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intelligence and loneliness

A study into the interrelations between emotional

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Abstract

In our research, we aimed to uncover the relationship between emotional intelligence and loneliness. Because emotional intelligence is a new topic in study and it is a subject of great potential for detailed study. Briefly, psycho attribute_that can predict human life and career success, and It is believed that the failure or deterioration in human life is largely due to the activity of emotional intelligence. But loneliness is one of the pressing psychological issues today. There are many studies that have shown that loneliness is weakening one's activity and reducing our physical activity. This, in turn, is considered a psychological problem. Even so, some researchers have found loneliness to be a useful feeling. An emotional intelligence is influence important when it comes to managing feelings of loneliness. Therefore, our research was clarifying the relationship between emotional intelligence and its components and loneliness. It is also necessary to clarify which component of emotional intelligence is most commonly associated with loneliness. There may be different correlations with each component of emotional intelligence. It also emphasizes loneliness to gender. In their research, compared to their gender and living place using psychological test and observation and interview methods to emotional intelligence and loneliness of university 205 students.

Keywords: Loneliness, emotional intelligence, self-awareness, self-regulation, self-motivation, empathy, social skill

Introduction

Emotional intelligence is an important new field of study. Loneliness has always been a fundamental psychological issue in humankind history. Many psychological problems arise from loneliness. Therefore, emotional mind role is very essential in solving psychological problems caused by loneliness. Thus, it is significant to study relations in advance and find solutions. As mentioned before, the research aims to answer the question of whether there is a clear link between emotional intelligence and loneliness, it is based on the loneliness concepts as well as many concepts and models of emotional intelligence, especially on the theory of mixed models by researcher D. Goldman. The model is not only the theoretical but also the methodological basis of the research study. Also, Daniel Russell's methodology is unique at two basic levels like there is loneliness or not. Here are some findings on the relations between loneliness and emotional intelligence.

Loneliness is inextricably linked to emotions; it can be explained by a basic concept in this regard. Lack of self-isolation, lack of communication, and lack of understanding can lead to mistrust and loneliness. From this point of view, loneliness is inextricably linked to the emotional mind. There are many components of emotional intelligence, and it is important to establish their relationship. Researchers have found that human emotional intelligence is important for our ability to live, be happy, content, and productive. Loneliness remains one of humanity's most pressing issues, and emotional intelligence is seen as important in mitigating its negative effects. Although loneliness has been studied in relation to many social abilities, it has rarely been studied in relation to emotional intelligence. (Chapman, 2005) [49].

According to evolutionary theory, loneliness is a process of adaptation, and the negative and unpleasant emotions and feelings that express it are aimed at regulating social and personal relationships. (Cacioppo, J. T., & Hawkley, L. C, 2009) [47] A 2012 study also found that low emotional intelligence can lead to loneliness. (Vanhalst & Luyckx, 2012) [57].

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There are four general indicators of emotional intelligence: human consciousness, management, social consciousness, and social management. Researchers believe that loneliness management mechanisms are possible. However, attitudes vary, such as whether loneliness is an independent expression of emotion or a combination of emotional and social abilities. (Zysberg, 2012) [40].

Some studies have suggested that the development of emotional intelligence can solve the problem of loneliness. In this study, we selected components such as emotional intelligence, management, motivation, empathy, and social skills. There are many theories and concepts that have studied each of these components. For example, the researcher Wols noted that "people who do not recognize their emotions do not distinguish between feelings of loneliness, which negatively affects their relationships with others." (Wols, 2015) [59].

1. Definition of loneliness

Loneliness is one of the most ancient and common psychological problems of mankind. The scientific study of loneliness is relatively new, and it can be said that it has been intensively studied since the mid-1900s. Here are some works. For instance: Researcher De Jong Gierveld, conducted a large-scale study of emotional and social loneliness in seven countries in the world, linking to gender and generation. In 2001, researchers Van Baarsen, B. S conducted "Lonely but not alone" "Emotional isolation and social isolation" and highlighted emotional and social loneliness differences and connections. In 2012, an article "Loneliness and Emotional Intelligence" by a psychologist, Zysberg, L is published in *The Journal of Psychology*. Let's take a brief look at how scientists define loneliness.

Researchers identify loneliness from many perspectives. In the Merriam-Webster it is explained by the following: 1. being without a company, 2. being cut off from others, 3. being different from others, being isolated or lonely (not frequented by human beings), 4. sadness (sad from being alone) (webster, nd), while in the Cambridge dictionary loneliness is defined as the state of being lonely. For example, loneliness can be caused by a divorced spouse, children who have been ostracized by their peers, loneliness in old age, wandering in the woods or in the wilderness, living in a new place. (Wols, 2015) [59] Loneliness, on the other hand, stems from a fundamental fear that the individual has nothing to do with subjectivity or objectivity, which some scholars describe as confusion, negative perceptions, lack of social interactions, and feelings of isolation. (B. Mijuskovic, 2002) [55] It is also said to be a relatively stable phenomenon in the body. This feeling can occur in many situations and can be explained in relation to the individual's psychological state and environmental characteristics. Research has shown that age, stress, social status, mental health, and personality traits have a significant effect on loneliness. It is also manifested in negative emotions such as dissatisfaction, depression, and sadness. (Cacioppo & Hawkley, 2010) [48] Here is a definition that confirms this notion. The scientist Hartog said that loneliness is a multifaceted phenomenon and is characterized by unpleasant emotions and feelings towards others (Hartog, 1980) [52]. Loneliness can change or disappear depending on the situation. In other words, it is relatively temporary. However, some researchers who have studied loneliness among children and adolescents over a period of time point out that it can last for a long time. (Jobe-Shields, L., Cohen, R., & Parra, G, 2011) [53].

Scientists have also pointed out that there are two types of consequences. The former is associated with depression, eating, sleeping, and crying, while the latter is associated with creativity, reading, listening to music, and weaving. (Parul Joshi & Tejpreet Kaur Kang, 2015) [54] Loneliness is also thought to be more common in older people, but research shows that high school students and adolescents are at risk. (Brennan, 1982) [46]. We conducted a survey among students aged 18-23. Based on the characteristics of the transition of high school students, attention is paid to their socio-psychological issues. However, students in their 20s still face social and psychological challenges, despite the transition. There are certain risks ahead of them. Therefore, the goal is to identify their problems.

2. Definition of emotional intelligence

In 1990, D. Mayer and Peter Salovi combined the formal theories and concepts of emotional intelligence. The concept of emotional intelligence was studied in the social sciences before the 1990s. In 1872, some of Charles Darwin's works contain famous quotes and concepts about emotions and social intelligence in relation to human life and adaptation. He said that the emotional process of fighting for life is the foundation of the human mind. Since then, several scientists have studied the features and significance of non-cognitive intelligence. We can see in the writings, theories, and concepts of Edward Torndike (1920) [56], David Wechsler (1940) [58], and Howard Gardner (1983) [50] that the study of emotional intelligence has been an applied science of the mind. In the early 1990s, researchers such as John Mayer and Peter Salovey first used the term emotional intelligence and began to study it independently.

Let's take a look at how scientists define the mind of emotion. D. Mayer and P. Salovey discuss the four areas of "the ability to manage, recognize, understand, and use everyday life relationships." In 1997, they defined "emotional intelligence as the process of regulating, recognizing, and understanding emotions in order to support the mind and emotions, as well as the process of accurately evaluating and expressing them." (Mayer, J. D., & Salovey, P, 1997) The definition suggests that it is a matter of communication, recognizing and controlling human emotions and feelings, as well as using and motivating them. According to Mayer and others, emotional intelligence is "an internal psychological process that regulates human physiological responses, perceptions, sensations, and cognitive processes in consciousness. It's about understanding emotions and feelings and being able to manage them." (Mayer, 1990) [35] They developed the theory of the "four-dimensional capacity of the emotional mind." This theory is implemented through an integrated process of emotion and cognition. They can be determined by the followings. First direction, the ability to feel emotions accurately, to express emotional needs, and to distinguish between true and false feelings; Second direction, the ability to distinguish between different sensations and to determine how they affect sensory processes; Third direction, the ability to experience emotions as a whole, to feel and understand emotions at the same time, and to move from one feeling to another; Fourth direction, the ability to manage emotions and feelings in a

way that is beneficial to the situation. These four skills are divided into two main areas: experience and strategy.

Russian psychologists G. Breslav, EL Nosenko, NV Kovriga, AV Karpov, and AV Petrovsky must also consider the emotional mind at the intersection of emotions and the mind and considered non-cognitive abilities. Psychologist R.K. Cooper and R. Sawaf described it as a combination of cognition and behavior. (Andreeva, 2016) [45].

From these definitions, it is clear that scientists and psychologists in the United States, Europe, and Russia have taken the position that emotional intelligence is a combination of emotion and intelligence. However, this does not mean that there is a direct or inverse relationship between the emotional mind and the intellect. Some scholars have argued that the emotional mind should be considered separately from the mental component. D. Mayer, P. Salovi, and R. Bar-On's concepts have been studied extensively, and based on these concepts, he said, is a reflection of behavior and reality. Therefore, it is different from mental ability. "A person with a high level of emotional intelligence has the ability to regulate, adapt and communicate effectively." (Andreeva I., 2004) [44].

With the publication of the book "Emotional Intelligence" by American psychologist Daniel Golman, the number of scientific articles and research papers on the subject has increased, and began to attract public attention. He emphasizes that the emotional mind has a greater impact on a person's success and happiness than the general human mind. It also looks at five areas: recognizing one's own and emotions, sharing feelings, and managing others' relationships. (Goleman D., 1995) [21] Daniel Golman defines emotional intelligence as "the ability to recognize one's own and others' emotions, to activate oneself, and to control one's own and others' emotions." (Goleman D., 1998) [51]. He developed a theory of mixed models of emotional intelligence, which is a concept with 4 general directions that express the 18 faculties. It defines a set of competencies such as one's own emotional knowledge, one's own emotional management, one's own motivation, emotional sharing, and social skills Rowan Baron, a senior researcher in the field, said that "non-cognitive skills are a way to express oneself, understand others, improve social relationships, overcome difficulties, and use emotional information effectively to help you cope with the challenges and demands of the environment." (Bar-On, 2003).

He linked the emotional mind to human success. In 1996, the Baron developed Emotional and social intelligence models: personal, communication, adaptation, stress management, and general attitude. (Bar-On, 2003) He differs from others in his emphasis on the ability to adapt to one's environment and to overcome adversity. Scientists also believe that the human emotional intelligence can be developed throughout life through education, training, upbringing, and psychiatry. The theoretical and methodological basis of this research is mixed model theory

by Goldman, D and it is methodological basis for emotional intelligence study, Hall N.

A clear link between loneliness and emotional intelligence has been observed in theoretical and empirical research. Instead, we need to emphasize what components of the emotional mind are involved. Loneliness is associated with certain components of the emotional mind, and by developing it, it is possible to solve the psychological problems caused by loneliness. Briefly, loneliness is closely related to its knowledge and management components of emotional intelligence. It is believed that emotional intelligence is clearly on the zoning and gender.

4. Method

The research is studied loneliness and emotional intelligence of 205 students (62.4% male and 38.6% female) aged 18-20, in Ulaanbaatar and other local universities, Mongolia. Also, 88.25 is in Ulaanbaatar, 7.8% is in rural districts, 19.5% is in aimags and 9.7% is in soums. Test method is used to collect data and theories, concepts, and research results are compared. In the emotional intelligence study, a questionnaire to assess emotional intelligence, researcher N. Hall is used.

- The research is conducted 2 days apart. Taking two surveys with multiple questions at the same time can be affected to appropriate answers. Students are selected by sampling which is represented a large scale. The study is on a voluntary basis.
- According to this methodology, emotional intelligence can be defined by 5 indicators: 1. Emotional knowledge, 2. Management, 3. Motivation 4. Sharing the feelings of others 5. Recognizing the emotions of others. It consists of a total of 30 questions and is in the form of a selection of answers. Each query is matched by the following:
- If this does not match 0 point; some match 1 point; generally, match 2 points; all match 3 points. Methodology for Assessing Loneliness (UCLA loneliness scale), Daniel Wayne Russell's is used. This is the third method has been improved and it is a method of detecting loneliness with 20 questions. In each question is answered with choices such as A. Never B. Seldom C. Sometimes D. Always. The methodology is developed in three phases, and the reliability of version 3 is analysed from a sample of university students, faculty, and nurses. In the research test, the reliability is (r=0.73).
- Two surveys are in accordance with the general requirements and personal information is only for research purposes. Quantitative and qualitative analysis of the collected data is performed and quantitative data is in SPSS software.

5. Results

Table 1: Loneliness and Emotional intelligence component index

Criteria	N	Min-Max	X	m	σ
Loneliness	205	20-64	52.65	1.38	8.85
(SA)	205	6-17	11.7	0.34	2.23
(SR)	205	4-18	10.07	0.46	2.99
(SM)	205	5-17	11.97	0.42	2.73
(E)	205	6-16	11.9	0.42	2.71
(MPE)	205	6-17	11.65	0.41	2.65
(EIQ)	322	31-78	56.39	1.51	9.67

According to the survey, loneliness average is 52.65 points which is a measure of loneliness, but not tension. The minimum score is 20 and the maximum is 64, indicating that the scores vary. Students' emotional intelligence was measured by five indicators: consciousness (SA), management (SR), motivation (SM), empathy (E), and the ability to recognize and manage the emotions of others (MPE). is close to average. The sixth indicator, the EIQ, averaged 56.39 points.

Although the component capabilities appear to be similar, the management (SR) can be seen to be relatively low compared to other indicators. This is because it requires individual effort and a certain system and sequence. Scientists also consider this indicator to be significant. The low level of self-management (SR) of students is related to the teacher-parent approach. This is due to the fact that childhood is influenced not only by teaching, but also by instructing teachers, parents, rules and regulations, and life-oriented training.

According to the program of Analyse - Scale - Reliability analysis, it is determined the reliability of the question. (Table 2).

Table 2: Reliability Questionnaire - loneliness and EI

Criteria	Reliability statistics				
	Cronbach's Alpha	N of Items			
loneliness	.710	2			
EI	.882	5			

Cronbach's Alpha method is used to determine the reliability of the question. If Cronbach's Alpha is more than 0.7, the question is considered reliable. Our study confirms

that the reliability of the question is good because the reliability is 0.710 and 0.882.

In other words, values loneliness and EI questions, by Daniel Wayne Russell, is used.

Table 3: Loneliness (gender)

Criteria	Gender	N	Min-Max	X	m	σ	t	P
Lonalinass	Male	128	46-61	54.63	0.60	3.98	1.00	.480
Loneliness	Female	36	20-64	51.94	0.90	9.87	-1.98	.460

When loneliness is compared to gender, male students is (54.63) and it seems lonelier than female (51.94), but this is

not; because statistically significant is (t = 1.70; P>0.80) So, it is shown that it does not depend on the gender.

 Table 4: Student loneliness index (by residence)

Classified as	Place	Study No.	Min-Max	$\overline{\mathbf{X}}$	m	σ
	Capacity	88	20-59	50.68	1.13	10.62
Loneliness	Rural district	16	51-59	53.66	1.13	3.93
Loneimess	Province	40	46-61	55.00	0.60	3.84
	District	20	43-64	54.60	1.69	7.58

 Table 5: Condition, location, t-value, significance

Condition	Location	t	P
	Rural - District	0.96	.339
	Rural - Province	-2.49	.014
Loneliness	Rural - District	-1.55	.122
Loneilless	Rural district - Province	-1.04	.300
	Rural district - District	-0.39	.696
	Province - District	0.27	.786

Compared to the place of residence, it can be observed that the level of loneliness of students living in urban areas is higher. However, the level of statistical significance does not differ much. It can also be seen from Table 6 (t = 2.49; P < .014) that there are significant differences in the loneliness of students living in cities and provinces.

According to the Table 6, we can see the 205 students' emotional intelligence.

Table 6: Level of loneliness

Loneliness	(f)	(%)
Loneliness	135	65.9
Non-loneliness	70	34.1

Table 6 shows that 135 or 65.9% of the 205 students are lonely and 70 or 34.1% are not lonely, and most of them

have certain problems. Therefore, we need to study in more detail.

Table 7: Level of loneliness (by gender)

	Gender N		Loneliness		Non-loneliness	
	Genuer	19	f	%	f	%
Loneliness	Male	55	35	63.6	20	36.3
Lonenness	Female	150	100	66.6	50	33.3

Table 8: Loneliness level (by residence)

	Place of residence	N	Loneliness		Non-loneliness	
	Place of residence	11	f	%	f	%
	Suburbs	110	65	59	45	41
T1:	Rural district	15	15	100	0	0
Loneliness	Province	50	35	70	15	30
	District	30	20	66.6	10	33.3

From the tables above, we can see that the level of loneliness of students living in the suburbs is higher than students living in other areas, but it does not depend on the place of residence.

Ratio-1

Table 9: Ratio between student loneliness and emotional intelligence

	L	SA	SR	SM	E	MPE	EQ
L	1.00	.333	.051	.266	.188	.211	.312
SA	.333	1.00	.304	.450	.390	.333	.539
SR	.051	.304	1.00	.455	.394	.211	.459
SM	.266	.450	.455	1.00	.591	.423	.671
Е	.188	.390	.394	.591	1.00	.503	.752
MPE	.211	.333	.211	.423	.503	1.00	.601
EI	.312	.539	.459	.671	.752	.601	1.00
N	205	205	205	205	205	205	205

The coefficients of correlation between loneliness and emotional intelligence are shown in Table 10. Loneliness is a component of emotional intelligence, which includes emotional knowledge (EA) (r=0.33), self-motivation (SM) (r=0.26), social ability (MPE) (r=0.21), and emotional intelligence (EI). (r=0.31) is moderately related to these capabilities.

However, it is weakly related to the ability to manage emotions (SR), (r=0.05), and the ability to share emotions (E) (r=0.18).

This suggests that loneliness has to do with emotional intelligence. In particular, self-awareness (SA) is more closely related to ability and emotional intelligence (EI).

Feelings of loneliness are closely linked to the process of recognizing and regulating an individual's internal psychological processes. In other words, you can control your feelings of loneliness by controlling your inner feelings.

Ratio-2

 Table 10: Ratio between student loneliness and emotional intelligence

	Loneliness	Gender
Loneliness	1.00	.459
Gender	.459	1.00
N	205	205

Loneliness and gender relationships are significantly correlated with r=0.45 when developed using Spearman's methodology. This supports the hypothesis that loneliness, which we proposed at the beginning of our research, is gender-dependent.

Conclusion

- In this study, we try to conduct the study of loneliness and emotional intelligence, the results of the scientists' theories, and the study of 205 students' loneliness and emotional intelligence. We are reaching the following conclusions.
- According to the survey, average points for loneliness is 52.65 and it is not serious level. It is found that loneliness and gender are significantly correlated (r = 0.45). In other words, loneliness is influenced by gender.
- In addition, according to the residence indicator, it is shown that loneliness level is higher in urban places but the proportion is higher among students who are living in rural areas. We need more detailed study with these two indicators.
- Emotional intelligence average is 56.39. Its composition and skill scores vary, but are relative to the overall average. Students' ability to manage their emotions (SR) appears to be relatively low. Therefore, the need to develop emotional intelligence is obvious. The purpose of this study was to determine the relationship between loneliness and emotional intelligence, and the presence of this relationship (EI) (r = 0.31) is moderate. Loneliness, on the other hand, is moderately related to emotional awareness (EA) (r = 0.33), but weak to other components. Our hypothesis suggests that feelings of loneliness are related to the emotion recognition ability. In other words, self-awareness increases your ability to manage feelings of loneliness.
- From these, it can be seen that emotional intelligence and loneliness are interrelated, and that the ability to

recognize emotions can be recognized and managed by developing the ability to recognize emotions.

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