

Participatory Action Research To Promote Educational Quality: A Literature Review

Zahra Sokhanvar^{1*} and Keyvan Salehi²

University of Tehran, Tehran, Iran

Research Article

Received date: 06/07/2017
Accepted date: 13/07/2018
Published date: 20/07/2018

*For Correspondence

PhD of Educational Measurement and Evaluation
Assistant Professor, Department of Curriculum
Development & Instruction Methods, Faculty of
Psychology and Education, University of Tehran,
Iran.

E-mail: salehi.student@yahoo.com

Keywords: participatory action research,
educational quality, professional development

ABSTRACT

PAR has become a popular approach in our modern society because it provides a framework for youth to raise their voices, represent their thoughts and communicate their opinions genuinely.

This paper considers Participatory Action Research (PAR) as an approach to promote educational quality in all levels and discusses the effects of Participatory action research (PAR) on educational development of teachers, students and other stakeholders.

21 papers that utilized PAR as an approach or examined the effects of PAR on youth, adults and communities were selected and reviews.

The results revealed that in the process of PAR, students acquired knowledge and gained skills, increased their social consciousness, initialized and fostered improvement and promoted change in their communities and improved their relations with adults.

PAR can aid students and teachers and educational settings in their professional development, it also helps them in building a cooperative context which is beneficial for all parties.

INTRODUCTION

In the last few decades we have witnessed a spectacular change in educational settings, instructors and learners' struggling made dramatic improvement throughout the whole educational systems. In the past, teachers were considered as the complete authority of the classroom, everybody was expected to follow the rules as it was dictated to them^[1]. As for the research, students were assumed to be 'researched subject' and their feelings and ideas didn't hold much importance to inquisitors, however after a period of time, the researchers tried to improve educational quality and think of learners as influential individuals which carried a great significance or value.

An approach which could be beneficial to reach a great change is a theory called Participatory Action Research^[2]. According to the principles which represent the PAR ideology, participants are set free from social and educational conventions and they are encouraged to be active participants to reach a profound understanding.

PAR projects have great advantages for students in educational settings. These kinds of projects can strengthen students' speaking abilities; therefore they can encourage them to participate in the process of making important decisions and aid them to take initiatives whenever they have the opportunity to do so^[3]. Student's exclusion from their research and learning process can make them feel unrecognized, unacknowledged and forgotten and it can result in lower self-esteem, hence, they can't take on any academic challenges which they are offered. School administrators can facilitate and encourage students to engage themselves in the process of learning and effectively deal with a problem in the time of crisis^[4].

According to a report by Razavi (2011) more than 180 thousand teacher-researchers, administrators and advisors participated in an action research project from 1999 to 2011 in Iran. They reported about the issues and problems associated with classrooms and other vital processes related to education^[5]. Most of the participants were primary school teachers while administrators and advisors who can have a bigger role in helping students to solve their attitudinal problems by using Action Research (AR) didn't participate much in the project.

This study is a review article of the recent understanding of the PAR and researchers, students and teachers could use it as a lead to probe this new area of research. The aim of this research is to explore the PAR's utilization in educational system and to proclaim the advantages of this approach to learners, instructors and other relevant stakeholders during their participation in a PAR project.

This study will present an explanation of PAR; furthermore, students and teachers' developments in their educational settings are explored.

Literature Review

The definition of PAR

According to a positivist point of view, researcher is regarded as a person with power which has adequate intelligence, perception, expertise and competence to probe individuals' actuality^[6]. People are usually observed as subject matters that have deficiency in their knowledge, capability and neutrality to scrutinize themselves in their real life. Accordingly the individual's conceptions of the world are treated as being insignificant in a research which is scientific based. In contrast, in PAR, skills that are mastered surpassed the researcher to contain all participants^[7]. Society members and inquirers function together and they cooperate to achieve a similar purpose while co-investigators attempt to examine issues related to community and compose an acceptable solution to the problem.

Reason and Bradbury (2008) describe PAR as a procedure which rectifies pragmatic learning and it attempts to value effective human goals. Action, critical thinking, theory and practice are incorporated in the process of PAR. Baldwin (2012) stated that PAR is a process which causes a marked modification rather than a procedure which is explanatory and instructional^[8]. Knowledge production is a community based process which is generated through constructivist approach. There are other premises which associate with PAR definition and they assume that knowledge relates to experience and the real life of the people and this understanding is made with cooperation among researchers and co-researchers. Dewey (1997) stated that in PAR context, instructors should acquire knowledge or new skills in accordance with their teaching, for these to happen they should promote the cooperation based learning context that is beneficial for both teachers and students^[9].

Hult and Lennung, McNiff and Reason and Bradbury (1980, 1981, and 2001) asserted that PAR is identified as a type of research which researchers' immediate behaviors influence the knowledge implementation in a cooperative context. Furthermore Wadsworth (1998) stated the importance of probing the issues which are concerned with the recent behavior for establishing development.

In PAR participants play a major part in all of the stages of the research instead of being subjects of the research? The PAR procedure offers analytic comprehension and reflection on community problems, as a result of this, participants can become more aware, independent and empowered^[10].

As stated by Williams and Brydon-Miller (2004) consciousness raising, critical examination, society associated research and following actions for a community modification are different features which relate to PAR. PAR gives special value to cooperation in communities which are ill-treated or repressed. Furthermore, it attempts to find solutions for unexpressed sources of social injustice to particular community issues^[11].

Generating knowledge and action which is channeled through investigation and education is considered to be one of the PAR's objectives; it is also a mean to enable people to operate extensively with their learning application and establishment^[12]. According to Pain, Whitman and Milledge (2011) PAR is recognizable among other participatory procedures because 1. It is participatory based. 2. It is a model which allows students to be automatous learners and they can construct and use their own knowledge. 3. The cooperation is vital at various levels. 4. PAR's purpose is to modify or develop the subject under investigation.

Researches who worked in PAR fields have identified that empirical knowledge is very beneficial and it is revolved around each researcher's interpretation and approach. Consequently the evolution of critical thinking, exploration, the scrutiny of social stratum and the development of community based modifications are designated as being the most important^[13]. Evaluating theoretical approaches such as feminist, race, neo-Marxist, communities' righteousness and self-governing cooperation are considered as important constituents of PAR^[14].

PAR in education

Maguire (1987) proposed three changes of PAR's objectives, the first one includes developing researcher's critical thinking, for example, researchers who are agents of an organization or associated with society and university. The second change relates to life enhancement of individuals who are involved in any way and the third one associate with modification of relationships and communities' systems^[15]. PAR is usually used in projects related to communities. In recent years PAR has been welcomed in educational settings and it is now utilized in students' learning development, teachers' successful instruction, projects involving youth and projects for international growth. Many of the projects which are done by involvement and participation of youth are about environmental and health education because these topics influence the lives of youth more directly.

According to Brydon-Miller and Maguire (2009), PAR is an important element that can be utilized by schools which are the perfect place for community change^[16]. Schools are the substantial sources of information and capable researchers can be discovered among students. PAR admits that within educational settings, teachers are the individuals with authority and advantage; therefore, PAR projects motivate teachers to participate eagerly alongside other stakeholders. Schools that utilize PAR principles, encourage development and exploration.

School PAR projects offer instructors and other community members an opportunity to 'act' with students. Genuine and willing cooperation of stakeholders with students is an important factor for improving schools and educational settings^[17].

METHODS

In this study the terms 'participatory action research', 'educational quality', 'educational development' and 'improving education' were searched in ERIC database and journals of *Action Research* and *Educational Action Research* of SAGE and Taylor & Francis Online databases. This probation provided various articles in the area of PAR and numerous papers from the references lists of several articles were used as well.

Studies that met the following criteria were included in this review:

- Papers which utilized PAR as an approach or examined the effects of PAR on educational development of relevant stakeholders
- Papers published in peer-reviewed journals
- Papers published in English language between 2007 and 2017

After assessing titles and abstracts of 67 articles obtained from different databases, 40 relevant papers that covered the second and third criteria were selected and screened thoroughly, finally, 21 articles that discussed the impacts of PAR on educational development were included in this review (Figure 1).

General information (name of author, country of researchers and participants, year), information about methods and procedures, findings and results were obtained from studies (Table 1).

The data which was obtained from the papers were categorized into three sections associated with the notion of PAR's effect on improvement of educational quality. These three sets include: students' development, teachers' development and educational settings' improvement^[18].

RESULTS

Effects of PAR on Educational Development of Students

The Student Action Research for University Access (SARUA) project was explored by a paper conducted by Bland and Atweh in 2007. SARUA project which was started by an Australian university, motivates marginalized students from higher education to investigate the obstacles of successful education and entrance to colleges and universities by using PAR. This project which involved students as researchers and included them in the process of the study, made passive students more active in their learning^[19]. By involvement in PAR process, students can voice their opinions about the educational problems and opportunities which they encounter in their educational lives, also they can take more responsibilities in their own learning. The SARUA project creates a warm environment for students to convey their feelings more freely and it also challenges the students and make them attend presentations and dispute their findings in different conferences, these experiences help students to have more faith and confidence in themselves which makes them more involved in their own learning, they also develop their educational opportunities. When students can communicate their feelings and ideas without reservation, schools can obtain large amount of useful information which can help them boost their students' learning and bestow more applicable and appealing curriculum^[20].

According to a paper conducted by C. Rubin and Jones (2007), there are some advantages regarding learners' Action Research (AR) including:

- "Building important academic skills": AR can aid students with their academic abilities due to the fact that this kind of research associate directly with each learner's real life experiences despite the context which they are living in and their academic accomplishments.
- "Engaging disenfranchised youth": Projects associated with AR can motivate deprived young students and make them have more involvement in the process of their own learning^[21]. Students AR project probe concerns which are crucial for learners and help them to establish thinking abilities.
- "Building social capital": Cooperation in a learner AR project is important because it helps students who are in an unfavorable position to have a chance to use "social capital" "that is family and community resources, college-preparatory experience and connection"^[22].
- "Developing empowered civic identities": Student's practiced observation and cooperation in society and research project help their readiness to undertake their liability as a citizen more seriously, furthermore, it aids them to acquire the capabilities for participation in different populist events^[23].

M. Downes, A. Bishop, Swallow, Olofson and Hennessey (2015) carried out a research which aimed at investigating the instructors and learners' experiences who were involved in "Collaborative Action Research" for middle school education enhancement in environments with developed technology. According to the objectives which are followed and each student's responsi-

bility, learners' engagement in the process of learning can develop control, arrangement and practical knowledge. Student's contributions do not indicate the recognition of their ideas or transformation of their positions in schools^[24]. In the research conducted by Fielding in 2006, learners' participation caused functional and potent instruction which nevertheless treats students as insignificant individuals. Fielding mentioned the notion called person center learning means students' involvement benefits them as individuals and assists them in their interpersonal relationships and communications. Students' demands and attentiveness should be considered as vital elements in small training communities, also affinity among teachers and students is important and real life learning possibilities is one of the main principles in designing pedagogies for learners.

According to Moore and Gayle (2010) learners' involvement in AR and their cooperation with teachers establish a close and harmonic bond among them and help learners to have better conception of their communities which improves their cognitive and spiritual involvement theory-practice connection and collaborative comprehension^[26]. Furthermore, students' association results in curriculum development. Students' contribution in the process of their own education improves learning outcomes and it makes the learners' opinions that are regarded as the affected party to be opined. Consequently, individuals begin to become more mature overtime and curriculum could be strengthened for staffs^[27].

In another paper carried out by Roberts, Brown and Edwards (2015), PAR was used to change conservative methods of teaching and learning in a Tanzanian village and used cooperation based techniques to generate participation and partnership between learners and teachers^[28]. furthermore learners gathered info of their communities and pinpointed the issues which they encountered, they thrived to distribute their results via demonstrations or lectures, moreover learner oriented methods were reinforced in teacher education progress. Consequently students' confidence was improved, active involvement in the classroom was expanded and teachers used more cooperative procedures in their instructions in the classroom^[29].

The analysis of a project by Bywater (2014) that aimed to inspect the benefits of PAR for environmental education showed that PAR aided learner to use materials in their real life situations and enhanced their capacity for using research methods, furthermore, it boosted their objective analysis and evaluation. As claimed by Bywater (2014) the PAR research, motivates students to learn and improve their skills, also, they might find great opportunities for problem-solving activities, moreover, PAR can enhance each student's assessment capabilities^[30].

In another study which was done by Balakrishnan (2016), PAR was used in communities with diverse cultural backgrounds, the opportunities and challenges which the participants encountered were identified, the participants who contributed in this study were 21 adolescents ranging from 16 to 17 years old and they were from different schools in Malaysia. In this inquiry, Balakrishnan used PAR because the probability of participants' attainments and involvement in the class were higher than teacher oriented classrooms, furthermore the researcher attempted to obtain students' feelings and ideas with the sole purpose of enriching them within the curriculum and strengthening the visibility of their continuous involvement outside if the classroom^[31]. One of the most important purposes of PAR that was recognized by Balakrishnan and Claiborne is 'conscientization' which is the strengthening of critical analysis and evaluation among researcher candidates from variety of cultures. Nurturing contributions to the process of research makes the community more associated in the process of decision making and this community is the recipients which may benefit at the end of this resolution^[32]. When participants' consciousness is acknowledged, the candidates can determine the source of their abuse, hence, they find solutions to their problems.

Maguire and Horwitz (2005, 2008) formed a research and attempted to support a more collaborative teacher student AR in an AR course. They made the instructor's training to be more in harmony with PAR procedures like cooperation, critical thinking and engagement; hence they have made a context in which the learners contributed in projects, assessments, adaptations and evolution^[33]. Correspondingly instructors prioritized learners' involvement in classroom; also students conveyed their feeling about different characteristics of the classroom and their daily school life. Additionally teachers attempted to utilize more cooperative teaching approaches in their classroom, according to the research they "talked" research with their learner, consequently students engaged in the process of learning and a rapport was built among students and teachers^[34].

Gordon and Edwards (2012) discussed how a virtual PAR project that occurred at Fielding Graduate University can help students to acquire research experience in a paper in 2012. There are some advantages regarding this research cooperation including: 1. Participants extended their knowledge of research. Learners explained that they comprehended a lot about AR while researches were analyzing the focus group^[35]. According to the researchers, equivalent possibilities should be accessible to other students. 2. Extremely useful knowledge was acquired that caused action, for example, participants showed intense and eager interest about the project experience and discussed it with their friends and instructors. 3. Female students appreciated the research experience. Learners mentioned that the opportunity which was made for their participation granted them the competence for research^[36]. 4. Writing and presentation capabilities were obtained by participants.

The results of using PAR in network school in Thailand for educational quality development, showed growth in students' understandings, abilities, critical thinking, consciousness, interpersonal relationships and cooperation^[37].

Benefits of utilizing PAR for students, teachers and other stakeholders in educational settings were discussed in a paper carried out by Steven Jacobs. Learners who are responsible for their own learning are students who manifest more confidence, desire and passion^[38]. Usually learners are not familiar with the notion of action research. They often assume that PAR is just

another research method in obtaining knowledge. However Strek (2014) stated that the studies which are carried out based on PAR propose modifications according to the research results, moreover, they facilitate learning through changes and resent understanding of knowledge throughout the process of research. Consequently PAR gives learners an outstanding opportunity to broaden their knowledge and experience associated with research^[39]. Kindon, Pain and Kesby (2007) argued that candidates' abilities and knowledge could expand in the course of research.

Postgraduate and doctoral students have increasing curiosity in AR, the consequences of the elevated interest contains the growing identification of the significance of PAR to promote cooperation among students in universities which disintegrate the dominance that are diverged between the researchers and the learners^[40]. AR candidates who are cooperative in the process of the research are equipped with the expanse which they could contemplate their future performances according to the recent knowledge which they have acquired^[41].

As stated by Baldwin (2012) PAR is community based and information is made by individuals for collaborating in the process of the research. All the candidates which are participating in a PAR project collaborate in a context which is autonomous and these kinds of setting can generate knowledge and disclosure^[42].

Effects of YPAR on educational development of children and youth

In a paper about reactions to the engagement of students of color in youth participatory action research (YPAR) Bertrand (2016) explains that in YPAR the particular attitude of young students especially learners who are treated as insignificant individuals are considered as the dominant principles for carrying out the research. The YPAR's purpose is to give youngsters a position as co-leaders with adults in society^[43]. YPAR attempts to find educational unfairness in native communities, hence, the related research could enhance the young learners' real life situations. In YPAR the candidates' authentic life experiences are assumed to have crucial role in the research process. These kinds of inquiries which are associated with YPAR yield changes which exceed the student's level and it can improve discourse and reinforce schools' development; furthermore, teachers and principals can use the information and come to an appropriate resolution^[44]. YPAR could be particularly influential when it's promoted by students of color and other learners who are treated unfairly^[45].

Kellett and associates (2004) stated that even the most experienced researchers cannot obtain the meticulous knowledge and in-depth information that youth can provide from their own world when they participate as co-researchers, they also discussed that when we involve youth in the process of research, we can vanquish the obstacles of age difference and power imbalance between researchers and researched, moreover, children can utilize various means of communication with their peers to get vigorous feedback from them^[46]. Children want to collaborate in participatory studies to enhance their skills and prepare themselves for future occupations. When research is done with children and they are involved in every stage of its process, they are able to question the outcomes of the study; also, the study's results are demonstrated from children's point of view, not researcher's renditions of their thoughts and encounters^[47].

The benefits of PAR for youth were studied in a paper about two YPAR projects conducted in East Palo Alto by Ardoin, Castrechini and Hofstedt, as part of an alliance between John W. Gardner Center for Youth and their communities at Stanford University and San Francisco Bay Area community of EPA. The first benefit associates with youth researchers' relation with their setting which is enhanced because their communal relations is escalated, also, their comprehension of the properties and resources which are located in their community is reinforced^[48]. In PAR, participants can alter their attention and switch from a deficit-based thinking to an asset-focused view of the community^[49]. The second advantage is that the youth accomplished efficient research capabilities which could be applied in this context or other educational environments. This process made the study more reliable because it presented a data set which could be preserved in different contexts; it also enhanced the relationship between community and university^[50].

The positive outcomes of a PAR project named "Youth Uncensored" that dealt with risky students were explored in a study^[51]. These benefits include: entertainment, pecuniary benefits, feeling of welfare and security, connection with peers and adults, effective comprehension of issues related to their life, also, it, aided them to gain a productive self-confidence and made them feel appreciated, moreover, youth were provided with the opportunity to assist and guide their peers in the community^[52].

Children's collaboration with adults in PAR projects can improve their perception of social justice and help them understand the subject of study. When children are given the opportunity to collaborate with adults, they can challenge their authority and domination in the class and express their thoughts and convey their feelings, therefore, their communication abilities would be strengthened^[53]. Children, often try to initiate plans which offers solutions to their current needs after PAR projects, also, they are authorized to pursue and find worthwhile occupations and submit their resolutions to decision-makers, and furthermore, they can assist their friends to improve their lives by making pragmatic decisions^[54].

Effects of PAR on educational development of teachers

According to the results of research studies which were done in western countries, student-teachers' inquiry in classroom can reinforce the connection between theory and practice, thus it can create a practice based education also it can fortify the student-teachers' understanding of teaching^[55]. Boosting the confidence of participants through PAR can help them to solve com-

plex issues with their problem-solving talents and self-efficiency^[56]. Participants' contributions in the process of AR can make the teachers more aware of their responsibilities in the classroom furthermore if the revision is initiated by teachers, the probability of maintaining progress elevates. In conclusion many studies have stated the importance of consciousness enhancement in the teacher education and their evolution^[57].

Teachers need to go through an evolution which makes them excellent instructors, teachers' development has to happen in three levels, first, they need to experience instructing before their real teaching starts, the second one relates to their initial teaching period which is identified by consideration for their own persona and the third is associated with a forgoing teaching stage which is recognized by thoughts for learner^[58]. For each stage, instructing should be initiated with planning, performance and consideration which are equivalent to the reflection practice basic in the PAR.

PAR research is a process involved in education. Action and community matters could be modified by data which is collected by researchers^[59]. Professional growth for instructors relates to PAR or AR and they could be used for student-teachers' education^[60]. Tomlinson (1999) stated that action research which is utilized for teacher enhancement, boost their sense of professionalism. Stating that instructors are responsible for their students' learning is useless except if they are determined to reach the best resolution for themselves and their students. According to factory model, students' productivity becomes one of the teachers' responsibilities when they are considered an accountable party for learners' materials and the information which they are taking in. For acknowledging instructors' AR, also for empowering training and education, schools and universities should function together, hence, each teacher's training becomes peculiar for their own classes and it improves their position as teachers^[61]. In a study which was carried out by Ginns et al. (2001) PAR was utilized to make novice teachers more professional. The results showed great professional progress in novice teachers, furthermore, teachers benefited from the cooperative aspect of PAR.

Self-assessment in the process of PAR enhances teachers' reflection in the classroom, furthermore, teachers' ability to combine theory and practice can help them to design their classes to be more cooperative, creative, more focused on students and in touch with their real lives^[62]. With PAR, teachers can make an improvement and they can change their traditional position in the classroom and design a modified curriculum which is influenced by their own research in the classroom. Consequently teachers will feel more responsible for educational and instructional improvement^[63].

Kari Kragh Blume Dahl (2013) aimed to explain whether PAR can be beneficial for student-teachers' professional development in health education in Kenya or not and if it can encourage participants to be more active and strengthen their professional teaching, according to the results, 3 themes emerged from the practice which includes: "Multiplicity", "Reflexivity" and "Empowerment"^[64]. One of the participants' attitudes altered during the 4 months of PAR because he developed a self-reflective perspective towards his own professional teaching and he found his inner motivation to do the job more properly, furthermore, he adopted more student oriented lessons in his classroom and the learners contributed to learning and they took more responsibility in the classroom. Student-teacher relationship was modified. Learners and instructors expressed their feelings and stated that their emotions became stronger as the research continued^[65]. The process of PAR for Kenyan student-teachers empowered them to express their ideas and establish new developments from 'worse to better'. The results of this research are similar with the Feldman (2007) study, the researcher in this study found that candidates became more perceptive of their capabilities to develop their self-reliance and problem-solving skills while they were performing in a PAR research^[66].

Bondy (2001) stated that teacher are unwilling to engage in PAR projects despite their great advantages as they can enhance reflection on instruction and learning, teaching, cooperation and participants' relationship^[67].

According to the result of the project by Downes et al. (2015), collaborative AR can help teachers to learn. In each stage of AR, teachers participate in analytic investigation of their own instruction and they offer assessments and assets to answer to the calls of each stage of AR^[68].

In an inquiry carried out by Rogers (2007) the influence of AR on 114 master's students was investigated, instructors have seen AR as a mean to determine interpersonal connection among learners and it helps learners to express their opinions more freely. AR is adaptable enough as a method for empowering research capabilities and when instructors use AR as a method for doing their study they can encounter many chances to construct and strengthen mind and character which generate teachers who are cooperative and critical thinkers^[69].

AR is considered as an investigation surpassing teaching, learning and educational context. This type of inquiry has the advantage for research candidates; also it is beneficial for researcher's professional progress^[70]. The research results are diverse and often contain the assessment of participants and the enhancement of care evaluation and arrangement devices. The merits which are mentioned by researchers allow learners to convey their feelings and affect the training; furthermore, they enable researchers to include practice in the method or research output^[71].

In a research by Crocco, Faithfull and Schwartz (2003) the relationship between a native high school and a college of education was investigated. The researchers used AR to know whether the curriculum is accurate or not and if evaluation procedures work for different types of students, during the process of this research master students whom were working as interns in that native high school improved their research ability and they encountered social discrimination in the high school, the results revealed that AR liberates the oppressed individuals instantaneously, also it is mentioned that these kinds of connection are faced with planning and legalizing issues^[72].

Effects of PAR on improvement of educational settings

PAR projects can help schools to generate knowledge, change and develop into settings for change instead of just being the victims of change^[73]. The processes of PAR projects are as important as the results of them, thus they can be of great advantage to learners, instructors and other stakeholders that participate in a project^[74]. Learners and instructors can express their difficulties and issues and distinguish procedures for discovering solutions.

Gordon and Edwards' virtual PAR project's results were advantageous to the program and the university. The university obtained some important knowledge which originated performances; the constructive second research was conducted because of the PAR project. Candidates discussed about their study experience passionately with their classmates and instructors which causes improvement in a student and student's faculty research^[75]. The experience helped the university and pupils to acquire a particular relationship.

In the paper by Bland and Atweh (2007), school based research teams' findings showed that SARUA students help their schools develop some comprehension of their native communities, also the participants' works in SARUA project assisted to generate modifications in the entire school and students started to adopt academic work, furthermore the school's image was enhanced in educational communities and it had practical influence on teaching staff^[76]. In another school SARUA students' works resulted in consciousness improvement about local issues in the school, moreover it made school's personnel to have debates about acceptance of native culture in the curriculum, finally two crucial objectives were identified by SARUA students 1. Local students should attract more attention in the school 2. (SARUA) Students have to hold more responsibility in the school^[77].

According to Michelle Fine (2004) students can identify problems that usually go unnoticed by school leaders because they have different perspectives of issues and concerns. Students can give innovative suggestions for schools improvement and encourage more student participation^[78]. AR projects involving students help schools to utilize students' skills to their advantage. Student co-researcher model involves high school students who plan and undertake a research to investigate educational concerns in their schools. These way students contribute to efforts for school improvement and assist school leaders in improving their educational settings^[79].

Effects of YPAR on Improvement of Educational Settings

In the study conducted by Ardoin, Castrechini & Hofstedt (2015), youth AR made university-community partnership stronger by encouraging collaborative spirit and curiosity. These types of collaborative alliances can connect people together so they can express their feeling and experiences in the community, hence, leading to more upright conversations.

Reich, Kay and Lin carried out a community based participatory research project in which middle school students tried to modify the quality and price of their school's food^[80]. Consequently, this study enhanced the interaction between students, managers and employees and allowed them to implement refinements that are required for their well-being^[81].

DISCUSSION

Although PAR provides children and youth with great opportunities for practical development, it is vital to know that researchers may encounter many challenges during the process of research^[82]. Six challenges associated with involving children in the process of PAR and their counter-challenges and solutions were discussed in a paper conducted by Bradbury-Jones and Taylor (2015). These challenges are as follows: 1. children have research skills deficiency, 2. inclusive instruction is needed for children and they should be trained for their roles, 3. children's personal thoughts and researchers' personal interpretations are hard to balance, 4. the issue of rewarding children as a compensation for their contributions to the process of research, 5. power imbalance between children and researchers must be dealt with, 6. the issue of providing a safe environment for children^[83].

First we should assume that children are mature enough to have their own opinions, moreover, it is recommended that researchers use methods which can guarantee children utmost involvement in the research process rather than using approaches which are extremely complicated and unsuited for their age group, young researchers who are usually eager to use the skills they have gained in the process of research, could also instruct children^[84].

Youth should be given enough time to gain enough competence and we should set up limitations for them in order to prevent 'over-identification' with peers, also, their thoughts and experiences should not be generalized. We should indemnify children like adults; children should be paid according to their social and cultural context. This matter is vital for children researchers and it ensures their maximum commitment to the study^[85]. Children shouldn't be treated in a manner that's against principles of justice and authoritarian opinions should be excluded, moreover, caution should be exercised to ensure that the originality factor of studies with children as co-researchers is not taken advantage of^[86].

In some articles, researchers don't involve children in every step of the study and children cannot express their ideas or they are exploited as their opinions and views are transcribed incorrectly^[87]. Since the process of PAR is very time consuming and expensive and requires education and instruction for contributors, papers with high degree of reliability, often, include a small number of children and youth as participants. Using quantitative methods might encourage more participants to engage in the process of research; however it is not the best alternative if the researcher wants a more authentic collaboration^[88]. Most of the

reviewed PAR studies were conducted in USA while there weren't as much research done in the third world countries. One of the reasons for research deficiency in third-world countries relates to the fact that youth in those countries couldn't prioritize their involvement in the research due to their homework, errands and their parents' disapproval. In some papers children who grew up in families controlled by men, couldn't deliver their ideas and their feelings genuinely. Children who form their opinions through social interactions with adults are anticipated to have appropriate and acceptable ideas which are in harmony with adults^[89]. Wickenden & Kembhavi-Tam (2014) faced this challenge in their research so they tried to interact with children in a more friendly way to extract more honest responses. When the research is administrated in contexts like schools and colleges, researchers have to alter their arrangements according to school's schedule^[90].

Limitations

There were so many institutional reports regarding the effects of PAR on education, however due to the fact that these records weren't peer reviewed journal articles and they didn't meet the second inclusion criteria mentioned in the method section, they couldn't be utilized in this review.

There were not many helpful quantitative studies which could be used in this research; therefore, only qualitative papers were assessed and one of the main limitations of qualitative studies is that the outcome is usually affected by the authors' distinctive ideas and due to the lack of objectivity, the results might not be conclusive enough^[91].

Implications

Learners' perceptions and opinions are of great importance for facilitating educational quality, therefore, teachers and principals should give students a chance to participate in the process of educational researches so they can learn about their problems and find solutions for them, also, adults should hear students' ideas and opinions without any prejudice because their ideas can influence the change that is required for the target community^[92].

Before the researchers initiate their projects they should have a discussion with stakeholders about their responsibilities and the level of engagement in their study.

Schools' administrative have to be unbigoted because students might come to conclusions that contradict their current policies, they should be ready to be criticized and listen to proposals which might not be acceptable and interact in a genuine way with participants about whether they apply their suggestions or not^[93].

Students as active participants should be reimbursed by researchers to ensure their active contribution and collaboration^[94].

When working with children and youth, we should provide a safe environment for them and support their endeavors, also, we must ensure that they are properly trained and prepared for their role in the research, moreover, we should involve children in every stage of the study to avoid misapprehension of their voices^[95].

It is essential that the outcome of the participants' study is used for people in need or participants might think that their work is underestimated; also, the influences and changes promoted by the research results should be maintained.

CONCLUSION

The present study attempted to investigate the impact of PAR on highlighting the educational standards.

PAR can help student in strengthening their academic capacities as a consequence of their authentic observation and experience in their educational environment^[96]. Also PAR can motivate oppressed students to convey their ideas and feeling more leniently, furthermore, during this period of time, they can develop a kind of reflective thinking which helps them construct new knowledge^[97]. Students' active engagement in the process of their learning can boost their self-confidence and leadership abilities^[98]. Teachers can be considered as cooperative partners of students rather than the sole power of classroom^[99].

For teachers, PAR can develop their sense of professionalism and they can build an interpersonal relationship with their learners^[100]. Furthermore, due to the process of involvement in the research project and their cooperation^[101-102], they form a kind of reflective thinking which helps them to contemplate about their teaching methods, therefore, they can improve both their teaching and training's qualities^[103].

The findings of this research might have some implications for syllabus and curriculum^[104]. Designers as it can help them to design a more collaborative approach for educational settings and they can improve the education's quality and standards, moreover^[105-109]. Teachers can strengthen the students' intramural motivation and help them to be more independent learner^[110]. They also can raise learners' awareness and make them think reflectively on each task^[111-112].

REFERENCES

1. Alderson P. Research by children. *Int J Soc Res Methodol*. 2001;4:139–153.
2. Ax J.Ponte P and Brouwer N. Action Research in Initial Teacher Education. An Explorative Study. *Educat Action Res*. 2008; 16:55–72.

3. Balakrishnan V and Claiborne L. Participatory action research in culturally complex societies: opportunities and challenges. *Educ Action Res.* 2016;1:1-18.
4. Baldwin M. Participatory action research. In: Grey M, Midgley J, & Webb SA (editors), *The sage handbook of social work*, London, UK: Sage. 2012;467-482.
5. Bautista M et al. Participatory action research and city youth: Methodological insights from the Council of Youth Research. *Teach Coll Rec.*2013;115:1-23.
6. Bergold J and Thomas S. Participatory research methods: A methodological approach in motion. *Forum Qual Soc Res.*2012;13:191-222.
7. Bertrand M. "I Was Very Impressed", Responses of Surprise to Students of Color Engaged in Youth Participatory Action Research. *Urban Edu.*2016;1:1-28.
8. Bertrand M and Ford A. "Planting the seeds": The influence of the Council of Youth Research on education policy. In: Conner J & Ebby-Rosin R (Editors), *Student voice in American education policy*. New York, NY: Yearbook of the National Society for the Study of Education, Teachers College Press.2015;114:189-202.
9. Bethel T, et al. Making links. Research report. Brisbane: Queensland University of Technology.2000.
10. Bland D and Atweh B. Students as researchers: engaging students' voices in PAR. *Educ Action Res.* 2007; 15:337-349.
11. Bondy S. Warming up to classroom research in a professional development school. *Contemporary Education.*2001;72:8-6.
12. Borg M, et al. Opening up for many voices in knowledge construction. *Forum Qual Soc Res.*2012;13:191-222.
13. Bradbury JC and Taylor J. Engaging with children as co-researchers: challenges, counter-challenges and solutions. *Int J Soc Res Methodol.*2015;18:161-173.
14. Brinton LM and Hershberg, RM. Participatory action research and feminisms: Social inequalities and transformative praxis. In: Hesse-Biber SN (Editors), *Handbook of feminist research: Theory and praxis*, 2012;16.
15. Brydon-Miller, et al. Why Action Research?. *Action Res.*2003;1:9-28.
16. Brydon MM and Maguire P. Participatory action research: contributions to the development of practitioner inquiry in education. *Educ Action Res.*2008;17:79-93.
17. Bywater K. Investigating the Benefits of Participatory Action Research for Environmental Education. *Policy Futures in Education.*2014;12:920-932.
18. Cammarota J. From hopelessness to hope: Social justice pedagogy in urban education and youth development. *Urban Edu.* 2011;46:828-844.
19. Cammarota J and Fine M. Youth participatory action research: A pedagogy for transformational resistance. In: Cammarota J & Fine M (Editors), *Revolutionizing education: Youth participatory action research in motion*, New York, NY: Routledge.2008;1-12.
20. Chandler D and Torbert B. Transforming Inquiry and Action Interweaving 27 Flavors of Action Research. *Action Res.*2003;1:133-152.
21. Chukwudozie O, et al. Applying community-based participatory research to better understand and improve kinship care practices: Insights from the Democratic Republic of Congo, Nigeria, and Sierra Leone. *Family & Community Health.* 2015;38:108-119.
22. Conrad D. Education and Social Innovation: The Youth Uncensored Project-A Case Study of Youth Participatory Research and Cultural Democracy in Action. *Can J Educ.*2015;38:1-25.
23. Crocco MS, et al. Inquiring Minds Want to Know: Action Research at a New York City Professional Development School. *J Teacher Edu.*2003;54:19-30.
24. Dahl KKB. 'From worse to better': How Kenyan student-teachers can use participatory action research in health education. *Educ Action Res.*2014;22:159-177.
25. Dewey J. *How we think*. Mineola. New York, NY: Dover Publications.Inc.1997.
26. Downes JM, et al. Collaborative action research for middle grades improvement. *Edu Action Res.*2015;24:194-215.
27. Downes T and Groundwater S S. Students: From informants to co-researchers. Refereed Paper, Australian Association for Research in Education, Annual Conference, Melbourne.1999.
28. Duncan Andrade J and Morrell E. *The art of critical pedagogy: Possibilities for moving from theory to practice in urban schools*. New York, NY: Peter Lang.2008.
29. Ericson lidman E and Strandberg G. Care Providers learning to Deal with Troubled Conscience through Participatory Action Research. *Action Res.* 2013;11:386-402.

30. Feldman A. Teachers, Responsibility and Action Research. *Educ Action Res.* 2007;15:239–252.
31. Feldman A and Weiss T. Understanding Change in Teachers' Ways of Being through Collaborative Action Research. *Educ Action Res.* 2010;18:129–55.
32. Fieldhouse J and Onyett S. Community Mental Health and Social Exclusion: Working Appreciatively towards Inclusion. *Action Res.* 2012;10:356-372.
33. Fielding M. Leadership Radical Student Engagement and the Necessity of Person centered Education. *Int J Leadershp Educ.* 2006;9:299-313.
34. Fielding M. Students as Radical Agents of Change. *J Educ Change.* 2001;2:123-141.
35. Gibbs P, et al. Literature review on the use of action research in higher education. *Educ Action Res.* 2016;1-20.
36. Ginns I, et al. Beginning teachers becoming professionals through action research. *Educ Action Res.* 2001; 9:111-113.
37. Glassman M. and Erdem G. Participatory Action Research and Its Meanings: Vivencia, Praxis, Conscientization. *Adult Educ Q.* 2014;64:206-221.
38. Glanz G. *Action Research: An educational leader's guide to school improvement.* 2nd ed. Massachusetts: Christopher-Gordon Publishers, Inc. 2003.
39. Gordon SM and Edwards JL. Enhancing student research through a virtual participatory action research project: Student benefits and administrative challenges. *Action Res.* 2012;10:205-220.
40. Greenwood DJ and Levin M. *Introduction to Action Research: Social Research for Social Change.* Thousand Oaks, CA: Sage. 1998.
41. Greenwood D J et al. Participatory Action Research as a Process and as a Goal. *Human Relations.* 1993;46:175–192.
42. Hampshire K, et al. Taking the long view: Temporal considerations in the ethics of children's research activity and knowledge production. *Child Geogr.* 2012;10:219–232.
43. Harnett J. Reducing Discrepancies between Teachers' Espoused Theories and Theories-in-Use: An Action Research Model of Reflective Professional Development. *Educ Action Res.* 2012;20:367–384.
44. Hart RA. *Children's participation: From tokenism to citizenship.* Florence, Italy: UNICEF International Child Development Centre. 1992.
45. Huang HB. What is Good Action Research? Why the Resurgent Interest?. *Action Res.* 2010;8:93–109.
46. Kellett M, et al. 'Just teach us the skills please, we'll do the rest' Empowering ten-year-olds as active researchers. *Children & Society.* 2004;18:329–343.
47. Hult M and Lennung S. Towards A Definition of Action Research: A note And A Bibliography. *J Manag Studies.* 1980;17:241–250.
48. Irizarry JG. *The Latinization of U.S. schools: Successful teaching and learning in shifting cultural contexts.* Boulder, CO: Paradigm Publishers. 2011.
49. Irizarry JG and Welton AD. Latina/o youth as educational researchers: Implications for teaching and learning in urban schools. In H. R. Milner IV & K. Lomotey (Eds.). *Handbook of urban education,* New York, NY: Routledge.2014;239-255.
50. Jacobs S. The Use of Participatory Action Research within Education-Benefits to Stakeholders. *World J Educ.* 2016;6.
51. Johnson A. *A short guide to action research.* Boston, MA: Allyn and Bacon. 2012.
52. Johnson MJ and Button K. Connecting graduate education in language arts with teaching contexts: The power of action research. *Eng Educ.*2000;32:107-126.
53. Katsarou E and Tsafos V. Student-Teachers as Researchers: Towards a Professional Development Orientation in Teacher Education'. Possibilities and limitations in the Greek University. *Educ Action Res.* 2013;21:532–548.
54. Kelly PJ. Practical suggestions for Community Interventions Using Participatory Action Research. *Public Health Nursing.* 2005;22: 65–73.
55. Kindon S, et al. (Eds.) *Participatory action research approaches and methods. Connecting people, participation and place.* London: Routledge, Taylor & Francis Group. 2007.
56. Kirshner B and Pozzoboni KM. Student interpretations of a school closure: Implications for student voice in equity-based school reform. *Teach Coll Rec.* 2011;113:1633-1667.
57. Kitchen J and Stevens D. Action Research in Teacher Education: Two Teacher Educators Practice Action Research as They Introduce Action Research to Preservice Teachers. *Action Res.* 2008;6:7–28.
58. deKoning K and Martin M. *Participatory research in health: Issues and experiences.* London, UK: Zed Books. 1996.

59. Koutselini M. Participatory teacher development at schools. *Action Res.* 2008;6:29-48.
60. Kur EE, et al. Teaching and learning Action Research: Transforming Students, Faculty and University in Mexico. *Action Res.* 2008;6:327–349.
61. Lewis ME. Developing and practicing participatory action research (PAR) pedagogy in a NYC high school greenhouse project: An insider's narrative inquiry. Presentation at the AERA Annual Meeting, April, in Chicago, IL. 2007.
62. Li YL. Teachers in Action Research: Assumptions and Potentials. *Educ Action Res.* 2008;16:251–260.
63. Lodge C. From Hearing Voices to Engaging in Dialogue: Problematizing Student Participation in School Improvement. *J Educat Change.* 2005;6:125-146.
64. Lundy L, et al. Working with young children as co-researchers: An approach informed by the United Nations Convention on the Rights of the Child. *Early Educ & Develop.* 2011;22:714–736.
65. McAlliste M, et al. Evaluating STAR – A Transformative learning Framework: Interdisciplinary Action Research in Health Training. *Educ Action Res.* 2013;21:90–106.
66. McNicoll P. Issues in teaching participatory action research. *J Soc Work Educ.* 1999;35:51-62.
67. McTaggart R. *Participatory Action Research: International Contexts and Consequences.* Albany, US: University of New York Press. 1997.
68. Minkler M. Using participatory action research to build healthy communities. *Public Health Reports.* 2000;191-197.
69. Minkler M and Wallerstein N. *Community-based participatory research for health.* San Francisco: Jossey-Bass. 2003.
70. Mirra N, et al. *Doing youth participatory action research: Transforming inquiry with researchers, educators, and students.* New York, NY: Taylor & Francis. 2015.
71. Moore J. Living in the Basement of the Ivory Tower: A Graduate Student's Perspective of Participatory Action Research within Academic Institutions. *Educ Action Res.* 2004;12:145–162.
72. Moore T and Gayle BM. Student learning through Co-Curricular Dedication: Viterbo University Boosts Faculty/Student Research and Community Services. *Transformative Dialogues: Teach & Learning J.* 2010;4:1–7.
73. Morale MPE. Participatory Action Research (PAR) cum Action Research (AR) in teacher professional development: A literature review. *Int J Res Educ Sci.* 2016;2:156-165.
74. Morrell E. Youth-initiated research as a tool for advocacy and change in urban schools. In: Ginwright SA, Noguera P, & Cammarota J (Editors), *Beyond resistance!: Youth activism and community change: New democratic possibilities for practice and policy for America's youth,* New York, NY: Routledge. 2006;111-128.
75. Ardoin NM, et al. Youth–community–university partnerships and sense of place: two case studies of youth participatory action research, *Child Geogr.* 2014;12:479-496
76. Noffke S and Somekh B. Action research. In: Somekh B and Lewin C (editors), *Theory and methods in social research (2nd).* EdLos Angeles: Sage Publications Inc. 2011;94-101.
77. Pain R, et al. Productive Tensions-Engaging Geography Students in Participatory Action Research with Communities. *J Geogr High Educ.* 2013;37:28–43.
78. Pain R, et al. *Participatory Action Research Tool kit: An Introduction to Using PAR as an Approach to Learning, Research and Action Research.* UK: Durham University. 2011.
79. Park P, et al. *Voices of change: Participatory research in the United States and Canada.* Westport, CT: Bergin & Garvey. 1993.
80. Pine GJ. *Teacher action research: Building knowledge democracies.* Thousand Oaks, California: Sage Publications, Inc. 2009.
81. Postholm MB. Teachers' Learning in a Research and Development Work Project. *Educ Action Res.* 2011;19:231–244.
82. Quijada Cerecer DA, et al. Toward critical youth policy praxis: Critical youth studies and participatory action research. *Theory into Practice.* 2013;52:216-233.
83. Reason P and Bradbur H. Introduction: Inquiry And Participation In Search of World Worthy of Human Aspiration. In: Reason P & Bradbury H (Editors). *Handbook of Action Research: Participative Inquiry and Practice,* London, UK: Sage. 2001.
84. Reason P and Bradbury H. *The sage handbook of action research: Participative inquiry and practice.* London, UK: Sage. 2008.
85. Reid C, et al. Finding the 'action' in feminist participatory action research. *Action Res.* 2006;4:315–32.
86. Roberts DM, et al. Participatory action research in two primary schools in a rural Tanzanian village: an exploration of factors to cultivate changes in teaching and learning. *Educ Action Res.* 2015;23:366-382.

87. Rodríguez LF and Brown TM. From voice to agency: Guiding principles for participatory action research with youth. *New Directions for Youth Development*, 2009;123:19-34.
88. Rogers D, et al. 'It's about the Kids': Transforming Teacher-student Relationships through Action Research. *The Clearing House*. 2007;80:217–222.
89. Rubin BC and Jones M. Student Action Research: Reaping the Benefits for Students and School Leaders. *NASSP Bulletin*. 2007;91:363-378.
90. Rudduck J. Student Voice, Student Engagement, and School Reform. In: Thiessen D, & Cook S A. (Editors).
91. *International Handbook of Student Experience in Elementary and Secondary School*, Dordrecht, the Netherlands: Springer. 2007;587–610.
92. Santo CA, et al. "Engaging Urban Youth through Technology: The Youth Neighborhood Mapping Initiative." *J Planning Educ Res*. 2010;30:52–65.
93. Savin Baden M and Wimpenny K. Exploring and implementing participatory action research. *J Geogr Higher Educ*. 2007;31:331-343.
94. Schäfer N and Yarwood R. Involving young people as researchers: Uncovering multiple power relations among youths. *Child Geogr*. 2008;6:121-135.
95. Shamrova DP and Cummings CE. Participatory action research (PAR) with children and youth: An integrative review of methodology and PAR outcomes for participants, organizations, and communities, *Children and Youth Services Review*. 2017;81:400-412.
96. Smith P, et al. Tuned in: Listening to student voices. *Princi Leadersh*. 2005;6:28-33.
97. Smyth J. Toward the Pedagogically Engaged School: Listening to Student Voice as a Positive Response to Disengagement and 'Dropping Out'? In: Thiessen D, & Cook SA (Editors), *International Handbook of Student Experience in Elementary and Secondary School*, Dordrecht, the Netherlands: Springer. 2007; 635-658.
98. Soleimanpour S, et al. Incorporating youth-led community participatory research into school health center programs and policies. *Public Health Reports*. 2008;123:709-716.
99. Stoecker R. Are Academics Irrelevant? Roles for Scholars in Participatory Research. *American Behavioural Scientist*, 1999;42:840-854.
100. Stoudt BG, et al. Contesting privilege with critical participatory action research. *J Soc Issues*. 2012;68: 178-193.
101. Taylor J, et al. Young people's experiences of going missing from care: A qualitative investigation using peer researchers. *Child Abuse Rev*. 2013;23:387-401.
102. Terapo R, et al. SARUA 2000: the Glenala students' report. Research report. Brisbane: Queensland University of Technology. 2001
103. Tonseenon P, et al. Development of Education Quality in Network School by Using Participatory Action Research. *Int J Educ Res*. 2014;2.
104. Torre ME, et al. Critical Participatory Action Research as Public Science. In H. Cooper & P. Camic (Eds.), *APA Handbook of Research Methods in Psychology*, Washington, DC: American Psychological Association. 2012.
105. Vaughan M and Burnaford G. Action research in graduate teacher education: a review of the literature 2000–2015. *Educ Action Res*. 2015;24:280-299.
106. Vikstrom S, et al. Pedagogic Leadership in Higher Education Using Participatory Action Research Strategies - Illustrative Cases from Three Pedagogical Development Contexts. *Dentistry*. 2016;6.
107. Wadsworth Y. What is Participatory Action Research? *Action Res Int*. 1998;2.
108. Walsh E, et al. Undertaking Action Research in Prison: Developing the Older Prisoner Health and Social Care Assessment and Plan. *Action Res*. 2014;12:136–150.
109. Weiler J. Who Gets It? Engaging in Action Research in Zimbabwe. *Action Res*. 2007;5:139–159.
110. Wickenden M and Kembhavi-Tam G. Ask us too! Doing participatory research with disabled children in the Global South. *Child*. 2014;21:400–417.
111. Williams B and Brydon MM. Changing directions: Participatory action research, agency, and representation. In *Ethnography unbound: From theory shock to critical praxis*. In: Brown SG, & Dobrin S (Editors), *the Handbook of Social Research Ethics*, Albany, NY: State University of New York Press. 2004.
112. Yonezawa S and Jones M. Student co-researchers: How principals can recruit, train and enlist the help of students to examine what works and does not work in their schools. *NASSP Bulletin*, 2007;91.