

The significance of the virtue of friendliness for moral education in the age of artificial intelligence (AI)

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Received : October 2024
Accepted : November 2024
Published : December 2024

ABSTRACT

Since 2022, Artificial Intelligence (AI), represented by ChatGPT, has changed human lifestyles and productivity. The development of AI technology is also more closely integrated with the progress of human society. In the context of the rapid development of this revolutionary technology, people's traditional moral principles are facing unprecedented challenges. In the background of the artificial intelligence era, this study focuses on exploring the concept of the virtue of friendliness and emphasizes its importance in moral education and ethical practice. Firstly, this study is based on Aristotle's virtue ethics and the Chinese Confucian traditional ethics to redefine the concept of the virtue of friendliness and clarify its essential noble qualities for human beings. After this, this study also explores the impact of the development of AI technology on the practice of the virtue of friendliness to highlight its significance for people's moral behaviour. Researchers advocate enhancing moral education on the virtue of friendliness to respond to increasingly complex ethical issues through the development of AI. This study not only provides a new way to inherit and develop traditional virtue ethics in the context of AI technology but also illustrates the significance of the virtue of friendliness in moral education in shaping people's moral behaviours.

Keywords: Artificial Intelligence (AI), virtue of friendliness, noble qualities, moral education

INTRODUCTION

On November 30, 2022, ChatGPT, a generative Artificial Intelligence (AI) released by OpenAI, America, triggered a global AI race. Many tech companies from different countries quickly joined this battle for the age of AI and released products and services with different features (Alex, 2024; Kothari, 2024). According to statistics, about 92% of Fortune 500 companies now use AI technology (Howarth, 2024). Bill Gates (2023), co-founder of Microsoft Corporation, declared that generative AI is an essential technological revolution that will bring a whole new era in the development of AI technology and various industries. AI, represented by ChatGPT, has added new productivity and economic driving force to human society and gradually integrated into people's work and lives.

However, some scholars argue that the development of AI technology has created numerous ethical problems for users, technicians and human society (Huang et al., 2022). Du and Xie (2021) believe that the key ethical issues regarding AI are raised, including bias, privacy protection, security and human well-being. Khogali and Mekid (2023) argued that AI might have long-term impacts on human society and require the development of stricter ethical standards. In a nutshell, while AI technology is developing, ethics should also be placed within the framework of technological development to mitigate its impact on human society (Paraman & Anamalah, 2023). AI technology is emerging as a potential threat to human society, which requires further research and resolution of this issue based on ethical theories.

Although some researchers have devised strategies to address the ethical issues of AI (Huang et al., 2022), these guidelines or principles are always controversial (Khan et al., 2022). This is because abstract or bottom-line moral codes make it hard to resolve the ethical dilemmas of technology (Zhao & Wu, 2019). The practitioners and policymakers of technology are real human beings, and solving the ethical problems that come from technology should highlight their subjectivity and virtues (Vallor, 2016). Virtue ethics involves shaping moral character and developing sustained good qualities (Hursthouse, 2017). It encourages people to make moral judgments and act ethically rather than simply relying on external norms when faced with complex issues (Crossan et al., 2013; Nguyen & Crossan, 2022). That is to say, virtue ethics may provide a new strategy for solving ethical problems in the age of AI.

Furthermore, this study emphasises the significance of the virtue of friendliness in moral education. The researchers believe that the virtue of friendliness may play a positive role in the interaction of people and people, people and society, and people and AI technology. The virtue of friendliness in moral education provides people with internal ethical codes to help them better cope with the long-term ethical challenges posed by AI technologies. People living in the age of AI need guidance on the virtue of friendliness to construct a balanced relationship between technological development and human prosperity and achieve social harmony, justice, and sustainability. It aims to provide theoretical support and practical guidance for moral education in the development of AI technology and to advise suggestions for the technology's users, practitioners, scholars and researchers.

RESEARCH QUESTIONS

AI technology has brought enormous social benefits and poses a potential threat to human well-being. Also, human-technology interactions are becoming more frequent and complex, and ethical issues are becoming increasingly prominent. The abstract moral norms may be insufficient to comprehensively address these novel and complex social issues. This study believes that the virtue of friendliness concerns the relationship between individuals and others and plays a crucial role in human-technology interaction. By systematically exploring the virtue of friendliness, it may be possible to provide ethical guidelines for humans to live in social harmony with AI, thereby promoting human prosperity. The following questions are explored in this study:

RQ 1: What is the concept of understanding the virtue of friendliness based on Aristotle's virtue ethics in Ancient Greece and Chinese Confucian philosophy?

RQ 2: Why is it important to emphasise the significance of the virtue of friendliness in moral education in the age of AI?

THE CONCEPT OF THE VIRTUE OF FRIENDLINESS

Aristotle talks about the two noble qualities of friendliness and friendship in the *Nicomachean Ethics*. The friendship emphasises the love and care between friends. Friendliness is the outward expression of a human being's virtuous heart and represents the undifferentiated goodwill of the "self-loving one" toward all people, things, and objects (Crisp, 2014). In other words, the virtue of friendliness based on goodness generates and includes fraternity. Goodness is the beginning of friendliness, which in turn extends to friendship (Crisp, 2014). Therefore, friendliness is more advanced than friendship because it takes care of more than just the emotions between friends.

Confucian traditional ethical thought also emphasises the value of the virtue of friendliness. According to Zhou (2015), in Confucian philosophy, Confucianism is based on "benevolence", and all of the discourse is an explanation of the virtue of friendliness. For example, "The benevolent man loves others" (Ivanhoe, 2009, p.120). Generally speaking, the core value of the virtue of friendliness is how to deal with interpersonal relationships. However, based on the idea of "overlapping consensus" (Rawls, 1971, p. 340), there are three aspects of the virtue of friendliness in traditional Chinese Confucian ethical thought and ancient Greek Aristotelian virtue ethics. This includes love of self as the origin of friendliness, love of others as the extension of friendliness, and love of society as the destination of friendliness.

Friendliness for Love Self

Chinese Confucianism asserts that the superior man is watchful over himself when he is alone (Legge, 2013). In other words, a person of noble character is first confronted neither with others nor with the

social community but with the self or the heart. A similar view is emphasised in the Nicomachean Ethics. According to Aristotle, a person is first and foremost his own friend and feelings for friends are derived from feelings for self (Crisp, 2014). Friendliness should be rooted in love for oneself. Only by being a friend to oneself first can one then realise love for others and for the social community. Therefore, the virtue of friendliness should also concern the person himself first while emphasising the goodness of the person's heart and love for himself.

Further, according to Aristotle, the virtue of friendliness is an expression of self-love and goodness. A person is first and foremost a friend of himself, and man should love himself best (Crisp, 2014). Those who love and do their best to fulfil their own needs are called "self-lovers" by Aristotle (Crisp, 2014). It is important to emphasise that "self-lovers" do not refer to a pure egoist who seeks to gain as much wealth, honour, or physical pleasure as possible for himself. The "self-lover" always seeks what is noblest and best for himself; always does what is just, temperate, or whatever is virtuous, and does what satisfies the "logos" behaviour (Crisp, 2014). Therefore, friendliness must be first and foremost a "self-lover".

Therefore, those things that are praiseworthy, such as noble qualities, will also be the first to be pursued by the "self-lover". Loving oneself is a fundamental virtue of a virtuous person, and it stems from the noble person's pursuit of goodness. Only when a person possesses love for himself can he gradually develop it into love with others and with society and then become a person of friendliness.

Chinese Confucianism also emphasises a gentleman's love of self and moral cultivation, as well as the value of "benevolence" for a person of noble character. In the Analects of Confucius, Yan Yuan, a disciple of Confucius, asks Confucius what perfect virtue (benevolence) is; Confucius replies, "To subdue one's self and return to propriety, is perfect virtue" (Brooks, E. B. & Brooks, A. T., 1998, p. 55). In other words, noble qualities do not come from elsewhere, and moral behaviour is not practised to gain the approval of others; "benevolence" comes from within. A person of noble character can only be a person if he or she acts with discipline and morality in his or her heart.

"The Master said that a youth, when at home, should be filial and, abroad, respectful to his elders. He should be earnest and truthful. He should overflow in love to all and cultivate the friendship of the good" (Brooks, E. B. & Brooks, A. T., 1998, p. 6). That is to say, to do the most basic little things well and to keep pursuing the good in one's heart is to love oneself. The 'benevolence' requires one to pursue excellence or nobility in oneself; what Aristotle said is praiseworthy. A person of noble character has to be based on self-love and the cultivation of self as a means to achieve friendliness.

Mencius made "benevolence" a fundamental part of one's life and emphasised the ethical value of self-love. "Mencius said that the feeling of commiseration is the principle of benevolence" (Ivanhoe, 2009, p. 13-14). The feeling of commiseration is a natural feeling that is inherent in every human being and is the starting point for showing love to other people and for doing good deeds. Therefore, "benevolence is the distinguishing characteristic of man" (Brooks, E. B. & Brooks, A. T., 1998, p. 182-183). In Chinese Confucian ethics, the virtue of friendliness revolves around "benevolence". It promotes the goodness of the human heart as the starting point and friendliness as a school of manhood and the value of benevolence.

The virtue of friendliness stems from love and care for people for themselves, emphasising the progression from self-love to love of people. In other words, self-love is the prerequisite for friendliness. One must first love oneself before one can treat others with sincerity and kindness. However, the virtue of friendliness is more than self-love; it implies inner social harmony. Each person must first have a good heart, be self-reflective, be at peace with oneself, be true to one's nature, show compassion and understanding, and make it easier to build friendships with others. Therefore, the virtue of friendliness is based on self-love. Only when a person loves and respects himself can he treat others with sincerity and promote social harmony and the positive development of society.

Friendliness to Love Others

The virtue of friendliness originates from self-love and develops into love for others in interpersonal interactions. According to Biniek (2013), love for others is a virtue among friends. Therefore, a person who possesses the virtue of friendliness tends to show patience and care for those he loves or admires, as well as genuine feelings of wishing others a better life. Not only are they honest, truthful, trusting, and understanding towards others, but they also show concern, sympathy, and help in others' situations without expecting anything in return. They also point out others' shortcomings appropriately and correct them patiently.

For Aristotle, the virtue of friendliness manifests itself in interpersonal relationships as a moderate state of character, which means that it lies between two vices (Crisp, 2014). One kind of vice is flattery; such people agree with everything and never disagree with anything (Crisp, 2014). That is, this type of vice person tends to hide his or her true will in order to pander to others or to make them happy, but this often leads to great suffering for himself or herself.

Another type of vice is perversity or hate. These people usually oppose anything they do not want to do or that is not good for them and never consider the pain that is caused to others (Crisp, 2014). They are usually self-centred and only focus on whether they can be happy or think that everyone else should agree with them. But when others disagree with them, they tend to be in great pain as well and may even resort to extreme and malicious means to achieve their own goals. It is only when a person has the quality of friendliness that he or she will agree with what is to be agreed with and disagree with what is to be disagreed with in an appropriate manner (Crisp, 2014). Thus, the virtue of friendliness is the state of moderation in which a person lives with others in a way that is neither flattering nor perverse.

The definition of the virtue of friendliness in Confucianism is almost the same as that of Aristotle, with "benevolence" as its root. At the same time, the virtue of friendliness is not only a virtue of impartiality, but it is further emphasised in its outward expression as "loyalty and forgiveness". For "Loyalty", "Master Zeng said that the Master's way lies in exerting all of one's effort and relating to the needs of others" (LaFleur, 2016, p. 92). "Forgiveness" is referred to by Confucius as a principle of conduct throughout one's life, that is, "do not demand of others anything that you are not prepared to accept" (LaFleur, 2016, p. 98). Therefore, "loyalty" is the principle of being a human being, and "forgiveness" is the foundation of success (Ge & Yang, 2024). "Loyalty and forgiveness" are very important in Confucianism, which implies how a person of noble character should behave and conduct himself. It is the practice of 'benevolence' in life and is the value of the virtue of friendliness.

Meanwhile, Chinese Confucianism explains the practice of the virtue of friendliness in people's interactions, in addition to the principle of "loyalty and forgiveness". Regarding the way of treating friends well, Confucius believed that faithfully admonishing friends with loyalty and guiding friends with goodness, but if that is impracticable, then stop (LaFleur, 2016; Brooks, E. B. & Brooks, A. T., 1998). Mencius also advocates kindness to others. "There is no attribute of the superior man greater than his helping men to practice virtue" (Ivanhoe, 2009, p. 54). Therefore, the virtue of friendliness is implied in Confucianism as "loyalty and forgiveness", which shows care, help, love and kindness to others. The virtue of friendliness is not only about empathy between people but also about respect, understanding and tolerance.

The above shows that in both Chinese Confucianism and Aristotelian virtue ethics, the virtue of friendliness includes the principle of love of interaction with others. Aristotle regarded friendliness as a moderate state of character, involving not only sympathy for others but also respect and understanding. Confucianism emphasises the virtue of friendliness as "loyalty and forgiveness", advocating loyalty and kindness to friends and caring for and helping others. Thus, the virtue of friendliness stems from self-love and develops into love for others in interaction with others. Friendliness towards others includes patience, care, honesty and selflessness.

Friendliness for Love Community

Human beings are not just abstract concepts but, in reality, are the sum of all social relations (Marx, 2016). In other words, no individual can survive apart from the community. Together, countless individuals form a social community (Moffett, 2019). Social community will also provide the basis for the existence and development of each individual, and people are linked together through love and kindness (Lynch, 2019; Easterling, 2022). Xu and Huang (2019) argue that the virtue of friendliness is a key element in the stability and social harmony of social relations and an important spiritual force that promotes social development. In other words, the virtue of friendliness promotes harmony and solidarity among members of a social community and also supports people's pursuit of a happy life.

As early as the ancient Greek period, philosophers had already begun to explore the elements that could unify the community. According to Aristotle, "every city is a community, and all communities are founded for some good" (Lord, 2013, p. 24). The city is a political community in which the good is pursued, and the "self-lovers" of the city-state and the city-state share in the pursuit of the praiseworthy and virtuous good. Thus, "the virtue of friendliness holds the city-state together" (Crisp, 2014, p.63) is an expression of the love of the 'self-lovers' for the city-state. It maintains good relations between the citizens of the city-state and the stability of the city-state and naturally serves as a bond between the citizens and the city-state.

On the other hand, in Aristotle's ethical system, solidarity is a further expression of the virtue of friendliness (Crisp, 2014). The virtue of friendliness of all "self-lovers" promotes the unity of the city-state. After the Peloponnesian War, the city-state system of Ancient Greece began to decline (Little, 2007). According to Aristotle, only when citizens within a city-state unite to do something together can the city-state prosper and make itself happy and well (Crisp, 2014). This is because unity is about the common good of the citizens in the city-state and about something that can affect the common life of the citizens. "If everyone competes in behaving nobly, what is common can be fully realised, and the greatest good can be attained by everyone (Crisp, 2014, p. 27)". Friendliness is a virtue of goodness that is externalised by citizens to self-love and builds solidarity between citizens of the city-state, ultimately pointing to love for the city-state.

The Chinese Confucian ethic holds that the virtue of a person of noble character is the pursuit of "harmony". "The gentleman is harmonious but not conformist. The little man is conformist but not harmonious" (Brooks, E. B. & Brooks, A. T., 1998, p. 63). The virtue of friendliness is the external expression of the gentleman's benevolence, which ultimately leads to the pursuit of harmony. The gentleman's pursuit of "etiquette" also aims to bring about social harmony among people (LaFleur, 2016). "Harmony" is the purpose of Confucianism's observance of rituals. Learning, knowing, and performing rituals is to achieve "benevolence". If everyone can realise the virtue of friendliness in interpersonal interactions and achieve "harmony" between people through understanding, tolerance and respect, only then can we achieve friendliness in love for society.

Further, Confucianism requires the gentleman to practice the virtue of friendliness in order to ultimately achieve the ideal goal of Grand Union and social harmony. In Grand Union, people are full of love for each other, and people show undifferentiated friendliness and love for their families and others, including the young, the old, the able-bodied, the disabled, the widow, and the orphan (LaFleur, 2016). Everyone loves others and loves the community, creating a loving social community. In this ideal community, "love the elderly in one's own family as well as others; love one's own children as well as the children of others" (Ivanhoe, 2009, p. 29). Grand Union is a perfect demonstration of the virtue of friendliness, which fully realises the beautiful situation of everyone loving each other and social stability. It implies that every member of the social community should be kind-hearted and good to others and expands the virtue of friendliness into love for the social community.

Friendliness is a virtue of friendliness that promotes unity and social harmony in a social community. According to Aristotle, a city-state is a political community pursuing a common good, and the virtue of friendliness is the key to maintaining the unity of the city-state. Confucian traditional ethical thought emphasises the construction of a society full of love between people and the virtue of friendliness as an element of achieving the Grand Union and social harmony. Therefore, the virtue of friendliness transitions between the love of self and the love of others and culminates in a social relationship that is harmonious and symbiotic among people and expresses love for the social community.

In summary, the virtue of friendliness is a noble quality that emphasises the expression of universal goodwill towards others and society. According to traditional Chinese Confucian ethical thought and Aristotelian virtue ethics, the virtue of friendliness is based on the self-love of the individual, which then extends to the love of others and ultimately points to the love of society. It is based on the inner goodness or benevolence of the 'self-lover' and is further expressed as undifferentiated care for all people, things and communities. In the context of the AI era, the virtue of friendliness is of great significance to individuals. It not only promotes interpersonal relationships and social community unity but, more importantly, helps individuals to behave ethically in complex and novel social environments.

THE SIGNIFICANCE OF MORAL EDUCATION ON THE VIRTUE OF FRIENDLINESS

The rapid development of AI technology has begun to transform people's traditional ways of life and production (Farina et al., 2024; Webster & Ivanov, 2020), as well as the ways in which people interact with each other and the ways in which people interact with machines (Jiang et al., 2022). In this study, the concept of the virtue of friendliness has been discussed in the previous section. It is important to emphasise the value of the virtue of friendliness and the significance of ethical education in relation to the virtue of friendliness.

According to the researcher, the virtue of friendliness is significant in that it can help individuals adhere to self-love derived from goodness and benevolence in the environment of AI technologies,

promote understanding, care, empathy, and cooperation among people, and build a more inclusive and socially harmonious society. The virtue of friendliness also encourages people to face the challenges posed by AI technology and still be able to adhere to their inner morality and use these advanced technologies responsibly. That is to say, in the age of AI, there is a need to pay attention to moral education about the virtue of friendliness.

Sustaining the Core Values of Human Society

AI technologies, especially generative AI tools, have been increasingly integrated into people's work and lives. Research by Farina et al. (2024) suggests that AI technologies seem to be changing human values, as well as traditional modes of interaction between people. AI technology provides people with more opportunities to communicate and interact with each other through virtual agents, social bots, or language generation software (Guzman & Lewis, 2020). However, it has been shown that feelings of human apathy and alienation may be further exacerbated in people's interactions with AI, as the quality of relationships determines the feelings of loneliness (Jacobs, 2023). The modes of communication provided by AI technologies do not replace real human interactions but instead contribute to the breakdown of human relationships.

That is, the intrinsic value of the virtue of friendliness needs to be emphasised in the context of the AI era. Lack of friendliness may make people lonelier and more apathetic and neglect the needs and feelings of others (Engelhart, 2021). Research by Hu et al. (2023) suggests that users experience more loneliness by having one-on-one conversations with the AI rather than interacting with different people or different groups of people. Therefore, the lack of relationships and inadequate socialisation can negatively affect an individual's psychological state, leading to an increased risk of mental health problems.

People with social anxiety often actively avoid human interaction, even though they also need social relationships (Rasouli et al., 2022). The anthropomorphic conversational approach of AI technologies, especially generative AI tools, seems to solve their social anxiety. However, Passi and Vorvoreanu (2022) argued that maintaining communication with AI may produce excessive trust and dependence on a certain AI tool. Despite the convenience that these advanced technologies provide to people, they also create a heavy dependency on AI (Acemoglu, 2021). Especially for people with social anxiety, long-term interaction with AI may not be a good option.

Therefore, the lack of friendliness may make people lonelier and more indifferent in their interactions with AI, thus neglecting "self-love" based on goodness and benevolence, as well as love and care for others, which may lead to social disharmony and conflict. According to the researcher, the virtue of friendliness allows "self-lovers" to hold on to their inner goodness and benevolence and further express their love for themselves. The virtue of friendliness serves as a moral compass that encourages people to behave appropriately and remain true to themselves in their interactions with AI. This is essential to prevent people from becoming apathetic and selfish as a result of addiction or dependence on the convenience of AI.

In addition, the virtue of friendliness allows people to express their love for others and social communities along with their self-love and to shape healthier and more social harmony. The virtue of friendliness helps people to maintain care for others and the social community in an era of high dependence on technology. The spread of AI in all industries may lead to the marginalisation of some social groups. The virtue of friendliness can motivate people to be more active in helping others adapt to technological change and help people feel respected and accepted. In other words, the virtue of friendliness can promote interpersonal relationships and social community cohesion.

Promoting Positive Interactivity Between People and AI Technology

The rapid development of AI technology may raise many ethical issues, such as invasion of privacy, information security, transparency of procedures, and bias (Zhou & Li, 2023). These issues may trigger a crisis of trust in society, both in terms of human trust in AI technology, as well as interpersonal trust (Horowitz & Scharre, 2021; Omrani et al., 2022). The researcher believes that the emphasis on the virtue of friendliness is of great importance in addressing these issues.

People who lack the virtue of friendliness may misuse AI technology for personal benefit in their interactions with it. For example, AI can be used to obtain others' private information or create false information (Zhang & Chen, 2023). This is not only unethical behaviour but also further triggers a crisis of trust in society. Therefore, the importance of ethical education on the virtue of friendliness aims to

guide AI technology users and developers to fully consider their ethical responsibilities and express love based on goodness and benevolence.

For developers of AI products, the virtue of friendliness can help them incorporate goodness and benevolence into the research and development process so that their products are in line with human values and social needs. The virtue of friendliness can also inspire AI designers to be more concerned with the well-being of humanity rather than just advancing their own financial interests. In addition, many AI technologies are potentially biased and unfair in their decision-making (Qadir, 2023). Developers of technology with the virtue of friendliness can focus on fairness and inclusiveness in AI products and thus avoid bias toward specific groups.

The virtue of friendliness is critical to cultivating trust as AI is used in fields such as healthcare, finance, and education. An AI product that uses the virtue of friendliness as a guiding principle will not only be more transparent but will also be more respectful of users' privacy and rights. At the same time, the virtue of friendliness allows people to be more cautious and responsible when using AI technology. For example, users do not share others' information freely when using AI applications that involve private data. The virtue of friendliness promotes human-to-machine trust, as well as human-to-human trust, making people more willing to accept and use these advanced technologies.

In conclusion, in the AI era, the cultivation and practice of the virtue of friendliness is an important foundation for maintaining interpersonal communication and social harmony. The virtue of friendliness emphasises people's love for themselves, others and society. It can help people adhere to the expression of goodness and benevolence in the rapid development of AI technology and further promote interpersonal understanding and trust. The virtue of friendliness also helps build a more inclusive and cooperative AI era, prompting people to work together to explore and solve the challenges posed by AI rather than being antagonistic.

As AI becomes more and more involved in human life, ethical education on the virtue of friendliness can serve as a value guide to help people stay true to their roots when using and designing AI products. The virtue of friendliness expresses goodness and benevolence towards others, an attitude that can avoid the abuse or misuse of AI technology. The cultivation of the virtue of friendliness can better enable developers of AI technologies to put human well-being at the centre of technological innovation and to design decision-making processes with full consideration of the technology's far-reaching impact on society and the search for friendly and fair solutions.

Expressing the Love of the Virtuous Man

Finkler (2001) argues that human societies are moral units based on kinship or blood, and ethics and values derived from different cultural traditions are passed on between moral units. However, in the increasingly modernised and urbanised 'Metropolis', the strong ties and sense of belonging within the community are weakened and create increasing independence of the individual (Simmel, 2023). With the continuous development of AI technology, people's loneliness and social anxiety have become more pronounced, and interpersonal relationships have become more distant in the process (Hu et al., 2023).

According to Aristotle, the main purpose of ethical study is not to regulate people's behaviour but to build human character (Crisp, 2014). In other words, the moral education audience is real people. As opposed to the constant development and updating of objective ethical norms or behavioural codes to cope with the rapid development of society, the aim of ethical education should be inclined towards the cultivation of people of high virtues. In turn, this will enable the stakeholders to consciously make correct ethical decisions and good behaviours guided by the virtues (Hursthouse, 1999). Therefore, moral education about the virtue of friendliness is crucial in the age of AI.

Firstly, the virtue of friendliness is rooted in the self-improvement of goodness and benevolence. Confucius believed that a person of noble character of benevolence has self-love (LaFleur, 2016). Self-love can only be understood if one identifies with the intrinsic value of the virtue of friendliness. In a context where AI technology is all over the place, people should do the same. If you want to give love to others, you need to learn to love yourself first.

The core of self-love is the understanding of goodness and benevolence. According to Duan (2015), the virtue of friendliness is the combination of moral cultivation and moral character, as well as the unity of motivation and behavioural effect. In other words, friendly behaviour is the external expression of the virtue of friendliness, and goodness and benevolence are the core of the virtue of friendliness. The virtue of friendliness is pursued because of its intrinsic value. A person with the virtue of friendliness does things in moderation, not out of feelings of love or hate, but because that is who he is (Crisp, 2014).

According to this logic, the cultivation of the virtue of friendliness should begin with the recognition and understanding of goodness and benevolence, that is, the intrinsic value of the virtue of friendliness. It is followed by self-love, the possession of love and empathy, and the attainment of the goal of loving others. "One who loves others always is loved by them; one who respects others is always respected by them" (Ivanhoe, 2009, p. 120). In other words, self-love, loving, and being loved from others are related. After a "self-lover" has gained the love of others, he or she eventually completes the cycle of the virtue of friendliness among people. In moral education, emphasising "friendliness for love self" means cultivating an individual's sense of self-worth. This virtue of friendliness is a reflection of one's own moral integrity.

Secondly, a person who is friendliness will receive happiness from interpersonal interactions. Human beings are social animals, and human interaction activities and social relationships are necessary conditions that constitute human existence (Singh, J. & Singh, J., 2020). According to Aristotle, human life lies in communication and reflection, and the goodness and pleasure of life can only be manifested by living with friends to share happiness and communicate together (Crisp, 2014). According to Confucius, "To have friends coming from far places: is this not also delightful?" (Brooks, E. B. & Brooks, A. T., 1998, p. 2). It can be seen that friends are commonly regarded by Chinese and Western philosophers as the bearers of indispensable emotions for every human being.

In other words, the virtue of friendliness expresses love between people and is the root of friendship. Friends can also shape their respective virtues of friendliness as they influence and learn from each other to demonstrate their friendship and love for each other. From an ethical perspective, the virtue of friendliness is both altruistic and egoistic (Schollmeier, 1994). Being a noble and happy person involves having good friends (Schollmeier, 1994). Aristotle considers a good friend to be a friend of high character and worth pursuing because the goodness stemming from his nature will be pleasing (Crisp, 2014). In other words, good friends are attracted to each other's noble qualities, reciprocate each other's kindness with genuine love, and cultivate their respective virtues of friendliness.

The virtue of friendliness, as a norm, already connotes the reasons for what and how one should do and why one should do it when making friends. It is worth noting that the practice of the virtue of friendliness is neither endless giving nor persistent adherence to behaviours that are beneficial to oneself. A truly good friend neither lets himself make mistakes nor allows his friends to do so (Biniek, 2013). Friendliness entails knowing the appropriate way to agree with what is to be agreed and disagree with what is to be disagreed with (Crisp, 2014). Therefore, in our interactions with friends, we should make appropriate ethical decisions or provide pertinent advice based on the virtue of friendliness.

Thirdly, friendliness is a virtue that promotes solidarity in social communities. The cultivation of the virtue of friendliness for the members of social communities deserves to be the key to the moral education of social communities (Cao, 2015). This is because the virtue of friendliness is related to the unity and harmony of social communities, as well as the well-being and happiness of each member. The virtue of friendliness based on love is also the ethical basis for the maintenance of community order. A social community needs to guarantee "spatial justice" for its members by updating institutions, laws and norms (Harvey, 2010; Huang & Jin, 2017).

In other words, the virtue of friendliness is love based on goodness and benevolence, which includes caring, respect, understanding, harmony, and tolerance among different individuals. According to Mencius, being affectionate toward his family is what allows him to be humane toward the people and loving toward circumstances (Ivanhoe, 2009). It not only shows love between people but also unites the whole social community through love. Only by letting every member feel the care from social communities based on goodness and benevolence can it promote their love for social communities. On the contrary, if people cannot feel the care of their social communities, the cultivation of people's love for their communities and individual virtues of friendliness is also a difficult matter.

Furthermore, love is embedded in the growth of each social community. The moral education on the virtue of friendliness among citizens should not be dogmatic or a quick fix. Nature has endowed people with the capacity for benevolence, and people are born to treat strangers as they would treat their loved ones (Ci, 2019). People's love for their social communities also stems from the externalisation and extension of the virtue of friendliness (Li, 2013). Therefore, moral education on the virtue of friendliness is implicit and requires policymakers to develop strategies to achieve the continuous and long-term cultivation of love for every individual.

In summary, with the rapid development of AI technology, people's loneliness and social anxiety have increased. The virtue of friendliness not only involves self-care, concern for others and care for society but also emphasises the importance of establishing friendly interpersonal relationships and

promoting social harmony in an environment of rapid technological development. Through people's virtue of friendliness, individuals are better able to cope with the challenges posed by the development of AI technology, thereby contributing to the overall well-being and positive evolution of society. That is to say, emphasising the virtue of friendliness in the ethical education of students is crucial for these potential future users and developers of AI technology. Educators should guide students to understand the virtue of friendliness and develop ethical awareness in using and designing AI. This will not only contribute to the moral growth of students but also lay the foundation for the sustainable development of society.

The core value of the virtue of friendliness is equally crucial in people's interactions with AI. When designing AI systems, developers should consider the principles of the virtue of friendliness to ensure that the use of technology promotes harmony in human relationships. For example, friendly AI assistants can enhance the user experience by understanding the user's emotions and needs and providing more empathetic feedback. This design not only demonstrates care for the user but also reflects the developer's ethical responsibility. The virtue of friendliness can also serve as an ethical guide in human-computer interactions. Users who maintain a friendly attitude when interacting with AI systems will help build trusting relationships and reduce misunderstandings and conflicts. For example, when using an AI recommendation system for a social media platform, friendly user behaviour can promote more positive content sharing and interaction, which in turn can enhance the overall social atmosphere.

CONCLUSION

The development of artificial intelligence (AI) technology has led to unprecedented challenges to universal moral principles, and there is an urgent need to revisit the core content of moral education. This study emphasises the significance of the virtue of friendliness in moral education in the complex AI environment and redefines the concept of the virtue of friendliness based on Aristotle's virtue ethics and traditional Chinese Confucian ethical thought. The researcher argues that the virtue of friendliness is the root of an individual's expression of love based on goodness and benevolence, the key to enhancing one's noble qualities, and an essential factor in promoting interpersonal relationships and social harmony. Moral education on the virtue of friendliness is an effective way to deal with the moral challenges in the age of artificial intelligence and an important guarantee for the sustainable development of human science and technology.

This study also provides a theoretical exploration of moral education in the age of artificial intelligence. The researcher advocates that moral education should be shifted from external moral norms to internal virtue cultivation, and the virtue of friendliness should be strengthened in moral education. By advocating the virtue of friendliness, individuals will be able to maintain their moral self-awareness in the midst of technological advancement and effectively cope with the ethical issues arising from technological change. Friendly developers are likely to incorporate more ethical considerations into AI design, and friendly users are likely to maintain positive attitudes and behave ethically in their interactions with AI.

SUGGESTIONS FOR FUTURE STUDIES

Future research can further explore the performance of the virtue of friendliness in different cultural contexts and the effectiveness of its educational methods, providing more comprehensive theoretical support and practical guidance for moral education in different regions. Future research can also combine the perspectives of different professional fields to deeply analyse the formation mechanism of the virtue of friendliness and its impact on individuals and society. Researchers can also understand the value of the virtue of friendliness in different contexts through case studies and empirical research to promote ethical behaviour in human-computer interactions.

Furthermore, AI technology has shown an unstoppable and explosive development trend. For educators, understanding the importance of the virtue of friendliness can help them emphasise the development of students' sense of self-love, social competence and care for society in education. Policymakers can formulate relevant social policies to encourage public-friendly behaviour and a harmonious social atmosphere in AI's environment based on this study. Corporations or organisations can draw on the principles of friendly virtues to build a corporate culture centred on employee care and social responsibility and further support employees to use AI technologies ethically.

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