

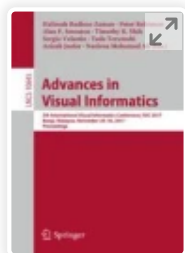
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Alan F. Smeaton · Timothy K. Shih
Sergio Velastin · Tada Terutoshi
Azizah Jaafar · Nazlena Mohamad Ali (Eds.)

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5th International Visual Informatics Conference, IVIC 2017
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Proceedings

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Advances in Visual Informatics

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The keynote and 72 papers presented were carefully reviewed and selected from 130 submissions. The papers are organized in the following topics: Visualization and Data Driven Technology; Engineering and Data Driven Innovation; Data Driven Societal Well-being and Applications; and Data Driven Cyber Security.

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Technological Intervention for Moral Education Among Teenagers: A Review

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Abstract. A good child is a dream for every family. Good moral education will encourage children to think and understand about what is allowed or forbidden things. A child who has a good education will be able to manage the management of emotions and the formation of his character. The main purpose of this study is to provide an alternative moral education in children, especially adolescents. Today's teenage morale is much damaged by juvenile delinquency as it happens and viral in social media, smoking behavior, dating, pre marital sex, piercing, taking drugs and things that violate the prevailing norms. Not all children get a good moral education from home or school. It requires effective moral education with technological intervention in improving and shaping the stage of moral development. Technology can not be separated from adolescents and greatly influence in adolescent moral formation. The positive actions they choose will help improve their attitude. Teens who have a good moral education in their social life will become more independent, and parents can give them the authority to choose more and act according to their choice. Moral education is the most important part in the stage of moral development of adolescents who are planted early on. The stage of moral development is divided into 3 levels: Conventional Level, Conventional Level and Post-Conventional Level. This research is more directed to developmental psychology and technological psychology. Interpersonal communication is the most important part in determining the outcome. The study concludes by suggesting a number of practical and theoretical recommendations for all related elements.

Keywords: Moral education · Technological intervention · Teenagers

1 Introduction

The child is a gift of God Almighty, which He left a family. Every family longs for children who have good moral, in order to be able to adapt to the social environment of society in accordance with prevailing norms. In general, teenagers will continue to vote and make decisions on each of their behaviors, but sometimes not all of their behavior is considered in accordance with the norms that apply to the community. Not infrequently their behavior is contrary to the custom and culture (read: Adab) that exist in an area where they live. In general, adolescents are also called transitional periods, the search period of identity, often they do coping strategies on the model he considers “present” or “true”.

Gender, environmental, peer group differences are a factor that allows to influence moral development. Young women tend to be more embarrassed in expressing feelings, and boys tend to be more indifferent to the surroundings. The presence of technology is also able to influence behavior/behavior patterns among adolescents. With the presence of Technology, teenagers are more “able” to express feelings of sadness, happiness, anger through social media such as Instagram, twitter, Facebook etc. This is also the authors prove with the teen easily expressed feelings of sadness through the snippets or pieces of song lyrics uploaded on his personal Instagram. Surely this will trigger a quarrel among teenagers, so that moral development is not good. Another example of the moral damage factor of teenagers is smoking behavior and relationship goals are wrong, so adolescents are immediately coping on the wrong model. Most teenagers will imitate what has been viral in social media such as the case of blue whale, skip challenge, down another challenge that does not have an important purpose and leaves only the moral damage for teenagers [1]. According to Dion Hinchcliffe (2011) in an online article, the current trends in information communications technology and telecommunications sectors illustrate that social media or social networking services (SNS) is one of the five major achievements of the next half decade [9, 13, 29, 30]. When individuals abuse technology it will affect their own personal growth and development [12, 28, 30, 38]. The issue of adolescent morale and technology in the era of globalization is very exciting for us to discuss, from the problems faced with friends, family and society. Moral education among teenagers becomes very important, because to be able to make a state of character and good moral of course comes from good moral generation as well.

According to Berkowitz and Bier [41] In recent years, character and issues of morality among youth have received nationwide attention from the general public, policy makers, educators, and parents [2]. The original educational term comes from the Greek word “pedagogie” which means guidance given to the child. Education is the process of changing the attitude and conduct of a person or group of people in an effort to mature humans through teaching and training efforts; Processes, ways, actions educate. Human only through education can’t be human. Education itself from specific (creator) whatever If she just is. Human but by people so they trained people are trained is remarkable (Kant 2015) [37]. Here a very important role for educators is. Educators in the context of universal morality that humanity needs an idealistic perspective, they be grasped. These trainers are not based on the natural tendency of individuals to

humanity, and to contribute to the future on behalf of generation must educate and instill in them the awareness that education should [37].

According to Ali and Asrori (2015) The moral word comes from the Latin, the *mos*. The word “*mos*” is a single word form, while its plural is *mores*. This means custom, moral. Customs are human actions that conform to general ideas about good or bad in society. Therefore morals are behaviors that conform to the measures of specific social or environmental actions accepted by society [4].

The word ‘moral’ is derived from the Latin *mos* (plural: *mores*) means the habit, custom. *mos* word (*mores*) in Latin is synonymous with the Greek word *ethos*. Dictionary of Education defines morality as a term used to delimit those characters, traits, intentions, or acts roommates Judgments can appropriately be designated as right, wrong, good, bad [14, 16].

Moral words in Arabic are often synonymous with the term “Akhlaq”. Akhlaq is a plural word, but sometimes it is used in its singular form (*khuluq*) to mean character, innate disposition, or ‘a state of the soul which causes it to perform its actions without thought or deliberation’ (Miskawih, 1968, p. 30; cf. Omar, 1994, p. 103). [21] according to Djazwidi, *akhlāq* means ‘good morals’ (*al-akhlāq al-mahmūdah*) or ‘bad character’ (*al-akhlāq al-madzmmūmah*) [16] Another term for morality is Adab, Adab al-islām means ‘the good manners adopted by Islam derived from its teachings and instructions’ (al-Kaysi, 2003, p. 13) [21].

The moral according to Dewey (in Zuriah [40]) says that moral in moral education here is almost the same as rational, where moral reasoning is prepared as a principle of critical thinking to arrive at the choice and moral judgment that is regarded as the best mind and attitude. Moral always refers to the good of human as human being [20]. The field of morals is the field of human life in terms of human kindness. Moral norms are benchmarks for determining right-wrong human attitudes and actions viewed in terms of good and bad as a human and not as a role-specific and limited actors. So he thinks that the problem of the moral field is whether human is good or bad.

Morality is viewed as the system of rules that regulate the social interactions and social relationships of individuals within societies and is based on concepts of welfare (harm), trust, justice (comparative treatment and distribution) and rights. The concept of morality has been variously defined by philosophers and psychologist but in common terms it can be interpreted to mean a person’s or society’s view of what is perceived to be the highest good. Such a view is based on a set of principles, ideas and norms that are used to distinguish between right’ and wrong’. Though the notion what is good’ and what constitutes happiness has a definite cultural bias, morality generally refers to attitudes and predispositions that foster respect, responsibility, integrity and honesty [17, 24].

The Moral goodness, but it is possible to be virtuous. mentioned above, the existence virtue of the absence of natural tendency or can it be possible by reducing the possible. So who is really the freedom to obey the laws of morality, we’re in it tend to adopt. In this case, the human being will require a disciplined. This disciplined state, based on the moral understanding of people’s homework will help to capture the target [37].

According to Dreeben (in Zuriah [40]) if the goal of moral education would lead one to be moral, it is important that one be adapted to the purpose of community life. Therefore, in the early stages it is necessary to do moral conditioning and moral

practice for habituation (in Zurian 2011). If we say about moral education that Islamic literature in the area of personality contains theories that direct man in certain ways as stated in two sources of Islam, which are the Qur'anic text and the Sunna [3].

Moral Education as part of grades education in schools, which helps learners to recognize, realize the importance, moral values that should be made A guide to his attitude and behavior as human beings, both individually and collectively in a society.

It can be concluded that moral education is a planned way and structured by an educator to form positive habits in learners, so as to form a good moral in accordance with the norms and character of the nation.

2 Teenagers

The word adolescent, also called adolescence and youth. The term adolescence comes from the Latin word *adolescere* which means to grow or grow into adulthood (in Hurlock [44]). Adolescence according to Mappiare (in Ali and Asrori 2015), between 12 years old up to 21 years for women and 13 years up to 22 years for men [4]. Based on the time span, adolescents are divided into 3 stages [8, 11, 32, 37]:

2.1 Early Adolescence (10–12 Years) [39]

- a. Appear and do feel closer to peers.
- b. Look and feel free.
- c. Looks and does pay more attention to the state of his body and start thinking the imaginary (abstract).

2.2 Mid-Adolescence (13–15 Years) [30, 39]

- a. Looks and wants to search for identity.
- b. There is a desire for dating or interest in the opposite sex. There is a deep feeling of love.

2.3 The Final Adolescence (16–19 Years) [27, 30, 39]

- a. Expressing self-deprecation.
- b. In looking for more selective peers.
- c. Has an image (picture, circumstances, role) against him.
- d. Being able to manifest feelings of love.
- e. Have the ability to think imaginary or abstract

Based on chronological age and various interests, there is a definition of adolescence that is:

- a. In pediatric books, generally define teenagers is when a child has reached the age of 10–18 years and the age of 12–20 year boys.

- b. According to the law no. 4 years 1979 on the welfare of children, adolescents are those who have not reached 21 years and not married.
- c. Under the labor law, a child is considered a teenager if he has reached the age of 16–18 years or is married and has a place to live.
- d. According to the marriage law No. 1 of 1979, children are considered to be teenagers if mature enough, i.e. age 16 years for women and 19 years for boys.
- e. According to the office of the child’s health, it is considered to be a teenager if the child is 18 years old, which is appropriate for the high school graduation.
- f. According to the WHO (2011), adolescents when the child has reached the age of 10–18 years [35].

According to WHO, adolescence is a time in which:

- a. The individual who develops from the moment he first signs his secondary sexual signs until he reaches sexual maturity.
- b. Individuals experiencing psychological development and pattern identification from childhood to adulthood.
- c. The transition from socio-economic dependence is full of relatively more independent conditions.

Adolescence is closely related to the development of “sense of identity versus role confusion,” i.e. feeling or awareness of identity. Basically teenagers do not have a clear place, meaning he is among the group of children and adults. It is therefore often known as the “search for identity” phase. However, in this adolescent phase, adolescents are at a very potential stage of development, both in terms of cognitive, affective and physical. This is reinforced by Hurluck (in Ali and Asrori 2015) that the term adolescence actually has a broad meaning, including mental, emotional, social, and physical maturity [4].

3 Moral Development of Youth Period

According to Starbuck (in Jalaludin [42]), moral development in adolescents is based on guilt and efforts to seek protection. Moral types also seen in teenagers also include:

1. Self-directive, obedient to religion or morals based on personal considerations.
2. Adaptive, follow the environmental situation without making any criticism.
3. Submissive, sensing doubts about moral and religious teachings.
4. Unadjusted, not yet convinced of the truth of religious and moral teachings.
5. Deviant, rejects the basic and religious laws and moral order of society.

The stages of moral development according to Kohlberg (in Ali and Asrori 2015) are as follows [4]:

- i. Pre-conventional Level: rules and moral expressions are still interpreted by the individual/child based on the physical consequences to be received, whether in the form of something painful or pleasurable. This level has two stages, namely punishment orientation and compliance as well as relativist-instrumental orientation.

- ii. The initial conventional or conventional level: moral rules and expressions are adhered to on the basis of family, group or community expectations. This level has two stages, namely the orientation of agreement between the person or called “sweet child orientation” and the orientation of law and order.
- iii. Post-conventional level: moral rules and expressions are formulated clearly based on legal values and principles that have validity and can be applied, regardless of the authority of the group or the person holding on to the principle and independent of self-identification with the group the. This level has two stages, namely the orientation of the social contract of legality and the orientation of universal ethical principles.

Factors Affecting the Achievement of Youth Identity

According to Waterman identity means having a clear self-image of the range of goods to be achieved, values, and beliefs chosen by the individual.

According to Prime unravels some of the factors that portray themselves teenagers include:

a. Family

Family circumstances can affect adolescents in self-esteem. There are some families who can portray themselves teenagers, among others:

- (1) Socio-economic identity
- (2) Family unity
- (3) Attitudes & habits
- (4) Child status

b. Social environment

Teenagers will try to expression to seek a social environment as a place for teenagers to express their identity. The teens feel with socializing teenagers can achieve their identity. In addition, within the social environment there are norms, values, ordinances also customs. In myself, adolescents will launder the values that apply in their social environment.

The way society around teenagers at the time of socializing can also portray adolescent identity.

c. Education

The way of thinking and behavior of a teenager can be known by the education of adolescents, adolescents who have a good education can consider the values and good in the environment. In adolescence the individual is at the stage of formal thinking. That is at this stage requires the ability of teenagers to think normally. With a good education will also be done teenagers who think formally operational feel challenged to achieve a unique identity. According to Asmau, Education, through which these moral values could be channelled from one generation to another is very important, being the first priority of Muslim parents, teachers and Islāmic institutions [6]. The process of identity-seeking processes in which a youth develops a unique personal identity or sense of self, separate and separate by others-is called individualization. These processes are [22, 33] (Table 1):

Table 1. The 5 C's of positive youth development

Asset	Definition	How to foster it
Competence	Perception that one has abilities and skills	Provide training and practice in specific skills, either academic or hands-on
Confidence	Internal sense of self efficacy and positive self-worth	Provide opportunities for young people to experience success when trying something new
Connection	Positive bonds with people and institutions	Build relationships between youth and peers, teachers and parents
Character	A sense of right and wrong (morality), integrity, and respect for standards of correct behaviour	Provide opportunities to practice increasing self-control and development of spirituality
Caring	A sense of sympathy and empathy for others	Care for young people

Source: Teen, 2009

4 Internet dan Morality

Internet provides human beings access to a large amount of data. Since the internet is not controlled by anyone, the type of data cannot be controlled. Therefore, all types of positive and negative information and objects are available on the web. Academic sources can be considered as positive aspect of the internet, whereas pornography, gambling and misappropriation are its negative aspects [1, 26]. Users need to make a choice to utilise the internet responsibly, wisely and intelligently [8, 19].

According to Longe et al. (2009): "Internet technology development in Sub-Saharan Africa has brought tremendous positive change in socio-economic growth and development in the region. Paradoxically, the internet has also evolved into a sophisticated tool in the hands of criminals for in various forms of cyber crime" [29].

According to research results Meena et al. and research results Hing Keung Ma: the internet is able to facilitate people to make a stronger face relationship without geographical, racial or social obstacles. This not only helps people to bond friendships but also emerges as a source to bridge different types of people from a little to a greater extent. But the results of this study indicate that children have negative effects, they are more likely to learn the language rough from their friends online, other than that children also often visit porn sites [1, 27].

The best filtering tool is having faith (Iman) and virtue (Taqwa) [19]. Good morals are faith [6]. Internet gives people the permission to act freely in almost everything. However, they are responsible for how they manage their freedom. Freedom and choice are related to responsibility, and everyone is responsible for his freedom and choice [5, 19]. We must understand that the internet can be a very enlightening platform, fun to surf, and can damage characters if not properly used [29]. So parents and teachers have more responsibility to help students learn how to use the internet safely and responsibly. For example, filtering is important for school and home computers. Teachers and parents should work together and discuss what types of restrictions are more efficient

for students. Some people think we should protect our children from dangerous, offensive and inappropriate information [7].

Morality is one of the fundamental principles of Islām. Islām prescribes a number of rules and regulations to be observed by believers in all activities. To uphold these rules, Allah (SWT) in the Glorious Qur’ān provides the believers with a series of moral teachings regarding personal ethics, family, social, business and political ethics to name a few [8].

5 The Advantage of Technological Intervention for Moral Education

Teens are very easy to imitate parents, society, and the environment to make it as a lifestyle and even a habit. In moral education, with technological intervention, stakeholders will be able to play a role in realizing good moral education. On the web provided a variety of features that are able to maintain the moral of children. Teachers and educational leaders can also provide motivation for children to continue to enter into positive activities, in order to maintain adolescent morale. In the identification of Hamid et al. [43] states that “Based on recent crime trends and media portrayals, it seems that a problem underlying social ills in Malaysia is moral decay among the Malaysian youth”. This confirms the importance of technological intervention in shaping and maintaining the moral of the child [18, 36].

Examples of current technological interventions are one of the faculties at the International Islamic University Malaysia that ICT has created an environment where the source of Islam can be converted to digital form so that it can be easily distributed globally in the form [19, 25]:

- a. Muslim virtual class
Getting education about Islam is made easier because it can be done from home through this virtual Muslim class [10, 32, 34].
- b. Games and Video Islam for children [31].
- c. Software - Interactive software to motivate Muslim children learn about Islam.
Islamic software is available in the form of audio and text formats for mobile phones, IPods and laptops. Where islam software can also be accessed through the web for free and installation on the phone only takes time in just seconds [18, 31].
- d. Online discussion on Islamic topics [15].

With the knowledge of Islam is expected parents and schools should take a role in preparing teenagers for success in the emerging information age with successful online ethical behavior outside of academia [23].

In addition teenagers need support from family and school, community, to building good relationship for moral education. The need for awareness of education programs that have been implemented by the Government through compulsory subjects of Citizenship Education, Education of Pancasila, etc. This awareness will also influence the government’s decision in the rapid development of education. The more a good moral teenager the better a country will be in the future.

6 Conclusion

One of the goals of moral education with a technological theme is to help make the child moral good - honest, disciplined, responsible, and caring etc., according to the character of the nation. The tendency of teenagers is to imitate a model that he believes to be a real truth. Those who think that model is the most correct and contemporary in accordance with today's lifestyle. This ready-made model does not necessarily correspond to a good moral attitude.

This paper aims to discuss the importance of moral education for adolescents with technological intervention. This is because moral education with technological intervention (web-based) for adolescents can bring positive effects for adolescents in adolescent moral development. The goal is that teenagers are more rational, able to judge the good or bad, apply honesty, responsibility, compassion in social life. We know that teenagers are at a very potential stage of development, both cognitively, affectively and physically. But this can not develop properly, because it is associated with poverty and low levels of education.

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