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Effects of Population Education Instructional Module on Undergraduates' Knowledge and Attitude

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ABSTRACT

Population explosion, poverty, and the gender gap in terms of access to education are the major issues related to population education. However, research on population education is avoided due to the sensitivity of the issue, particularly in Pakistan where religious extremism and social norms are a big restriction. But, no one can deny the need for population education due to population growth and the current economic condition of Pakistan. Therefore, this experimental research was planned to find out the effects of a self-instructional population education module on undergraduates' knowledge and attitude. An achievement test and an attitude scale were used for data collection. Findings revealed that SPEM significantly affects undergraduates' knowledge and attitude regarding population education. However, the relationship between knowledge and attitude mean scores was significant but poor (Pearson rho=.263). Hence, there is a need to launch effective population education programs throughout the country to remove the restrictions for the people to adopt the procedures required for control of population growth.

Introduction

With a population of over 207 million, Pakistan is the sixth most populous country in the world. However, only 25% of eligible couples say they are using the latest contraceptive methods. However, our understanding of how Islam is shaping Pakistan's reproductive strategy and its relative importance in contraceptive decisions needs to be complex (Ataullahjan et al., 2019). Pakistan's contraceptive prevalence has been stable at 34% for over a decade, suggesting that fertility rates are likely to remain high unless effective interventions are developed (Naz & Acharya, 2021). There is a large gap between women's knowledge and practice (Pasha et al., 2021). The world's population has reached 7.7 billion and is projected to reach 9 billion by 2045 (Van Bavel et al., 2018).

According to a Pakistani survey, 90 percent of the women were knowledgeable of family planning, 27 percent were aware of oral contraceptives, 26 percent were aware of injectable contraceptives, and 35 percent were aware of condoms (Bashir & Guzzo, 2021). According to a survey undertaken in Karachi, Pakistan, 89 percent of women were aware of family planning, whereas just 33 percent had ever utilized any technique of family planning (Habib et al., 2017). The study is being conducted because family planning counseling and health promotion activities by medical practitioners can have

a positive effect on the use of forms of contraception as a result of maternal health services (Agha & Williams, 2016: Kumar et al., 2020). According to this survey, just 25% of reproductive-age women use family planning, which is relatively low as compared to their understanding of the topic (Pasha et al., 2021).

The low level of government investment in education causes Pakistan's educational performance underwhelming. As Wazir and Goujon (2021) highlight that the academic system of Pakistan is not enough effective to is flawed to arrange the required infrastructure, reduce gender discrimination, and enhance the quality of education. The reason for these flaws could be the lack of awareness of family planning. Pakistan's family planning strategy, which has been in place for more than 30 years, has yet to provide the intended outcomes. Although fertility numbers are declining, they are still higher compared to certain other nations' programs (Chakraborty et al., 2019).

Pakistan's population growth is high among the list of developing countries. Now, it is the sixth largest country in terms of population. According to World Population Data Sheet 2013, it is expected that Pakistan will retain the same sixth position with a population of 363 million in 2050 (Jamaluddin, 2016). Therefore, there is a real need to take preventive measures for controlling this phenomenon. This disquieting situation demands that Pakistan-like countries need work more in the area of population education.
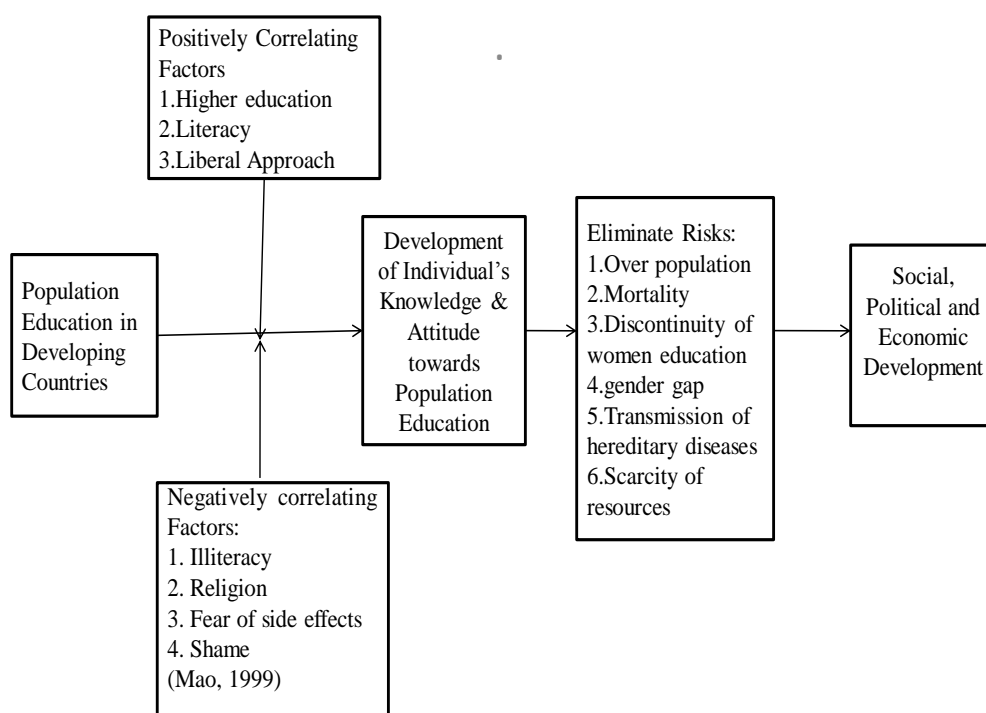

Figure 1: Conceptual Framework of the Study

Figure 1 on the conceptual framework of the study clarifies the gateway to social, political, and economic development through population education in developing countries, such as Pakistan. The restrictions to avoid family planning methods are lack of knowledge and education, religious belief, and fear of side effects needed to challenge bringing real change instead efforts limited to documents only. Therefore, the researcher

addressed that issue through an experimental study to find out the effect of population education instructional module on undergraduates' knowledge and attitude.

Literature Review

Existing literature on population education, restrictions to population education, and its benefits are discussed in this portion of the paper.

The globe is currently confronted with issues such as high unemployment, profound poverty in many emerging nations, resource depletion, rapid population increase, environmental destruction, and climate change, to name a few (Salvatore, 2013). Globally, around 201 million (M) people are jobless, with an annual rise of roughly 3.4 million. The global unemployment rate has increased to 5.8%. Even if there has been modest progress in recent years, nearly every third individual in emerging and developing economies is still poor. Over 2.1 billion people work in precarious jobs across the world (Naidoo et al., 2017).

Workers face certain risks because of this circumstance since they are likely to have less secure positions with stable incomes and access to better social conditions. As a result, even in today's environment, excellent career prospects are few (RazaCheema et al., 2021). Asia is the largest and most influential continent, accounting for about 60% of the worldwide population (Rahman, 2017). Pakistan is in a similar condition to its South Asian neighbors. With a population of 207.77 million people, it is the sixth-largest most populated country and the third most populous in South Asia (Naidoo et al., 2017).

When it comes to food security, this situation is not looking good, with 58.1 percent of households experiencing food insecurity (Sachs, 2017). This ever-increasing population must be managed. It is critical to minimize the fertility rate to achieve this. Family planning is one viable solution. It is a means to have planned pregnancies and babies rather than ones that happen by coincidence (Phongluxa et al., 2020). In the case of Pakistan, while the government has approximated fertility rates, there is limited data for calculating the variables that contribute to high fertility rates.

Birth control, family planning, and population education are some of the terms that are used in this subject of education (Organisation for Economic Cooperation and Development, 2008). However, the most recent and more accepted option is population education, which is a concerted effort to raise community knowledge and conceptual understanding. The size of a family is critical only for the individuals' and society's well-being but also for the country as a whole (Brueckner & Schwandt, 2015). Population education uses the procedures to aware people of the nature, cause, and implications of population growth. Moreover, it focuses on the issues such as the rapid growth of the population and its impact on the scarcity of resources (World Health Organization, 2005).

As of 2015, the world population is at roughly about 7.2 billion people and rising day to day. The current growth rate of the population is 1.2 percent per 100 live births. Since 1960, we are still adding more or less 80 million people in a year to the planet named Earth (Costa & Bógus, 2012). At this growth rate, China and India are the two most populous countries with more than a billion people, the United States is the third most populous nation with 317 million people (U.S Beuro of Population Planning, 2012).

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Earth The following graph explains the population growth rate in the world from 1950 to 2050 (Ratcliffe et al., 2016).
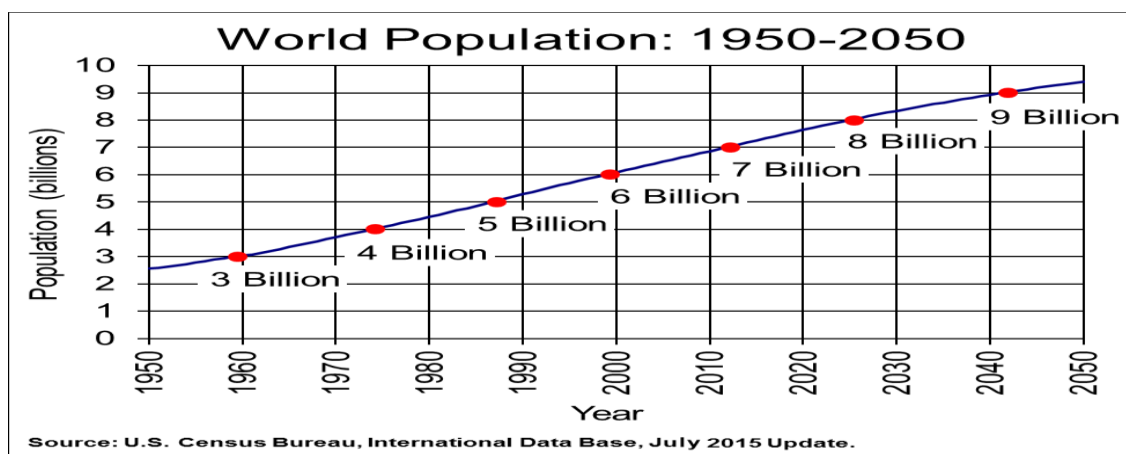

Figure 2: World Population Predicted Growth Rate

In 1959, the world population increased from 3 billion to 6 billion by 1999, which is considered a very big increase in world population over 40 years (Ratcliffe et al., 2016). In 1959, the world population increased from 3 billion to 6 billion by 1999, which is considered a very big increase in the world population over 40 years. According to the Census Bureau's census, there will be a continuous increase in the population in the 21st century. The expected growth of the population would be 9billion by 2044 (U.S. Census Bureau, 2015). Population education and population planning are essential community health concerns as well as human rights problems. Muslim countries are also working parallel with other counties on maternal and child health issues. Islam is considered a hurdle in making an effort for family health care (Roudi-Fahimi, 2004).

1.25 billion Population of the world consisted of Muslims', which are different by language, traditions and culture, and religious views from other communities. It is considered that Muslims are religiously conservative and fundamentalists due to Islamic laws. However, the real picture is much different, Muslims follow the rules of the Quran and Shariah, both of these highly supported family life (Roudi-Fahimi, 2004).

Islamic scholars studying population education and family planning in different ways said that Islam is a religion of restraint and equality. Quran and the Prophet's tradition (Sunnah) do not forbid birth control (Khan et al., 2013). Thus, the greater part of Islamic scholars believed that family planning or population planning is acceptable in Islam. The silence of the Quran on the issue of birth control or population planning shows that is permissible in Islam (Musallam, B. F., & Musallam, B., 1983).

One of the top priorities of any government is to reduce the growth of the population due to a shortage of resources. The most critical contribution to the reduce population is family planning programs. The increase in the number of family planning users in Pakistan is caused by the increase in population education awareness through media and women health workers programs, which provide door-to-door services to the community; it is all possible through the efforts of the Punjab government (Sagheer et al., 2018). The National Population Education Project (NPEP), is working actively for maternal land child health, Adolescence Education Programs (AEP) also working for adult health, and put their efforts into empowering the younger generation to deal with the issues regarding population education (National Research Council, 2012). None of the government systems can deal with population growth, for example, capitalists built

industries but the rapid growth of the population creates population, unplanned colonies, and environmental problems (Edet et al., 2014).

According to Coverdale (2018), the majority of population growth is expected to take place in urban areas, there are indications that this pressure on biodiversity will not be sustained, if not compounded. Other activities associated with urbanization, such as infrastructure and industrial developments, are also important contributors to habitat loss (Edet et al., 2014)

Rapid population growth can generate food security problems, environmental hazards, and urban congestion. In Pakistan, resources are limited and therefore the rising population is putting more pressure on these scarce sources (Sagheer et al., 2018). However, education is a solution to reduce fertility as developed countries have proved (Wachter, 2003).

It is concluded from the above discussion that population explosion is an issue for the whole world; however, countries with more traditional approaches to population are possibly going to face many problems such as poverty, mortality, diseases, etc. Pakistan is also facing these restrictions and the Centre for Educational Research and Innovation is making efforts to influence change in the patterns of the population at the micro-level, as well as on broad demographic changes (Centre for Educational Research and Innovation, 2006). As earlier, United Nations (2003) warns that the unemployment rate in Pakistan is 5.6% and the main cause of the issue is a shortage of economic resources and a rush of job seekers due to the high population growth rate.

Pakistan has one of the oldest and least successful programs for making people aware of family planning in the world. Many data is available in written form regarding the use of contraceptives and fertility reduction but its implementation is discouraging. Moreover, comparatively less work in written form as well is done on the broader perspective of population policy and program (Hakim & Mahmood, 2001). There are many challenges to implementing the program as Soomro and Mahmood (2004) argue that these programs are effective only for educated women and making illiterate women aware of the programs is tough. Therefore, the authorities may invest in female education that will consequently support the implementation of population education programs.

One of the primary issues facing emerging countries like Pakistan is population growth. A greater fertility rate is thought to be a primary contributor to population growth (RazaCheema et al., 2021). Population education is a program to bring positive change in an individual's knowledge, attitude, and behavior regarding family situations and community (Rao, 2004). Moreover, family planning has focused on two objectives; the first focuses on the number of children and the second places focus on the gap between the pregnancies (Mao, 1999). World Health Organization (WHO) states that one out of five individuals in the world is at the stage of adolescence (World Health Organization, 2005). Moreover, about 85% of these young people are from developing countries and more than 50% of the world population have less than 25 years of age (Phongluxa et al., 2020).

This ratio is an alarm for all the nations that the results will be disastrous shortly due to population explosion, hunger, violation of women's right to education creating of gender gap and transmission of hereditary diseases, etc. Population and family planning methods are avoided more in underdeveloped areas. Mao (1999) considered the lack of awareness, negative attitudes, religious extremism, and threats of side effects as major causes of people avoiding family planning.

Walt et al. (2013) describe the era of 1990-2000 as the era of the emergence of population education curricula in Pakistan with a focus on developing awareness, attitudes, and commitment to family planning among adults. Different courses on population education are designed and emerged in national curricula for enabling individuals to make logical and conscious decisions regarding family life and population-related issues. The effort was aimed to bring change in the knowledge and practice of individuals about population education that will support them to continue higher education. As, Ramesh et al. (1996) proved that knowledge and practice of family planning are strongly related to a higher level of education in individuals.

Population education contributes to decreasing mortality, fertility, and the gender gap in marriage age. Erfani and McQuillan (2008) claim a decrease of 63% in fertility in Iran due to the implementation of nationwide family planning plans in the 1980s. Consequently, according to Erfani (2012), this decline in fertility brings necessary changes in social and other demographic characteristics of women, and from 1976 to 2006, the marriage age for women increased by three years from 20 to 23. Moreover, the marriage age gender gap also dropped by 1.4 years, from 4.4 to 3 years in 2006 during the same era.

The benefits of population education are not limited to the fertility and marriage age gender gap. It also produces an opportunity for women to continue their education that made them more aware of self, family, and social life. Buchmann et al. (2008) found that post-secondary education attainment for women is remarkable from the 1990s to 2000 in OECD countries, including the US and the United Kingdom. Where, the programs were initiated in the mid-20th century for liberating women regarding unintended pregnancies causing restrictions on peruse education and participation in economic activities (Cleland, 1996).

Owing to the issue, there is a need to develop awareness at individual levels as Schreiber states that only one decision of a married couple highly affects the worth of a community, nation, and world. The sum of family-based decisions shapes the composition of the density (fertility, mortality, migration). These patterns work within a community and affect individual, social, political, and economic development (Schreiber, 2015). Moreover, Kaveta recommends that when students are learned through different activity methods of teaching learning it affects highly than any other routine method of teaching like the lecture method or any other (Kaveta, 2002).

Environmental circumstances, traditions, and prospects have effects on turning attitudes into behaviors (Kumar, 2020). Attitude change and development take time to occur (Ayaz & Efe, 2009). Attitudes are not genetic but learned and adopted by experiences and are culturally gained through the socialization process.

Attitude toward family planning among women seems influenced by their educational level and experience of pregnancy. It is proved through empirical research that women who are literate or above and have 1-3 pregnancies have a more positive attitude toward family planning as compared to others. Hence, literate couples are more eager to adopt birth control procedures as compared to illiterate ones (Saleem & Bobak, 2005).

However, some ground realities create restrictions for population education projects. As Monika (2013) highlights, the issue of population education is reported to be sensitive due to religious and cultural norms are not supportive of population education as much as in other different developed countries. However, the threats that are not ignorable and more disastrous than religious extremism and cultural challenges

to the population are demanding serious and emergent action and the researcher tried to provide a possible solution through the study on the effect of SPEM on undergraduates' knowledge and attitude regarding population education. Moreover, the exploration of the relationship between knowledge and attitude regarding population education has also been focused on.

Material and Methods

Population education is a life-related topic and demands to conduct of a study on the actual involvement of the participants. Therefore, the experimental research design was planned to investigate the effect of SPEM on undergraduates' knowledge and attitude. The Randomized pretest-posttest control group design was selected for this study because this design showed strong control of threats to internal validity such as mortality, location, instrumental decay, data collector characteristics, pretest treatment interaction threat, and regression threat (Fraenkel et al., 2011).

Table 1
The Randomized Pretest- Posttest Control Group Design

Treatment Group	*Mr*	*O*	*X*	*O*
Control Group	*Mr*	*O*	*C*	*O*

Table 1 illustrates that the symbol "Mr" represents the members of each matched pair, which are randomly assigned to the experimental and control group. 'X' is used to represent the experimental group and "C" is used to represent the control group of the students in the experimental study whereas 'O' represents the control and Experimental Group's average score in the post-test.

A college was conveniently selected for the study based on permission from the administration and the willingness of the participants. The name of the college is kept hidden due to the sensitivity of the topic. The sample consisted of 61 undergraduate girls that are in their fourteenth year of education. Students are selected by following the process of pairing based on a pretest and random assignment. The experimental group contains 30 students while the control group contains 31 students. Initially, there were 64

Research Treatment

The experimental group was treated with SIPEM, which was made and conducted by the researcher herself. Research treatment is divided into three stages explained below.

SIPEM was constructed and administered by the researcher herself. SIPEM is the combination of learning activities that were planned by the researcher. The content of SIPEM consisted of topics related to population education from the Punjab textbook board's books. These books were studied by class one to 4rth year by our traditional teachers. The content was selected from the books of Urdu, English, Islamyat, Pak studies, and General Science.

Table 2
Content Selection

Sr.#	Classes	Subjects	Chapter title	Page No
1	One	English	Not Available	-
		Urdu	Not Available	-

Sr.#	Class	Subject	Topic	Page
		General Knowledge	My Family	21
		English	My Family	1
		Urdu	Not Available	-
2	Two	General knowledge	1. Rural and urban life (past and present)	28,29
			2. Protection of earth recourses	111
			3. Duties of govt. and public	47
			4. Water	51,52,53

Content validity of the research instruments and SPEM was worked out by administering them to eight experts, including two from the field of nursing, two from community medicine two from religion, and two from education. Their suggestions are incorporated into the tools and guidelines are modified accordingly. A research tool containing two parts was developed by the researcher; i) an achievement test having 60 MCQs and; ii) a scale containing 10 generic statements with a five-point Likert to measure the attitude. The overall Cronbach alpha (0.85) was calculated.

After content analysis there were 5 different types of activities were planned by the researcher. According to the recommendations of UNESCO, the activity method is the best way of learning population education content (UNESCO, 1984). Because population education is a sensitive issue and its meaning is different in situations and cultures. The activity method is an indirect way of teaching-learning in which the teacher can easily communicate the sensitive or debatable concept. Through the activity method, students got the opportunity to explore their feelings, think, and value structures of the possible aspects of population phenomena. This process enabled the students to make responsible decisions regarding the population's behavior (UNESCO, 1984).

Activities were administrated by activity plans. There were 24 activity plans designed by the researcher.

SPEM is the combination of learning activities planned by the researcher. The content of SPEM consisted of topics related to population education from compulsory subjects up to class one to 12th year from the books of Urdu, English, Islamic studies, Pak studies, and General science followed by the syllabus of Punjab textbook board. After content analysis, the researcher plans five different types of activities. For developing self-instructional guidelines researcher used population census, religious aspects of the population, Pakistan government initiatives for population education, problems due to population explosion, population explosion and environmental health, overpopulation, and community health, population education and scientific procedures, and family education, and exemplary content on population education.

Table 3
Activity Procedures

Sr.#	Activity	Duration
1	Mental warm-up activity and Introduction of lesson	5-7 mints
2	Developmental Activities (Computer-assisted instructions)	25-27 mints
3	Closure	2-3 mints
4	Summative assessment and assignment given	5-7 mints

The time duration of treatment was 35-40 minutes in each session. A total of 26 sessions were held. 2 sessions 1st and last were used for pre and post-test and 24 sessions were conducted for treatment. According to Fraenkel et al. (2012), attitude will be developed within 4 weeks.

Controlling Threats to Internal Validity of Treatment

The use of a pre-test raised the possibility of pre-test treatment interaction threat, and the pre-test might alert the members of the experimental group and they tried to do their best in the post-test. That is why the researcher selected this design because a control group worked parallel with the experimental group. Post-test taken by both groups proved that the change in mean score after the post-test was due to maturity, pre-test interaction threat, or treatment (Fraenkel et al., 2012).

The researcher tried their best to standardize the conditions under the study occur such as classroom setting for the control of location, subject attitude, and implementation threat. The researcher collected more information about the subjects of study and use that information in analysing and interpreting results for the control of subject characteristics threat, mortality, and maturation and regression threat. This study was affected by such extraneous variables as the size of the class, Gender of students, gender of researcher, Age of students, Time of day, Ethnicity of researcher, and length of researcher's lecture.

The researcher obtained all information on the details of the study that is where and when it took place and what types of extraneous variables were affected by research. This act controlled the location, instrumentation, history, subject attitude, and implementation threat. The design of this study controlled all possible threats but some threats Location, Data collector characteristics, data collector bias, and Attitude of the subject were not controlled by this design. The researcher tried their best to control his attitude through self-awareness.

Results and Discussion

Inferential statistics were mainly used to analyze the data. Independent samples t-test was used to find out the significant difference between experimental and control groups on knowledge and attitude regarding population education. Moreover, Pearson rho was used to find out the relationship between knowledge and attitude regarding population education.

Table 4
Difference between Experimental and Control Groups on Knowledge and Attitude regarding Population Education

Population Education	Experimental Group		Control Group		Mean Difference	t-value	Sig.
	Mean	SD	Mean	SD			
Knowledge	49.90	3.57	15.67	.42	34.22	43.62	.001**
Attitude	30.90	1.32	28.25	.91	2.65	6.32	.001**

Degree of Freedom= 59, p<.05

Table 4 represents the usage of the independent samples t-test to compare the knowledge and attitude of undergraduates regarding population education. There is a significant difference (sig. =0.001 i.e. p<.05) between the experiment and control group undergraduates on knowledge and attitude regarding population education. It reveals that SPEM treatment is better than traditional teaching in terms of imparting knowledge and developing the attitude of undergraduates regarding population education.

However, the mean difference between the experimental and control group on knowledge is greater as compared to attitude; hence spearman rho is applied to find out the correlation between the variables.

Table 5
Correlation between Knowledge and Attitude of Experimental Group Students

Knowledge Mean	Attitude Mean	N	Pearson rho	Sig(2-tailed)
40.90	30.90	61	.263**	.001

**p<0.01

Table 5 shows a significant relationship between knowledge and attitude regarding the population education of undergraduates taught through SPEM. But, the strength of the relationship is moderate. Moreover, the mean score on knowledge is 40.90, and the mean score is 30.90, having a difference of 10. It reveals that the SPEM affects the knowledge level of undergraduates as compared to their attitude regarding population education.

None of the government systems can deal with population growth, for example, capitalists built industries but the rapid growth of the population creates population, unplanned colonies, and environmental problems (Edet et al., 2014). In third-world countries, such as Pakistan, which already have threats to reaching the default status, there is a huge need to focus on data-based measures to control population growth to save resources. Therefore, the researcher developed a self-instructional population education module and conducted an experimental research to contribute to the population growth of Pakistan. The findings of the study revealed that SPEM significantly develops the knowledge and attitude of undergraduates about population education but the relationship is poor. This indicates that the knowledge of the population is important but it needs a more efficient effort to develop the attitudes of the members of the society to control the population growth and manage the family life. The education system of Pakistan least focuses on population education, as Goujon and Wazir (2021) reported that the academic system of Pakistan is not enough effective to is flawed to arrange the essential infrastructure, decrease gender discrimination, and increase the quality of instruction. The other important cause of population growth is the lack of awareness of family planning. Pakistan's family planning strategy is in action for more than 30 years but the targets are not even close to achieving and the condition is getting worse. This is similar to the findings (Kavita, 2002) that educational material is effective in increasing the awareness of population problems among senior secondary school students. Moreover, Rao (2004) claims that population education is a program to bring positive change in an individual's knowledge, attitude, and behavior regarding family situations and community. Moreover, the effects of such programs are not limited to knowledge and attitude but result in more benefits as Buchmann et al. (2008) found that post-secondary education attainment for women is remarkable from the 1990s to 2000 in OECD countries, including the US and the United Kingdom. Moreover, the findings revealed that there is a moderate correlation between the knowledge and attitude of the undergraduates regarding population education and the influence of the treatment is strong on knowledge as compared to attitude. The reasons can be the threats of poor religious beliefs, and fear of side effects according to Mao (1999). Environmental factors, habits, and expectations all have an impact on how attitudes become behaviors (Habib et al., 2017). Education and life events, such as pregnancy, impact women's attitudes regarding family planning. The family planning attitude scale was shown to provide higher ratings to women who have completed elementary education or above, have had 1-3 pregnancies, and do not desire any more children in the future. The number of children wanted lowers as the education level rises (Kumar, 2020). Moreover,

According to this survey, just 25% of reproductive-age women use family planning, which is relatively low compared to their understanding of the topic (Pasha et al., 2021).

Conclusion

Population explosion is a topic of great concern and is directly associated with national progress. Results and discussion of the study clarify that SPEM is effective for developing undergraduates' knowledge and attitude regarding the population. However, the change in knowledge level as compared to attitude may be due to short-term experiments, as attitude development takes more time. Moreover, it can be due to the long terms religion and fear of side effects related to the beliefs of undergraduates developed through society. Moreover, Monika (2013) highlights that the issue of population education is reported to be sensitive due to religious and cultural norms are not supportive of population education as much as in other different developed countries.

Rao (2004), on the other hand, suggests that individuals' knowledge and attitudes toward population education may be developed by developing relevant teaching resources. Individual behavior towards population education may be changed by promoting and encouraging greater education, as Ramesh et al. (1996) demonstrated that knowledge and practice of family planning are closely associated with higher levels of education. Soomro and Mahmood (2004) suggested that investment in women's education must be a priority because the ability of family planning programs for uneducated women is most challenging. Population education modules can be developed at the school level to provide clear, gender-appropriate, age-appropriate, and culturally appropriate instructions that are particularly linked to universal ethical principles. Adolescence is the most critical stage that is also in the school years, so, there is a need to use this time appropriately to share the risks of population growth and changing the behaviors of the future generation. Society values schooling as the safest and most credible mode of information (Ishaque et al., 2018; Ishaque & Zaman, 2022), therefore, the school leaders and the teachers should know about population education and pedagogical skills to impart its knowledge and develop attitudes of next-generation towards population education. Finally, teachers are respected and trusted by pupils and are often role models for adolescents (Wahba & Roudi-Fahimi, 2012). According to a Pakistani survey, 90 percent of the women were knowledgeable of family planning, 27 percent were aware of oral contraceptives, 26 percent were aware of injectable contraceptives, and 35 percent were aware of condoms (Bashir & Guzzo, 2021). According to a survey undertaken in Karachi, Pakistan, 89 percent of women were aware of family planning, whereas just 33 percent had ever utilized any technique of family planning (Habib et al., 2017). The study is being conducted because family planning counseling and health promotion activities by medical practitioners can have a positive effect on the use of forms of contraception as a result of maternal health services (Agha & Williams, 2016: Kumar et al., 2020). Therefore, now, everyone (public, private, and religious institutional leaders) have to play the role to control population growth for the better future of Pakistan.

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