The degree to which the dimensions of moral intelligence contribute to technological well-being among a sample of new students at Mu'tah University

**Abstract**---This study aimed at identifying the degree to which the dimensions of moral intelligence contribute to technological well-being among a sample of new students at Mu'tah University in Karak, Jordan. In order to achieve the objectives of the study, the researcher developed two scales: the scale of moral intelligence and the scale of technological well-being through the revision of the theoretical literature and the previous studies and through the electronic application of the scale in 2021. The study sample consisted of (184) students. The results revealed that the level of the dimensions of moral intelligence and technological well-being among the University students was medium. The results also revealed that the dimensions
of moral intelligence contribute to predicting medical technological well-being with about (56%). In the light of the results, the study recommended the necessity of paying attention to the new students in the university as well as conducting further researches and studies as well as developing counselling programs that contribute to better adaptation and adjustment.

**Keywords**---moral intelligence, technological well-being, new students.

**Introduction**

Psychology addressed intelligence as a behavioral advantage that is independent from wisdom, while intelligence is concerned with the way in which individuals perform their tasks, wisdom is more concerned with the results of behavior and its effects on others. Therefore, wisdom is different from general intelligence in its traditional concept. Wisdom is not limited to verbal abilities and causal skills that are more prevalent in traditional intelligence tests. Additionally, there is an agreement between common people, in general and psychologists, in particular that intelligence in its conventional concept is not sufficient to succeed in life (Gardener, 1983).

Moral depravation that is prevalent throughout the world demonstrated a number of notices. For example, a survey study was conducted in the USA on a sample that consisted of (10,000) students in a secondary school. The study results showed that (50%) of the students stole something from a supermarket in the last year, (25%) lie in order to get work, (70%) cheat in exams, (25%) brought a weapon to school, at least, once, and (70%) used drugs and alcohol, at least, once. The percentage of activity and attention failure increased to reach (700%) and in (40) years, suicide-committing increased to (300%), and the same applies to depression (Borba, 2001).

Moral intelligence is considered as one of the new uncommon uncommon. It first appeared in North America and was applied to the domain of education through work teams about students in Campbell in California (Lennick& Kiel, 2011). Moral intelligence is defined as the individual’s ability to understand right and wrong things and to think morally based on having several moral virtues that guide the individual’s behavior in correct and valuable ways. This case really helps in dealing with the evils of society as well as the internal and external stressors in an appropriate way. Moral intelligence is concerned with self-discipline, tolerance, justice, respect, conscience and empathy. The current study focuses on Rest model (1984) for the determinants of moral behavior, since it is one of the most important models that addressed manners in the light of integration between knowledge and emotions. Moral behaviors are determined by four components (moral sensitivity, moral judgement, moral motivation and moral personality), where these four components are responsible for the moral act (Rest & Narvaez, 1995).
The Donston Study (1997) defined moral intelligence as one of the methods that develop and enhance individuals’ moral life and develop their personalities. (Hoss, & Wylie, 1999) defined it as the ability to follow the inner sound for the decisions that may serve the individuals and the other people surrounding them. (Michele Borba, 2001) defined it as the ability to understand wrong and right things, which means that we should have moral values and convictions, so that we can act in the right moral way, such as the capability of recognizing pain experienced by others, preventing one’s self from thinking of bad intentions, controlling motives, listening to all parties before giving judgements, accepting and appreciating differences, distinguishing nonmoral choices, resisting unfairness and dealing with others with love and respect (Borba, 2001) and (Borba, 2003). Finally, (Gullikson, 2004) defined it as what is provided by parents from examples that are represented by the good behavior that is acceptable to their children as well as the standards determined by the community in order to promote mercy, empathy and respect.

During the annual American conference that discussed five types of intelligence and their effects on administrative work in an organization, Toole suggested that moral intelligence had a prominent role, where it was placed in the first rank through its effect on the leader’s position in the organization where the leaders’ decisions should be in accordance with their moral convictions. Moral intelligence helps individuals to be strong and honest; it is, hence, the basis of rigid personality (Toole, 2010).

The Len Nick and Kiel study, (2005) defined moral intelligence as a set of abilities that are directed towards doing good deeds, where it guides the multiple mental abilities to do the right thing. The importance of moral intelligence lies in being the hope of saving the community’s manners, where people feel a type of psychological health and psychological stability when they are committed to what they say. The individual and community’s commitment to moral intelligence leads to acquiring societal health, where its members become healthy and interrelated with each other (Denton, 1997).

Moral intelligence leads to more interest in others as well as getting away from selfishness. It contributes to the prevalence of psychological security and tranquility in the community, in addition to preventing verbal and non-verbal violence among the community members (Oconnor, 2000). Moral intelligence eliminates administrative corruption; it provides the leader with the ability to manage work while maintaining good relationships between the staff members. It also leads to the prevalence of love, empathy peace, appreciation and nonviolence as well as giving the individuals the ability to be fair, tolerant and patient which, in turn, promotes their ability to adapt to and deal with the others. Moral intelligence provides the individuals with moral and auto immunity that enable them to resist temptation (Down and King, 2001).

The results of several studies suggested that self-empathy is strongly related to psychological well-being (MacBeth and Gumley, 2012; Neff, Leary and Hoyle, 2009). For example, some researchers suggested that self-empathy contributed to more than half of the variance in the scales of psychological well-being. The results showed that the high levels of self-empathy are related
to low levels of anxiety, depression and fear of failure in addition to an increased feeling of happiness, optimism, curiosity and authentic relationships with others (Neff, 2009).

Although the concept of self-empathy was originated in the eastern philosophical thought decades ago, it is considered as a relatively new concept that was newly crystallized in the west, especially in the domain of positive psychology. The last decade witnessed an increased exchange between those philosophical thoughts and western psychology, particularly in relation to the way through which alertness, awareness and self attention are related to the indicators of psychological health (Brown, Ryan & Creswell 2007). Several studies and researches were conducted in the topic of self-empathy (e.g., Gilbert, 2009; Neff, 2003).

The study Borba, (2001) conducted a study which aimed at identifying the correlation relationship between moral intelligence and self-esteem among the adolescents. The study sample consisted of (2000) male and female students from the secondary schools in New York city. The results revealed that there is a statistically significant positive correlation relationship between moral intelligence and self-esteem among the adolescent students in the secondary schools. Gerjoli, 2008 conducted a study which addressed the development of moral principles among teachers by enhancing moral principles and values. The study aimed at identifying the moral distinction in situations when dealing with those working in educational institutions. The results revealed that moral intelligence has a great effect on leadership and its activity inside the educational environment. The results also revealed that when teachers have high levels of moral intelligence, they will have more ability to face the new challenges and problems. (Norcla, 2010) conducted a study which aimed at detecting the role of the mind in the dynamic nature of the environment through balancing the individual’s moral intelligence and social interaction in the community as well as developing the moral sense and moral intelligence when dealing with others. The results revealed that mental, psychological, social and moral intelligences require social skills and abilities in order to be activated. The results also suggested that the individual with social and moral intelligence can achieve more success due to cooperation between moral intelligence, social skills and mental abilities.

The Hoseinpoor and Ranjdoost study, (2013) conducted a study to investigate the relationship between moral intelligence and achievement among the students of the preparatory stage in the city of Tabreez. The study sample consisted of (210) male and female students who were randomly selected from the study population that consisted of (1600) students. The researcher used the checklist of moral intelligence that was developed by (Lennick and Kiel, 2005). The results revealed that there is a statistically significant positive relationship between moral intelligence and achievement regarding the dimensions of honesty, tolerance and mercy), while the dimension of accountability was related to the achievement of students. The dimension of forgiveness was higher among males as compared to females. The dimension of accountability was lower among the students of the humanities compared to the students of applied sciences and mathematics. (Nobahar and Nobahar, 2013) addressed the evaluation of moral intelligence among the library staff in the University of Bo Ali Sina. The researcher used the checklist of moral efficiency developed (by Lennick and Kiel, 2005). The results
revealed that the library staff gained high scores in fulfilling their promises and taking care of others. The results revealed that there are no differences between males and females concerning any elements of moral intelligence, and that the other demographic variables, such as age and academic degree were not significantly related to moral intelligence.

Well-being is generally manifested through self-satisfaction, the existence of good mood and the absence of negative mood, as they constitute the most common components used to evaluate personal well-being (Deiner and Lucas, 2000). Well-being consists of six domains (social domain, spiritual, emotional, professional, physical and environmental). All these domains are affected by technology, where technology could be used in an appropriate way that helps the individual to deal well with the various domains, and thus promotes the level of well-being. Technology could also have a negative effect that reduces the level of well-being; i.e., a decline in the level of technological well-being (Kennedy, 2014).

Recently, technology has become as one of the most important issues, where scientists referred to as the age of technology due to the increased prevalence of technology. The number of qualified devices that are connected to the internet reached (8.4) billions in 2017 with a percentage of (31%), which is more than the number in 2016 (Köhn, 2018). Technology adversely affects the humans from several domains, where some studies revealed that they cause stress, anxiety, stressors and frustration. Other studies addressed the anxiety of technology. (Brosnan, et al, 2012) suggested that (5.6%) of the University students who used technology gained high scores of anxieties, and that the bad usage of technology has increased in the last period, where technology has become a tool that affects the morals and behaviors of the group, referred to as psychological war. Several problems emerged in relation to technology, such as Internet addiction, gaming addiction as well as others. For example, internet addiction was defined as using the internet for more than (8) hours a day (Young, 2004).

Psychological wellbeing is the personal well-being, which is an expression used when emphasis is primarily directed towards the state of general enjoyment in the individual’s life (Ryan and Deci, 2001). However, technological well-being includes the following factors (Kennedy, 2014): using technology to achieve comfort, where the individual uses technology in a way that saves time and effort, such as relaxation and purchasing the needed items via the internet; technology anxiety, which results from using modern technology; and using technology to enhance physical health, where individuals use technology to promote health and increase physical flexibility through diet and physical exercises. Technological wellbeing is manifested about the way of using technology; individuals use technology in a useful and positive way, and for professional purposes, where individuals invest technology for professional growth and development (Bachiller, 2011).

The Lyubomirsky, King and Diener study, (2005) suggested that people who have psychological well-being are considered as successful in most dimensions and domains of their lives, and that is attributed to having feelings of pleasure. Those individuals are also considered more socialized and active and view others more
positively. They also have strong bodies, more self-confidence, better skills to solve conflicts and problems as well as creative ideas. The Ala’deen study, (2015) conducted a study to investigate the relationship between self-empathy, self-esteem, depression and social anxiety. The study sample consisted of (410) University students (248 females and 126 males). The results revealed that the scores on the scale of self-empathy and its subscales were positively correlated with self-esteem and negatively with depression and anxiety. The results revealed that the domains of self-empathy demonstrated various effects and that self-judgment and self-unification predicted the levels of self-esteem and the symptoms of depression. The results showed that self-judgment and self-unification predicted social anxiety.

The Al-Jondi and Talahmeh study, (2017) conducted a study which aimed at investigating the degrees of the feeling of psychological well-being among the university students in the governorate of Al-Khaleel as well as identifying the levels of psychological well-being in the Palestinian environment. The results revealed that the degrees of the feeling of psychological well-being was medium. The results indicated that there are differences in the degrees of feelings of psychological well-being according to the variable of gender in favor of the females, and that there are differences attributed to specialty in favor of the students of the humanitarian faculties. The results also revealed that there are differences attributed to the economic level in favor of those with high income, as well as differences attributed to the place of residence in favor of the students living in rural areas.

The study problem

The late adolescence stage is a critical stage for the University students, where it represents a summary of the past and present experiences of the student. This stage also represents a critical conversion point towards the autonomy that is necessary for a healthy development during adulthood, the starting of a new professional life and the achievement of a rigid sense of the ego identity (Marcia, 1994). This stage is accompanied with an increase in perceptual capabilities, physical maturity, more opportunities in establishing social relationships and the preparation to adopt new life roles and facing the imminent difficulties. All these factors force the University students to make critical decisions related to determining their beliefs and role in life as well as determining what Erickson referred to as "identity crisis". With the end of identity crisis, psychologists assume that the moral domain had completely developed. However, the moral domain is sometimes affected by the new technological developments, where technology could have a role in the occurrence of some positive developments among university students. Unfortunately, these developments could be negative, where technological domains could adversely affect the student's life. Therefore, the problem of the current study lies in addressing a new phenomenon related to using technology which has recently become more prevalent. The study also addresses the moral domain which is constantly decreasing among the youth in the light of the increased potentials of more comfort and enjoyment related to the technological advancement. Based on the researcher's work at university, he noticed a decline of the various domains related to moral intelligence. He also noticed that students are too interested in the technological domains, and thus it
is necessary to address the psychological phenomena related to the moral aspects and linking them with the technological domains, especially among the youth who use the technological tools for long hours each day in the light of the prevalence of Corona Pandemic; there is a lack of the educational materials that educate students about the mechanism of using technology in a way that provides psychological well-being to students. Therefore, the researcher conducted this study, given its role in bridging the gap related to the moral domain and the usage of technology. Accordingly, the current study aims to answer the following question: To what extent the dimensions of moral intelligence contribute to psychological well-being among a sample of new students at Mu'tah university?

The following sub-questions are derived from the study main question:

1- What is the level to which the new students have moral intelligence?
2- What is the level to which the new students have technological well-being?
3- What is the extent to which the dimensions of moral intelligence contribute to psychological well-being among a sample of new students at Mu'tah university?

The importance of the study

The study importance lies in the following aspects:

**First, the theoretical importance**

the study addressed the concepts of moral intelligence and technological well-being, which are relatively new concepts. The study also attempts to extend the factors relating to these two variables and review the most important previous studies. In addition, the study importance lies in identifying the reality of both moral intelligence and psychological well-being among the new university students, where this category needs more attention, since they recently moved from school to university. In relation to the conditions of corona pandemic, those students suffer too much because they didn’t come to university for a whole year and did not acquire the experiences of attending the university.

**Second, The applied importance**

The applied importance of the current study lies in the possibility of making advantage of it in identifying the level of the prevalence of moral intelligence and technological well-being which could, in turn, be beneficial to university counselors with regard to dealing well with students, guiding and instructing them in this domain. It will also be beneficial to university counselors with regard to making advantage of the predictive power for the dimensions of moral intelligence in developing technological well-being; therefore, they can provide counseling programs later on about these two variables. This study also helps the staff of the unit of counselling services and the deanship of students' affairs to develop mechanisms for dealing with the new students when they return back to university after Corona pandemic as well as employing the dimensions of moral intelligence to reach technological well-being among those students. The study limitations: the study is limited to the responses of the university students to the
items of the two scales via the electronic connection due to the circumstances imposed by Corona pandemic.

**The study terms**

Moral intelligence: The Clarken study (2010) defined it as the implementation of moral principles to the objectives, values, and personal behaviors as well as the ability to distinguish the right from the wrong and behave morally. It is procedurally defined as the score gained by students on the scale developed in the current study.

Technological wellbeing: The Kennedy study (2014) defined it as a way for dealing with technology which, in turn, increases the ability of promoting health and well-being. It is procedurally defined as the score gained by students on the scale developed for the purposes of the current study. Technological wellbeing is defined as the method of the individual’s interaction with technology in a way that contribute to complete well-being. It includes the following technological factors: using technology to achieve comfort, technology anxiety, using technology to enhance physical health, the way of using technology, and using technology for the professional purposes.

**Methodology and procedures**

The study methodology: The study used the predictive descriptive approach to answer the questions of the study.

The study population: the study was applied to the new students at Mu'tah university with a total of (4350) male and female students. The study sample was used by the convenience sampling, with a total of (184) male and female students who responded to the two scales after distributing it to them for a month.

**The study instruments**

**First, the scale of moral intelligence**

This scale was developed by reviewing the theoretical literature and previous studies: (Qasim, 2009; Al-Obaidi and Al-Ansari, 2011; and Rizq, 2006).

The primary version of the scale consisted of (6) dimensions, these are:

1- Empathy: it is the identification with the interests of other people and feeling what they feel. It represents the strong emotion which has the potential of preventing the violent behavior and urge individuals to deal with others in a kind way in addition to increasing the awareness of other people's opinions, understanding their needs and caring about those who were exposed to harm (Borba, 2001).

2- Conscience: it is the strong inner sound that contributes individuals to be in the right way to do the right things, and make them feel guilty in case they go too far in committing mistakes.
3- Self-control: it refers to organizing ideas and behaviors to resist any internal or external stressors which, in turn, gives more willingness power to do the right thing and choose work morally (Borba, 2001).

4- Respect: it refers to showing appreciation to others and dealing with them in a polite way as well as responding pompously, since they are worthy of that (Borba, 2001).

5- Tolerance: it is the forgiveness of those who made mistakes and respecting the dignity and rights of each person regardless of the differences related to ethnic or social issues or the differences related to beliefs or abilities (Borba, 2001).

6- Fairness: it is the virtue that urges people to be honest, open minded and behave fairly (Borba, 2001).

In order to verify the suitability of the scale to the study objectives and environment, the psychometric characteristics of the scale were verified:

First, the validity of the study instrument: validity was verified in terms of (surface validity/ arbitrators' validity), where (12) arbitrators of the faculty members in the faculties of education at the Jordanian Universities responded to that. An agreement of (80%) was taken as a criterion to judge maintaining the item or modifying it. Based on the suggestions, linguistic modifications were made to (6) items. The indicators of internal content validity were verified by distributing the scale to a pilot study that consisted of (30) students from the study population and outside its sample. Correlation coefficients were calculated between items with the dimension and the total score. The value of correlation coefficients between the item and the dimension ranged between (0.35 – 0.77), while the correlation coefficients between the item and the total score ranged between (0.30 – 0.70). The results revealed that the correlations between the items and the total score were significant at (0.05).

Second, the reliability of the study instrument: the study instrument’s reliability was verified using (test-retest), where the scale was applied to a pilot study that consisted of (30) students from the study population and outside its sample. The respondents were asked to respond to the items of the study instrument and the test was reapplied two weeks later. Pearson correlation coefficient was calculated between the scores in the two tests, where the correlation coefficient was (0.91). The coefficient of internal consistency was calculated using Cronbach Alpha for the students in the pilot study, where the value of Cronbach alpha was (0.88), which is high and suitable for the purposes of the current study.

**Applying, scoring and interpreting the scale of moral intelligence**

The scale consisted of (45) items and the respondents are the students themselves. The high scores indicate that the students have moral intelligence, where the alternatives are given as follows: strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1). In order to interpret the items of the scale, the scores are divided according to the mean of the item between (1-5) into three levels as follows: (1-2.33) refers to the low level of moral intelligence, (2.34-3.67) indicates a medium level of moral intelligence, and (3.68 –5) indicates a high level of moral intelligence.
Second, the scale of technological well-being

This scale was developed by reviewing the theoretical literature and previous studies: (Al-Jondi and Talahmeh, 2017; and Ala’deen, 2015). The primary version of the scale consisted of (20) items, where the dimensions included: using technology to achieve comfort and happiness, technology anxiety, using technology to obtain information and communicate with others, and using technology for the academic purposes. In order to verify the suitability of the scale to the study objectives and environment, the psychometric characteristics of the scale were verified:

First, the validity of the study instrument: validity was verified in terms of (surface validity/ arbitrators’ validity), where (12) arbitrators of the faculty members in the faculties of education at the Jordanian Universities responded to that. An agreement of (80%) was taken as a criterion to judge maintaining the item or modifying it. Based on the suggestions, linguistic modifications were made to (5) items. The indicators of internal content validity were verified by distributing the scale to a pilot study that consisted of (30) students from the study population and outside its sample. Correlation coefficients were calculated between each item with the dimension and the total score. The value of correlation coefficients between each item and the dimension ranged between (0.40 – 0.81), while the correlation coefficients between the item and the total score ranged between (0.39 – 0.78). The results revealed that the correlations between the items and the total score were significant at (0.05).

Second, the reliability of the study instrument: the study instrument’s reliability was verified using (test-retest), where the scale was applied to a pilot study that consisted of (30) students from the study population and outside its sample. The respondents were asked to respond to the items of the study instrument and the test was reapplied two weeks later. Pearson correlation coefficient was calculated between the scores in the two tests, where the correlation coefficient was (0.86) and for the dimensions between (0.80 – 0.87). The coefficient of internal consistency was calculated using Cronbach Alpha for the students in the pilot study, where the value of Cronbach alpha was (0.86) and for the dimensions between (0.80 – 0.87), which indicates that the scale has a suitable reliability value.

Applying, scoring and interpreting the scale of technological well-being

The scale consisted of (20) items and the respondents are the students themselves. The high scores indicate that the students have technological well-being, and the students respond to the scale items by choosing one of the following alternatives: always (5), often (4), sometimes (3), rarely (2), and never (1). In order to interpret the items of the scale, the scores are divided according to the mean of the item between (1-5) into three levels as follows: (1-2.33) refers to the low level of moral intelligence, (2.34- 3.66) indicates a medium level of moral intelligence, and (3.67 –5) indicates a high level of moral intelligence.
The study procedures

The following procedures were performed to conduct the study: the researcher reviewed the literature and the previous studies related to moral intelligence and technological well-being. Two scales of moral intelligence and technological well-being were developed in their primary image; their validity and reliability were verified. The study scales were applied to a sample that consisted of (184) students via the electronic application using Google drive. The data were collected and analyzed statistically using (SPSS). Based on that, the study results were discussed, upon which conclusions and recommendations were cited.

Displaying and discussing the study results

Displaying and discussing the issues of the first question: what is the level to which the new students at Mu'tah university have moral intelligence? In order to answer the first question, means and standard deviations were calculated as shown in table (1).

Table (1): The results of means and standard deviations for moral intelligence among the students of Mu'tah university

<table>
<thead>
<tr>
<th>Number</th>
<th>Dimension</th>
<th>Mean</th>
<th>SD</th>
<th>Order</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Empathy</td>
<td>3.65</td>
<td>0.66</td>
<td>4</td>
<td>Medium</td>
</tr>
<tr>
<td>2</td>
<td>Conscience</td>
<td>3.60</td>
<td>0.55</td>
<td>5</td>
<td>Medium</td>
</tr>
<tr>
<td>3</td>
<td>Self-control</td>
<td>3.69</td>
<td>0.73</td>
<td>3</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>Respect</td>
<td>3.75</td>
<td>0.74</td>
<td>1</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>Tolerance</td>
<td>3.72</td>
<td>0.75</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>6</td>
<td>Fairness</td>
<td>3.56</td>
<td>0.68</td>
<td>6</td>
<td>Medium</td>
</tr>
<tr>
<td>Total degree</td>
<td></td>
<td>3.63</td>
<td>0.64</td>
<td></td>
<td>Medium</td>
</tr>
</tbody>
</table>

The results of table (1) revealed that the students at Mu'tah university have a medium degree of moral intelligence, where the mean was (3.62) with a standard deviation of (0.64), whereas the dimensions ranged between the medium and high level. The dimension of respect was in the first place, followed by tolerance, the self-control. The dimension of empathy was in the third place, followed by conscience and finally the dimension of fairness, which indicates that the students at Mu'tah university have moral intelligence on the total degree and the dimensions. Moral intelligence is an acquired, where students learned it at Mu'tah university and acquired it with different degrees, which indicates the role of family, school, university and the surrounding environment in acquiring moral intelligence. Moral intelligence has a great role in improving their life values and helps them in domains desired by the community. This contributes to making individuals more satisfied and tolerant, where communities are more interested in this domain in the light of the technological development. Those students who moved from high school to university life that includes more mixture between males and females are in need of moral intelligence in order to help them in self-control and provide them with more ability to acquire more satisfied and comfortable life, in addition to taking them away from the risks of using technology.
The researcher attributed the medium level of moral intelligence to the family's increased concern to the necessity of urging their children to acquire moral intelligence as well as the other forms of intelligences and education. Furthermore, the university students have already acquired sufficient mental maturity and recognize the importance of manners in their personal and social life, where manners are considered as a control for them and give them more ability to acquire a life that corresponds with their personal life; the individual is evolved to do good deeds as well as the love of values and manners. Displaying and discussing the results of the second question: what is the level to which the new students at Mu'tah university have technological wellbeing? In order to answer the first question, means and standard deviations were calculated as shown in table (2).

Table (2): The results of means and standard deviations for technological well-being among the students of Mu'tah university

<table>
<thead>
<tr>
<th>Number</th>
<th>Dimension</th>
<th>Mean</th>
<th>SD</th>
<th>Order</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Getting comfort and happiness</td>
<td>3.49</td>
<td>0.64</td>
<td>3</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>Gaining information and communication</td>
<td>3.60</td>
<td>0.78</td>
<td>2</td>
<td>Medium</td>
</tr>
<tr>
<td>3</td>
<td>Gaining academic advantage</td>
<td>3.74</td>
<td>0.88</td>
<td>1</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Total degree</td>
<td>3.64</td>
<td>0.65</td>
<td></td>
<td>Medium</td>
</tr>
</tbody>
</table>

Table (2) revealed that the students at Mu'tah university have a medium degree of technological well-being, where the mean was (3.64) with a standard deviation of (0.65), whereas the dimensions ranged between the medium and high level. The dimension of academic advantage was in the first place, followed by obtaining information and communication with others, while the dimension of getting comfort and happiness was in the third place.

It seems that the students' acquisition of technological well-being is attributed to the family's media and cultural openness to setting certain methods and citing regulations that contribute to good treatment with technology which, in turn, represents an important factor in their life and gives them more ability to use technology, especially social media sites more positively. Students in this stage at university generally have their own mobile phones through which they can use the internet and social media sites; therefore, they should deal wisely with this technology, so that it represents a comfortable factor in their life, instead of being a stressful factor for them.

The researcher attributed the current result to the maturity of the students with regard to using technology in a way that ensures their rest and keeps them away from all the types of temptation that may cause them more confusion and psychological stressors. Displaying and discussing the results of the third
question: what is the extent to which the dimensions of moral intelligence contribute to technological wellbeing among a sample of new students at Mu'tah university have?

In order to answer the first question, graded regression analysis by using Enter was used to identify the extent to which moral intelligence predict technological well-being among the students of Mu'tah university. Tables (3 and 4) show the results of the statistical analysis.

Table (3): The results of variance analysis, multiple correlation coefficient and determination coefficient for multi regression analysis between moral intelligence and technological well-being among the students of Mu'tah university.

<table>
<thead>
<tr>
<th>Source</th>
<th>Total square</th>
<th>Degrees of freedom</th>
<th>Mean squares</th>
<th>f-value</th>
<th>Statistical significance</th>
<th>multiple correlation coefficient (R)</th>
<th>determination coefficient (R²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>36.31</td>
<td>6</td>
<td>6.05</td>
<td>31.59</td>
<td>0.00</td>
<td>0.75</td>
<td>0.56</td>
</tr>
<tr>
<td>Error</td>
<td>28.54</td>
<td>149</td>
<td>0.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>64.84</td>
<td>155</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (4): Multi regression coefficients and their statistical significance for moral intelligence and technological well-being.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Regression coefficient</th>
<th>Standard error</th>
<th>Standard regression coefficient</th>
<th>t-value</th>
<th>Statistical significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.20</td>
<td>0.29</td>
<td>0.69</td>
<td>0.49</td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td>0.14</td>
<td>0.07</td>
<td>0.15</td>
<td>2.14</td>
<td>0.03</td>
</tr>
<tr>
<td>Conscience</td>
<td>0.02</td>
<td>0.07</td>
<td>0.02</td>
<td>0.34</td>
<td>0.73</td>
</tr>
<tr>
<td>Self-control</td>
<td>0.24</td>
<td>0.06</td>
<td>0.27</td>
<td>4.13</td>
<td>0.00</td>
</tr>
<tr>
<td>Respect</td>
<td>0.10</td>
<td>0.06</td>
<td>0.11</td>
<td>1.78</td>
<td>0.08</td>
</tr>
<tr>
<td>Tolerance</td>
<td>0.16</td>
<td>0.06</td>
<td>0.19</td>
<td>2.79</td>
<td>0.01</td>
</tr>
<tr>
<td>Fairness</td>
<td>0.28</td>
<td>0.06</td>
<td>0.29</td>
<td>4.45</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Table (3) revealed that multi regression model between technological well-being (y) and empathy (x1), conscience (x2), self-control (x3), respect (x4), tolerance (x5), and fairness (x6), can be formulated in the following formula:

Estimated regression model: \( y = 0.20 + 0.14 \times x_1 + 0.02 \times x_2 + 0.24 \times x_3 + 0.10 \times x_4 + 0.16 \times x_5 + 0.28 \times x_6 \)

This regression model refers to the constant amount = 0.20, and t-value for the six dimensions as follows: 2.14, 0.34, 4.13, 1.78, 2.79, 4.45.

The validity of the estimated regression model: we can judge the validity of the estimated regression model by commenting the results of multiple regression of technological well-being as illustrated in tables (3, 4), as follows:

1- The interpretative power of the model: table (3) shows that multi correlation coefficient (R) equals (0.75), and the determination coefficient (R²) equals
(56%), which means that the total degree of moral intelligence accounts for (56%) of change that took place in the dependent variable of technological well-being, while the other (44%) is attributed to other factors. Therefore, the interpretative power of the model is suitable to interpret technological well-being among the students of Mu'tah university.

2- The overall statistical significance: table (3) shows the analysis of variance at the statistical value of (0.00) which is less than the significance level of (0.05). Therefore, the regression model is statistically significant regarding the dimensions of moral intelligence, and the estimated regression model can be used to predict technological well-being among the students of Mu'tah university.

3- The partial statistical significance of the model: table (4) shows the multiple regression coefficients and their statistical significance, where the coefficients were variant in terms of their statistical significance or non-significance, and the results can be explained as follows:

A- The value of constant amount equals (0.020), which is not statistically significant. Therefore, the existence of this constant in the prediction equation is not necessary.

B- We noticed that the regression coefficient is equal to (0.14) which is statistically significant at (0.00), and it is the regression coefficient related to empathy. This result revealed that empathy predicts technological well-being among the students of Mu'tah university.

C- We noticed that the regression coefficient is equal to (0.02) which is statistically significant at (0.00), and it is the regression coefficient related to conscience. This result revealed that conscience does not predict technological well-being among the students of Mu'tah university.

D- We noticed that the regression coefficient is equal to (0.24) which is statistically significant at (0.00), and it is the regression coefficient related to self-control. This result revealed that self-control predicts technological well-being among the students of Mu'tah university.

E- We noticed that the regression coefficient is equal to (0.10) which is statistically significant at (0.00), and it is the regression coefficient related to respect. This result revealed that respect doesn't predict technological well-being among the students of Mu'tah university.

F- We noticed that the regression coefficient is equal to (0.16) which is statistically significant at (0.00), and it is the regression coefficient related to tolerance. This result revealed that tolerance predicts technological well-being among the students of Mu'tah University.

G- We noticed that the regression coefficient is equal to (0.28) which is statistically significant at (0.00), and it is the regression coefficient related to fairness. This result revealed that fitness predicts technological well-being among the students of Mu'tah University.

The results of the current question revealed that empathy, self-control, tolerance and fairness predict technological well-being, while respect and conscience do not predict it. Generally, the results of the current question showed a suitable predictive power for the dimensions of moral intelligence in improving technological well-being, which indicates the important efforts exerted by students to acquire moral intelligence and its impact on promoting their technological well-being. Indeed, this confirms the necessity of helping students
and guiding them towards acquiring more moral intelligence, given its role in improving technological well-being. The researcher attributed the high importance for the role of moral intelligence in improving technological well-being to the consideration of moral intelligence as one of the positive variables that helps individuals to monitor themselves and acquiring multiple values and manners as well as promoting them in case the individual performs positive behaviors that enable him to control himself and feel comfortable when using the internet and social media sites.

It seems that the moral domain significantly contributes to improving the way of using technology in our daily life; when the individual has the manners, they will help him in choosing the technology that he desires and the suitable time for usage as well as the duration of usage in an appropriate way. The researcher attributed this finding to the fact that when the student has various types of moral intelligence, he will be able to resist all the existing temptations that are related to technology, and thus using technology will be an easy and comfortable task for the student, which is, in turn, reflected on his psychological health and self-adjustment. In the light of the results, the researcher recommended the following:

1- The necessity of developing moral intelligence among the new students at Mu'tah University due to its important role in facilitating their life, especially in the dimensions of conscience and fairness.

2- The necessity of paying more attention to promoting technological well-being among the new students due to its importance in controlling their life and their feelings of happiness, especially in the dimension of gaining happiness and comfort.

3- Making advantage of the great contribution for the dimensions of moral intelligence and their role in promoting technological well-being among the students.

4- Conducting counseling programs to develop moral intelligence among the new students due to their role in reaching technological well-being among the students.

5- Conducting further studies related to moral intelligence and technological well-being among the new students at the University.

Conflict of interest. The author declares that there are no conflicts of interest in this research study.

References

Afra’ Al-Obaidi and Siham Al-Ansari (2011), moral intelligence and its relationship with academic adjustment among the students of the sixth grade, the journal of the educational and psychological researches, Issue 31,(75-96).

Ala’deen, Jihad (2015), self-empathy and self-esteem and their relationship with psychological wellbeing among university students, the educational journal, the University of Kuwait, 117(30), 339-396.

Al-Jondi, Nabil and Talhmeh, Jebara (2017), the degrees of feeling of psychological well-being among the female students of the Palestinian
Universities in the governorate of Al-Khaleel, *the journal of the psychological and educational studies*, the University of Sultan Qaboos, 11(2), 337-351.


Muriel J., Bebeau, J., Rest, D. (1999). *Beyond the Promise: A Perspective on Research in Moral Education*, First Published May 1, Research Article


