## K.D. Nichola Dewapriya COMPARISON OF LONELINESS STATE FEATURES OF THE GENERAL POPULATION DURING THE COVID-19 PANDEMIC (ACCORDING TO EXTROVERT OR INTROVERT NATURE) IN BELARUS AND SRI LANKA. *Tutor: assistant K.N. Shcharbakova*

Department of Public Health Gomel State Medical University, Gomel

**Резюме.** В данном научном исследовании мы сравнили особенности состояния одиночества населения в Республике Беларуси и Шри-Ланке в период пандемии covid-196 обнаружили неожиданный результат: интроверты чаще испытывают чувство одиночества при covid-19 карантинных мерах в обеих странах.

Ключевые слова: общественное здоровье, Covid-19, одиночество

**Resume.** In this Scientific research we compared features of loneliness state of general population in Belarus and Sri lanka and we discovered a rather unexpected result, we expected that individuals with extrovert nature to have more signs of loneliness than their introvert counterparts but it was the opposite where it showed that introverts were more likely to experience loneliness in the case of covid-19 and quarantine and lockdown measures in both the countries.

Keywords: public health, Covid-19, loneliness.

Actuality. For most of human history loneliness has been a very prevalent issue, despite the rise of better human civilization and better living conditions and infrastructure such as education, health care, economic stability, basic rights, freedom of speech and other graces the modern human possess.

From countries with better standards of living to countries in economic and geopolitical turmoil, loneliness is still a persistent problem. Humans are fundamentally social animals who form bonds with others for mutual aid and protection. For social species, the perception of being socially isolated even when in the presence of others signals danger and evokes a dysphoric state termed loneliness in humans. [1].

**Aim:** to determine the level of loneliness during covid-19 quarantine/isolation or generally in a normal scenario, and how it affects individuals based on their nature of being introvert or extrovert in comparison in Belarus and Sri Lanka.

**Tasks:** this research is based on an online survey thus it was required to create the appropriate surveys and find the survey questions from suitable resources. The questions had to satisfy the proper information that is mentioned below, and also it was required to include all the details in a spreadsheet for easier analysis, compare the data and finally to form a comprehensive conclusion.

**Methods and materials.** The following research is done to evaluate scientific and statistical data in order to obtain a detailed point of view on the subject of loneliness in the general population and the impact of the COVID-19 pandemic conditions which changed our day-to-day lifestyle norms.

This survey illustrates the impact of loneliness based on the person's nature, mainly introvert or an extrovert.

This data collection for this research was done by using an online form created with the help of 'Google forms' online survey tool. This survey was presented to participants in Belarus and Sri Lanka.

The total participants was 82, in Belarus 42 (51.2%) and in Sri Lanka 40 (48.7%) participants. The research is performed in the year 2021 when most of the countries experienced a major increase in Covid-19 cases with the emergence of various strains of the virus.

The age of each participant was divided into predetermined age groups: i.(18-30) ii.(31-4) iii.(41-5) iv.(51-6) v.(61-7) vi.(71-8). In which 62 participants or 75.6% of the total is from the (18-3) age group, 9 participants or 10.9% from the (31-40) age group, 1 participant or 1.2% from the (41-50) and 10 participants or 12.1% from the (51-60) age groups.

The classification of participants by their nature as extroverts or introverts it was determined that 37 (45.1%) were Extroverts and 45 (54.8%) were Introvert participants.

According to the data that was collected about the participants' status of living where 14 participants (17.0%) live alone, 18 participants (21.9%) live with a group of friends or colleagues and 50 participants (60.9%) live with their spouse or family.

Out of all the 82 participants 36 (44%) have undergone quarantine or self-isolation due to the reasons of being diagnosed with Covid-19, being identified as a first contact or decided to undergo isolation quarantine themselves. In the case of Belarus out of 42 participants 18 (42.9%) have undergone quarantine while in Sri Lanka out of 40 participants 18 (45%) have undergone quarantine.

This study consisted of 4 main sections in the questionnaire

1) Acceptance of consent to participate in the research and collection of personal information such; name, age group, gender, and status of living, exposure to Covid-19 and if the person has undergone quarantine or isolation or not. It is also worth noting that I have considered the answers of all participants whether they have been in isolation or not.

2)This is the test where the nature of the participant is determined, whether he or she is an extrovert or an introvert. This test consists of 10 questions each with two answers (one answer reflecting an introverted preference and the other reflecting extrovert preference) and each participant getting a score out of 10 points. Here I assumed that a person getting a score of 5 or higher will be counted as an extrovert and a person with 4 or lower in the score will be counted as an introvert. It was extracted from the website of the TED organization quiz created by Adam Grant [2].

3)This questionnaire is extracted from UCLA loneliness scale which consists of 20 questions [3]. This will reflect a subjective perspective of loneliness of that individual and his/her perceived level of social isolation. Each question has a grading ranging from agreeableness (Often, Sometimes, Rarely, Never). The scale is widely used in studies and surveys on loneliness. A 1992 study estimated the UCLA Loneliness Scale had been used in an estimated 80% of all empirical studies on loneliness [4]. According to the survey the highest value obtained is 70 marks and from this if a participant scores more than 40 he is considered to have at least mild levels of experiencing loneliness.

4)The final set of questions is focused on obtaining some straight forward details about the participants opinion on the questions i) about the necessity of the participant to seek out for medical advice, counseling or psychological assistance, ii) the question of opinion of the participant about the prevalence of loneliness even before the covid19 pandemic

And finally, their comments about the overall survey.

**Research discussion and results.** As mentioned before, participants who exhibit more than 40 points in the UCLA scale of loneliness index out of 70 are considered to have signs of loneliness and thus the following results will be based on this metric.

The results from this study shows that a majority of introverts are more susceptible to loneliness rather than extroverts who participated in this test. Introverts in this study show increased level, out of 45 participants 32 (71.1%) has increased levels of loneliness, while out of all total extroverts 37 only 17 (45.9%) shows increased levels of loneliness

Age group comparison

According to the analysis of the age groups the most affected or showing signs of loneliness is the (31-40) has 77.7% showing increased levels of loneliness while the age groups of (51-60) has 70% and the age group (18-30) with 53.2% showing loneliness.

Country comparison

When comparing the data of the 2 countries separately it is worth noting that most of the participants from the survey in Belarus where in the age group (18-30) consisting 37 participants (88.0%) and (31-40) age group consisting 5 participants (11.9%). In the Sri lankan survey majority was also in the age group (18-30) 25 participants (62.5%) and in age groups (31-40), (41-50), (51-60) are 4 (10.0%), 1 (2.50%) and 10 (25.0%) respectively.

When comparing the presence of loneliness in each of the countries in Belarus out of 42 participants 19 (45.2%) shows an increased score in UCLA loneliness scale while in the Sri Lankan survey out of 40 participants 31 (77.5%) shows an increased score in this case.

Thus it is worth noting that many sri lankan participants are from the age group of (41-50) and (51-60) which shows the highest levels of loneliness should also be taken into account.

A report from the National Academies of Sciences, Engineering, and Medicine (NASEM) points out that more than one-third of adults aged 45 and older feel lonely, and nearly one-fourth of adults aged 65 and older are considered to be socially isolated [5]

In both countries the introvert population scores higher than the extrovert population is also another feature.

Considering the young participants of the age group (18-31) in both countries which has the largest participation, In Belarus 43.2% and In Sri lanka 68.0% of the participants in this age group shows increased signs of loneliness.

In the last section of the survey the participants were asked 2 straight forward questions.

In the first question 58.5% of participants agreed with the answer "Yes" with their opinion 'to think it is necessary for you to seek out for medical advice, counseling or psychological assistance in this matter'.

And in the second question 58.5% of participants agreed with the answer "Yes" that even despite the COVID19 quarantine measures and self-isolation, loneliness is still a persisting problem in your personal point of view on yourself and others around you.

**Conclusions:** this study confirms the importance of psycho-emotional support for the population in isolation, including those related to Covid-19 infection, and in that matter any epidemic or pandemic outbreak which requires strict isolation regimes can have a negative effect on most populations.

It was clear that in the case of self-isolation, people with introverted nature in their day-to-day lives are generally less social than their extroverted counterparts are the most affected. This finding was fascinating to see as it was expected to be the opposite.

In this survey it was significantly seen that middle aged, upper middle aged populations example (40-60) were much more prone to feeling experiences of loneliness than other younger age groups example (18-30). This may be due to the better social adaptation of young people to the realization of their opportunities through online devices.

It was clear that the population of Sri Lanka showed much higher levels of loneliness than the populations of Belarus. We can assume the impact of mandatory isolation of the population with strict control of leaving the house only for medical or social reasons.

The relevance of the topic is high and emphasizes the need to review the features of the organization of medical and social assistance to the population in the context of the spread of Covid-19.

Finally, it was also evident that people showed heightened states of loneliness despite not being in self isolation during the time of pandemic, or despite living with family or friends. Thus in accordance with the data obtained it is safe to say that loneliness is a very prevalent problem in modern society.

## References

1. Cacioppo JT, Cacioppo S, Boomsma DI (2014). Evolutionary mechanisms for loneliness. Cogn Emot 28: 3–21.

2. Quiz: Are you an extrovert, introvert or ambivert? By Adam Grant, TED organization.

3.UCLA Loneliness Scale; Russell, D, Peplau, L. A., & Ferguson, M. L. (1978). Developing a measure of loneliness. Journal of Personality Assessment, 42, 290-294.

4.Goossens, Luc; Klimstra, Theo; Luyckx, Koen; Vanhalst, Janne; Teppers, Eveline (2014-01-20). "Reliability and Validity of the Roberts UCLA Loneliness Scale (RULS-8) With Dutch-Speaking Adolescents in Belgium".

5.National Academies of Sciences, Engineering, and Medicine. 2020. Social Isolation and Loneliness in Older Adults: Opportunities for the Health Care System. Washington, DC: The National Academies Press.