poor conditions of social justice. Peace education worked to mold the attitude of individuals, and develop the respect and openness for cultural diversity and forms of expression. Peace education develops the confidence to contribute for the development of society characterized by justice, peacefulness and people wellbeing (Navarro-Castro & Nario-Galace, 2010). Teacher can not only teach the peace but also change the students attitude for sufferings of people (Harris & Morrison, 2003). Teachers are role models for their students. They set the standards for their students how to behave by practicing peaceful behaviors in the class rooms (Thapa, et.al., 2010).

Teachers can train the young people to be peaceful with the help of peace education. By adopting and teaching the themes of peace education to future generations teachers can create the peaceful society. The role of the teacher is not just to teach students the concept of peace, rather to promote peace. Bretherton, et.al., (2003) says that "a teacher who tries to pass on the culture of peace without doing anything, including the act of peace, might be considered hypocritic" (p. 3). A teacher who preaches for peace while not demonstrating what's being schooled becomes a hypocrit. As a result of this practice, teaching peace concepts becomes worthless. Teachers who modeled peaceful behaviour in front of his students could be a powerful mean to implement the peace education (Vriens, 2006).

Need of Peace Education for Teacher Training

It is observed that the most prominent reason of unrest and violence in the modern world is that the people have not the ability to appreciate the strengths of non-violence (Harris & Morrison, 2003). Teachers have had less opportunities to gain confidence to teach content about conflictual situations particularly in connection to social disparity, either as a student of teacher education or as teacher (Boler & Zembylas, 2003; Tupper, 2005). Teachers frequently reported the deficiency to lead discussions about controversial issues, and the course of their professional development seldom addresses this challenge (Donnelly & Hughes, 2006; Torney, et.al. 2005). Researches shows that it is difficult for teachers to address the conflicts on sensitive issue in a way that give spaces for culturally diverse and economically deprived students (King, 2009; Subedi & Stephanie, 2008). Teachers have not the ability to lead the discussion by opposing the contradictory views in a way that develop mutual understanding (Hemmings, 2000). The findings of a research conducted by Dull and Murrow (2008) depicts that teacher question with in the classroom based on recalling of content, they have not the ability to ask analytical question that probe critical thinking among students. They also found that this over-use of lower-order informational questions was unreasonably higher in classrooms with diverse students. This situation required teacher training to develop in them the ability of teaching conflictual controversial content and to lead classroom discussions democratically in the light of global diversity and social justice concerns (Parker, 2010; Thornton, 2005). Effective discussions about violations of social justice need to know the origins of these violations and effects on humanity in general (Pang & Valle, 2004; Woyshner, 2002). Teachers with the help of peace education can prepare the individuals who see beyond the self-interest which spread injustices (Conrad, 2006). Cultural knowledge is a precondition to achieve the objective of quality of life of an individuals. Teachers can assist the children who have less political influence or financial assets to struggle against segregation or injustice. They require important social knowledge and abilities to handle these issues of segregation or injustice (Merryfield, 2000). Researches conducted on teachers' educators elaborated that teacher appreciate the importance of the issues of tolerance and multiculturism only in terms of

theory without considering the ways of presenting these concepts into the practice of classroom teaching and learning (Koshmanova, & Holm, 2007). Training of teachers for peace education may not change the entire social order but help to develop peaceful consciousness for the beginning of peaceful world (Harris & Morrison, 2003).

Peace education develops the competencies in learners to cope with violent situations nonviolently. Nations all over the world spend money and resources to train doctors who can cure the diseases. Teacher can cure the problems of peace by developing the peaceful minds of youth through peace education. So, the nations must spend money and resources to educate teachers for peace education for the development of peaceful minds of youth. (Harris& Morrison, 2003). Therefore, training for peace is a long-term investment to establish permanent peace in societies. In the process of pre-service teacher training prospective teachers try to learn peaceful ways to handle problems of peace. So that they can model peaceful behaviour in their classrooms.

Teachers are the most appropriate elements to develop in students the attitude and skills. Researches conducted locally reveals that teachers are not prepare to trained students for peace attitude. The findings of the study conducted by Mehreen (2019) indicated that the teachers had no prior formal exposure regarding peace themes. Sharing the classroom observation researcher stated in the findings that students of 5th grade were whispering while taking books out of their bags………teacher banged a stick, already lying on the teacher's table, twice on the table and said no noise……teacher slapped on the shoulder of a students talking to his fellow sitting next to him in the class (Mehreen, 2019). A female teacher shares that she can't apply teaching methods and techniques that she learned in B.Ed As she has to kept students quite during class activity and her ambition is to finish the syllabus. (Mehreen, 2019).

The findings of the research study in Pakistan shows that most teachers and prospective teachers have agreed to incorporate peace education into pre-service teacher training because peace education builds positive attitudes among teachers, enhances human rights awareness, improves self-awareness, educates teachers, promotes justice and empathy among teachers, and promotes inclusion among teachers. social justice (Amin, et al., 2019). Further, researches conducted on curriculum in Punjab, Pakistan shows that only the textbooks of English, Urdu and Islamiat promotes peace values and the emphasis of these textbooks are on few values of peace education (Bashir, Amin, & Amin, 2020; Bashir, & Akbar, 2019). In such a situation, where there is an absence of such focus of peace values in curriculum the role and expectation from teacher are more. Therefore, efforts should be made to familiarize them with peace education.

Statement of Problem

Teacher education programs need to include peace education into their curriculum. Presently teacher education programmes largely focus on imparting knowledge and skills necessary for classroom work and management (Harris & Morrison, 2003). A study conducted in Pakistani context suggests the need to design and develop an appropriate peace education curriculum for teacher education especially in pre-service training (Amin, et al., 2019). Ali and Hussain (2021) concluded in their study that novice teachers have no knowledge and lack of peace-related training in Pakistan. They discovered teachers did not have any background knowledge of peace education. In reality, some of the teachers are not even aware of the concept of peace education. Data also shows that some of the teachers discriminate with their students. Peace education develops various skills, attitudes and knowledge in the students as well as in the teachers and an atmosphere free of bias (Bahera, 2013). Teachers' involvement in teaching peace gives them an opportunity to reflect on their values and beliefs. Therefore, teachers will have a positive impact on many students (Bahera, 2013). In schools, teachers are role models for students; therefore, if we want to bring change to our future students, it is important to bring change in teachers first. This study was conducted in "determine the effects of peace education on knowledge and attitude of prospective teachers" in Pakistan.

Significance of Study

Universities that are imparting teacher education programs can take guidance from the findings of this research to add peace education in to the teacher education programs. Findings of this study added the empirical evidence into the literature on the effect of peace education on the knowledge and attitude of future teachers.

Literature Review

Advancements of 21st century cannot save the humanity from challenges of war, terrorism, and violence which is a consequent source the poverty, inequalities, injustices and unrest among people and nations. Nations of the world are continuously spending resources for the eradication of these challenges and unfortunately have less focus on developing plans and programs to cure these challenges permanently (Danish, 2008). Peace education is one of these plans or programs that can protect humanity from these challenges by changing mindset of people. As explained by Reardon (2001) peace education transforms human conditions through the changes in thinking process and social conditions. In this regard teacher training for peace would serve the dual objectives; It will train the peace-loving teaching community and peace-loving youth to whom these teachers will educate.

Various countries of the world have developed the peace education programs for their educational system. These peace programs vary their objectives and contents according to the condition of the country (Salomon,2002; Bar-Tal, 2002). Therefore, the content of peace education programs varies all over the world (Hakvoort, 2010). Reardon

(2001) reviewed the different educational curriculum and concluded that there is no criteria for inclusion of exclusion of peace education landmark. However renowned peace educationists have identified some common theme for peace curriculum i.e., content of peace education promoting knowledge and encouraging attitude about peace development, values of respect, social cohesion and reconciliation, human rights, social justice, cultural diversity, environmental protection, and equity and tolerance (Aspeslagh, 2006; Johnson, 2007; Hakvoort, 2010; Danish, 2008; Harris & Morrison, 2003)

UNESCO has worked to develop the peace education programs for different countries of the world for decades. UNESCO has taken praiseworthy initiatives to educate teachers for peace education. In this regard UNESCO developed curriculum for teachers; "Peace Education: Framework for Teacher Education." (UNESCO, 2005). This program focused on themes of peace education i.e., social peace, inner Peace, peace with nature, conflict resolution, human rights, social justice, cultural diversity, Critical and positive thinking, respecting human dignity, democratic attitude, and tolerance patience (UNESCO, 2005). These programs of peace education suggest changes in three categories; knowledge, attitude, and skills (Fountain, 1999). Researchers conducted on different aspects of peace education e. g. conflict resolution, cultural diversity and empathy reported positive changes in the attitude of learners. (Webel, & Galtung, 2007; Johnson & Johnson, 2007; Sagkal, Turnuklu & Totan, 2012; Alger,2014).

Theoretical and Conceptual Framework of the Study

This study takes the guidance from constructivist theory of learning. Constructivist theory suggests that previous knowledge of learner needs to connect with new knowledge. Learner construct knowledge by active engagement in the process of learning. Knowledge cannot be passively received but actively (Hein, 2006). This active engagement of learner in the process of acquiring knowledge provide him sustainable learning. Sustainability of knowledge may motivate the individual/learner to exhibit this learning into practice that form the attitude of individual.
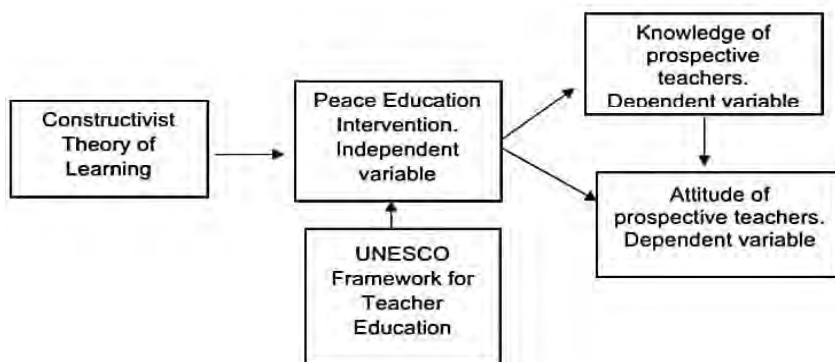

Figure 2. *Conceptual framework of the study*

Research Objectives

1. Examine the effect of various themes of peace education on i.e., Peace, Cultural Diversity Conflict Resolution, Social Justice, and Human Rights, in the Knowledge of prospective teachers.
2. Explore the effects of various themes of peace education i.e., Peace, Cultural Diversity, Conflict Resolution, Social Justice, and Human Rights in the attitude of prospective teachers.

Research Hypotheses

Determining the outcomes of peace education intervention, it was hypothesized that:

1. Knowledge of experimental group towards the aspects of peace namely peace, social justice, human rights, cultural diversity, conflict resolution, will increase significantly when compared with the control group.
2. Attitude of experimental group towards the aspects of peace namely peace, social justice, human rights, cultural diversity, conflict resolution, will increase significantly when compared with the control group.

Methodology of the Study

This quantitative study falls into the realm of positivist paradigm. Positivist paradigm provides methodological framework for quantitative researches in social sciences. Positivism paradigm worked under the epistemology based on objectivism (Pham, 2018). According to this stance, reality of a thing must be supported and measured by evidence (Hammersley, 2013). Positivist researchers try to understand the reality supported by empirical evidence such as tests, questionnaire and observation etc. (Cohen, 2007). In the process of, exploring a phenomenon, the effect of independent varial on dependent variable relationship between dependent and independent variables will bed is covered or determined by following experimental designs through the control of certain carefully controlled variables to maximize influence of independent variable on dependent variable (Cohen, et al., 2011). In this research working in the frame of positivist paradigm, reality was explored by conducting an experiment in an educational setting. Two self-developed tools (a test and a scale) were used to collect the data.

In this research study to determine the effect of peace education on knowledge and attitude of prospective teachers quasi experimental design i.e. A pretest posttest nonequivalent group design was used. Because this design is considered good to check the effect of treatment. (Reichardt, 2009). Pretest-posttest nonequivalent group design is widely applied in social science research, mainly for the purpose of measuring change subsequent from experimental treatments. (Dimitrov, & Rumrill, 2003). In this study the intervention of peace education is an independent variable, while the two variables i.e. knowledge and attitude of future educators were considered dependent.

Instrumentation

Researchers developed two tools for data collection to determine the effect of independent variable on the dependent variable. A Test for Knowledge of Peace Education (TKPE) and a Scale for Peace Attitude (SPA) were developed.

A Test for Knowledge of Peace Education (TKPE) was developed by reviewing the literature. It was objective test and comprised 25 Multiple Choice Questions (MCQs). Five themes of peace education were selected to developed the MCQs, i.e., peace, conflict resolution, human rights, social justice, and cultural diversity. Five MCQs for each theme of peace education were developed in this test. MCQs were developed according to the criteria provided in the literature. Stem of every MCQs is comprehensive statement and written in simple language. For options were written for each MCQ; three distractors and one write answer (see in Abdulghani, et.al., 2017; Collins, 2006).

A Scale for Peace Attitude (SPA) was developed to determine the effect of PEI on prospective teachers' knowledge. Five themes of peace education were selected to as constructs for scale development i.e. peace, conflict resolution, human rights, social justice, and cultural diversity. The attitude scale consisted of 80 statements related to these themes of peace education. A scale should have comprehensive statements related to its constructs. A five-point likert scale was used to take the answers of respondents, namely; strongly disagree to strongly agree.

Both instruments were pilot tested to determine their face validity. To determine the content validity expert opinion was taken. Experts suggested some changes in the TKPE and SPA. Experts revise some statements on SPA. Stems of few MCQs were also revised by the experts. All the suggested changes by experts were incorporated in the tools. Reliability of TKPE was insured by applying Kuder Richardson 21. The value of Kuder Richardson 21 was 72.1 for test that is considered good. The reliability of SPA was insured by applying Cronbach Alpha. The value of Cronbach Alpha was 91.2 which shows its internal consistency is good.

Participants of the Experiment

Two groups of prospective teachers (one from morning and one from evening programs) enrolled in B.Ed (Hons) program at Institute of Education and Research, University of Punjab were selected as control and experimental group. These groups were selected conveniently because in nonequivalent group designs groups of participants are pre-existed such as class of already enrolled students (Reichardt, 2009) and it does not interrupt the existing research setting (Dimitrov, & Rumrill, 2003). Cohen, et al., (2011) discuss their understanding that minimum number of participants in experimental research study should not be less than 30 for each variable. Fraenkel and Wallen (2009) suggests the minimum

number of 30 participants for each group in an experimental study. There were 32 students of B.Ed. (Hons) semester 7th (morning programme) who were willing to participate voluntarily in the experiment. While a group of 39 prospective teachers studying in B.Ed. (Hons) semester 2nd (evening programme) was determined as control group. Students were already enrolled in the said programme.

Peace Education Intervention

Peace Education Intervention (PEI) was prepared to determine the influence of peace education on the knowledge and attitudes of future educators. PEI was prepared according the framework of UNESCO for teachers, i.e. "Peace Education: Framework for Teacher Education." (UNESCO,2005). This program was used under the umbrella of UNESCO in different countries for the training of teachers to become peace educators. This program suggests the number of themes of peace education to be taught to teachers (see the literature review section for detail of themes). However, the peace education experts suggested that the themes of peace be contextualized in accordance with the needs of the society in which they are to be applied (see in Salomon, 2002; Bar-Tal, 2002; Hakvoort, 2010). So, this peace education framework for teacher education was contextualized according to the needs of Pakistani society. Researchers decided to take the expert opinion for this contextualization. Researchers prepared the draft for peace education intervention that included the themes of peace education to be taught to the prospective teachers (each theme of peace education comprised one unit in this intervention), objectives to teach each unit, and content to achieve these objectives. This draft of PEI included 12 themes of peace education, namely; Peace, respect for human life, conflict resolution, brotherhood, cultural diversity, democratic attitude, justice, positive thinking, human rights, tolerance, environmental education, and gender equality.

Researchers selected five experts conveniently from the field of education for expert opinion. These experts were serving as teachers of education at different public sector universities of Pakistan. Researchers personally visited these experts and took their opinion about PEI. Experts suggested to reduce the number of peace education themes because it might be too long to teach. Then researchers asked them to prioritize the themes of peace education that should take included in this intervention. According to the opinion of experts five themes of peace education were included in this intervention i.e. peace, conflict resolution, human rights, social justice, and cultural diversity. Experts also commented on objectives and content of peace education e.g. in the theme of human rights they added few learning objectives, they added few content different themes and few are deleted due to overlapping and somewhere due to redundant content. Lesson plans then were prepared to teach the peace education to prospective teachers with focus on students active engagement.

Procedure of Experiment

In this research two non-equivalent groups of prospective teachers were selected as control and experimental group. Including control and experimental groups to determine the effect of treatment provided a comparison about what happened when Peace Education Intervention (PEI) was implemented and what happened when intervention was not implemented (Reichardt, 2009). In this way the role of both groups was very important in this experiment. A pretest assessment was taken before implementing PEI. Responses of prospective teachers were taken on Test for Knowledge of Peace Education (TKPE) and Scale for Peace Attitude (SPA) before implementing PEI as pretest measure. PEI was implemented on experimental group.

An intervention was given for 16 weeks. The first researcher herself implemented the intervention. Each session was planned by researcher. Activity based session were planed by researcher. Different activities were conducted in different lectures, discussion and question answer session was part of every lecture. Prospective teacher took keen interest in the peace education lectures. Classes held two times in week for 1 and half hour each. In this way researcher delivered 32 lectures in the semester. At the end of intervention both groups were assessed on posttest measure.
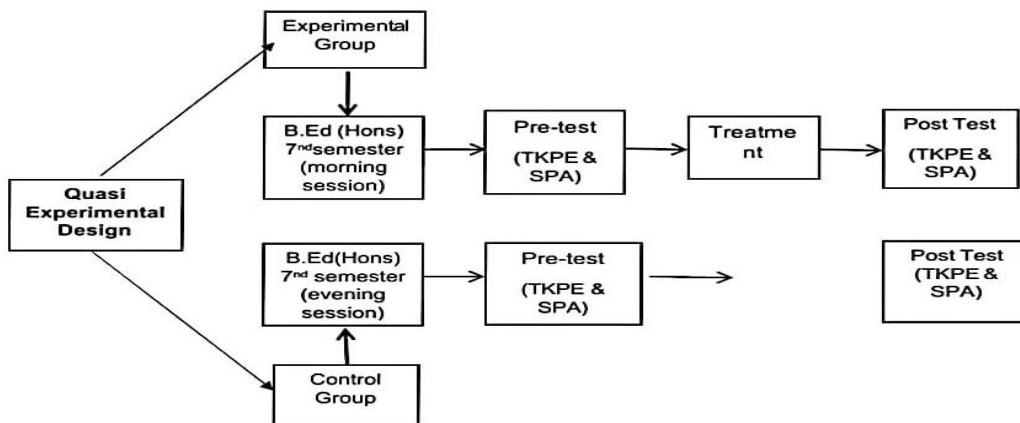

Figure 1. *Procedure of experiment*

Addressing the Threats of Experimental Validity

Pretest posttest nonequivalent group design was faces many threats to internal and external validity (Fraenkel & Wallen, 2009). In this experiment these threats were carefully addressed. Instrumentation was a threat to internal validity when different and changed instruments were used for pre and post-test (Reichardt, 2009). This threat was addressed

by using same instrument for pre and posttests. The threat of attrition or mortality was happened when the participants of experiment left the experiment before posttest (Fraenkel & Wallen, 2009). In this experiment number of participants in pretest and posttest was same this shows that mortality or attrition was not happened. The effect of history was addressed because there was four months gap between pretest and posttest assessment. In this experiment a pretest was applied and two groups of prospective teachers were selected conveniently. This non-random selection of participants reduces the threat of selection biased. The threat of selection difference was catered by applying statistical test ANCOVA. An ANCOVA check the effect of selection differences by providing participants statistical matching in nonequivalent treatment groups on pretest posttest measures (Reichardt, 2009).

Findings of the Study

Data collected through Test for Knowledge of Peace Education (TKPE) and Scale for Peace Attitude (SPA)was analyzed by applying descriptive statistic and ANCOVA. The difference in the mean score of pre & posttest of both tools i.e. TKPE and SPA wase checked by applying descriptive statistic. After that, ANCOVA test was applied to see the difference between the performance of control and experimental group on each aspect of peace education namely; peace, conflict resolution, human rights, social justice, cultural diversity, on TKPE and SPA. Findings of the study along with hypothesis are as under:

H1. Knowledge of experimental group towards the aspects of peace namely peace, social justice, human rights, cultural diversity, conflict resolution, will increase significantly when compared with the control group.

Table 1
Descriptive Statistics of Pretest and Posttest of TKPE

Variables		N	Min	Max	Mean	S.D
Control Group	Pre-Test	39	5.00	14.00	9.9	2.45
	Post-Test		7.00	15.00	11.4	3.20
Experimental Group	Pre-Test	31	3.00	13.00	8.03	2.68
	Post-Test		20.00	24.00	22.6	1.02

Table 1 shows the descriptive data of pre and posttest of knowledge. Above table display the slight difference in the mean score of pre and posttest for control group, on the other hand for the experimental group mean score improved from 8.03% to 22.6%.

Table 2

ANCOVA results of PEI on post-test score on knowledge of prospective teachers

Aspects of Knowledge of Peace	Source	Type III SS	df	MS	F	P	Partial η²
Concept of Peace	Pre-Test scores on Concept of Peace	.14	1	.14	.19	.70	.003
	Group (Experimental+ Control)	23.4	1	23.4	32.10	.001	.33
	Error	49.6	67	.73			
Conflict Resolution	Pre-Test score on Conflict Resolution	2.09	1	2.09	1.9	.190	.03
	Group (Experimental+ Control)	41.1	1	41.10	36.8	.001	.36
	Error	77.6	67	1.15			
Human Rights	Pre-Test score on HR	10.1	1	10.10	7.7	.007	.101
	Group (Experimental+ Control)	50.7	1	50.7	35.6	.000	.35
	Error	96.8	67	1.43			
Cultural Diversity (RD)	Pre-Test CD	7.32	1	7.30	8.2	.006	.107
	Group (Experimental+ Control)	8.80	1	8.80	9.90	.001	.130
	Error	60.50	67	.890			
Social Justice (SJ)	Pre-Test score on SJ	.050	1	.050	.030	.87	.000
	Group (Experimental+ Control)	101.10	1	101.10	67.60	.000	.410
	Error	102.70	67	1.60			
Over all summary	Pre-test knowledge	151.229	1	151.219	9.821	.003	.127
	Group (Experimental+ Control)	762.676	1	762.667	48.8	.000	.427
	Error	1023.917	67	15.289			

Table 2 displays noteworthy variance in the aspects of knowledge test among both groups (control & experimental). Result shows the significant difference among groups for peace concept knowledge whereas ($F (1, 67) = 32.02$, $p<0.05$. output shows the significant difference among groups for conflict resolution whereas ($F (1, 67) = 36.8$, $p<0.05$. Results shows the significant difference among groups for human rights whereas ($F (1, 67) = 35.6$, $p<0.05$. Output shows the significant difference among groups for cultural diversity whereas ($F (1, 67) = 9.90$, $p<0.05$. Table shows the significant difference among groups for social justice (SJ) whereas ($F (1, 67) = 67.6$, $p<0.05$. Above table displays the results for knowledge test with total marks in pre-test and post-test. Whereas ($F (1, 67) = 49.8$, $p<0.05$

H2. Attitude of experimental group towards the aspects of peace namely peace, social justice, human rights, cultural diversity, conflict resolution, will increase significantly when compared with the control group.

Table3
Descriptive Statistics of Pretest and Posttest of SPA

Variables		N	Min	Max	Mean	S.D
Control Group	Pre-Test	39	3.46	3.96	2.17	1.08
	Post-Test		3.34	3.89	2.61	1.10
Experimental Group	Pre-Test	31	1.79	3.94	2.83	.527
	Post-Test		3.40	4.41	3.80	.266

Table 3 shows the descriptive statistics for data of pre-test and post-test of SPA. Above table display the slight difference in the mean score of pre-test and post-test for control group, on the other hand for the experimental group mean score improved from 2.61% to 3.80%.

Table 4
ANCOVA result of PEI on post-test score on attitude of prospective teachers

Aspects of attitude towards peace practices	Source	Type III SS	df	MS	F	p	Partial η^2
Concept of Peace (CP)	Pretests core on CP attitude	.005	1	.01	.079	.79	.001
	Group (Experimental & Control)	.45	1	.46	6.98	.00	.094
	Error	4.4	67	.07			
Conflict Resolution (CR)	Pre-test score on CR attitude	.02	1	.024	.279	.61	.005
	Group (Experimental+ Control)	.11	1	.12	1.42	.24	.03
	Error	5.57	67	.09			
Human Rights (HR)	Pre-Test score on HR attitude	.045	1	.05	.27	.62	.01
	Group (Experimental+ Control)	.34	1	.34	1.85	.000	.03
	Error	12.2	67	.18			
Cultural Diversity (RD)	Pre-Test score on CD attitude	.001	1	.00	.012	.92	.001
	Group (Experimental+ Control)	.37	1	.37	7.86	.000	.112
	Error	3.19	67	.05			
Social Justice (SJ)	Pre-Test score on SJattitude	.12	1	.12	.73	.31	.019
	Group (Experimental+ Control)	.005	1	.01	.03	.88	.001
	Error	10.32	67	.16			
Over all summary	Pre-Test score Attitude	.009	1	.009	.233	.631	.003
	Group (Experimental+ Control)	.266	1	.266	6.875	.011	.092
	Error	2.633	67	.039			

Table 4 displays significant difference in the aspects of Attitude of respondents among the control & experimental group. Result shows the significant difference among groups for CP whereas (F (1, 67) = 6.98, p<0.05. Output shows the insignificant difference among groups for CR whereas (F (1, 67) = 1.42, p>0.05. Results shows the significant difference among groups for HR whereas (F (1, 67) = 1.85, p<0.05. Output shows the significant difference among groups for CD whereas (F (1, 67) = 7.86, p<0.05. Table shows the significant difference among groups for SJ whereas (F (1, 67) = 0.88, p<0.05. Above table displays the results for attitude scale with entire scale response in pre-test and post-test. Whereas (F (1, 67) = 6.9, p<0.05.

Discussion

The findings of study shows that the peace education intervention remained successful in achieving its objectives. Improvement in the knowledge and attitude of participants towards peace was observed. The difference mean score of experimental groups on knowledge test shows that effect on knowledge was significant. The difference in mean score of knowledge of control group might be due to the maturation of participants as there was four months gap in the pretest and posttest measure. The difference in performance of experimental group on knowledge test particularly indicate that this difference is due to the intervention. Comparing mean score of both (control & experimental) group was also shows the difference in the performance of both groups. The performance of experimental group on attitude scale shows that the participants have significant changes in their attitude about peace. This indicates the commanding effect of intervention on prospective teachers. These results are similar to a study conducted by Arain, Ramzan and Noshab in 2019, findings of their experimental study showed that teaching of peace played an important role in developing and strengthening students' attitude towards peaceful environment. Teaching of peace enhanced the knowledge and attitude of teachers towards peace. It was also found that the success of teaching peace education could only be achieved if the teacher had adequate knowledge and teaching skills necessary to build peace in the minds of children. Another study conducted by Arenas (2019) found were significant improvement in the Knowledge, skills and attitudes of students after the intervention including peace education. Strategy involving peace education has positive effect on the behaviour of students.

The findings of ANCOVA indicated that changes were obvious in all themes of peace education namely; peace, social justice, human rights, conflict resolution, cultural diversity on knowledge test. Difference in the performance of all peace themes knowledge was due to sturdy effect of PEI. The findings of ANCOVA specified the changes in all themes of peace education i.e. peace, social justice, human rights, cultural diversity on attitude scale expect conflict resolution. Difference in the attitude towards peace themes was due to well-made effect of PEI. Another study also shows the similar results i.e., peace education influenced the attitude of learners towards cultural diversity positively (Castro, 2014). Peace education creates effect on knowledge of social justice, human rights and cultural understating (Quezada, & Romo, 2004).

However, on theme conflict resolution significant changes were not found. This finding contradicts the findings of previous researches that indicate the positive effect of peace education on the attitude of learners. The findings of a study showed that the tendency of students to be violent in the experimental group decreased and the ability to solve community problems increased significantly as compared to that of the students in the control and placebo group (Kabasakal, Sagkal & Turnuklu, 2015). There is need to conduct

another research with particular focus on the theme of conflict resolution. Session will be planned to develop awareness among prospective teachers to gain skills to handle their daily life conflicts. This may develop a positive effect to develop their attitude towards conflict resolution.

Conclusion

This study has been conducted to highlight the effects of peace education on knowledge and attitude of prospective teachers. This research was conducted under the assumption that peace education might prepare teachers to play their role as a reformer who understand peace problems and their solutions by having positive attitude. Peace education is a successful method to prepare pre service teachers to embrace the needs of students who are culturally diverse. It can develop positive attitude to protect their rights. It is beneficial to develop positive attitude towards the social justice.

This peace education intervention that included the basic themes of peace i.e. peace, conflict resolution, human rights, social justice, cultural diversity identified that the teachers will be aware of peace problems and their solution. This study focused on implementing peace education and specifically checking its effects on prospective teachers' knowledge and attitude and suggested that a teacher training program that focus peace education can transform teachers as agent capable of implementing peace yielding attitude towards peace.

Recommendations of the study

Peace education intervention implemented in this research addresses all the major themes of peace e.g. social justice, human rights, cultural diversity, conflict resolution and provided a highly replicable format to integrate peace education into teacher education programs in Pakistan. The results of research were endorsing the peace education effect on future teachers knowledge and attitude. On the bases of these findings, it is proposed that the peace education should be included into the teacher education curriculum. Furthermore, it is advised that the program of peace education can easily be taught as separate course in pre service education and as a component of professional development course for in service education.

It is also recommended that peace education intervention may be replicated with more focus on the theme of conflict resolution in another teacher education institution. The theme of conflict resolution should be taught with continues emphasis during intervention implementation. So that, the required changes in attitude of participants towards conflict resolution could be achieved.

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