



Charlie: The Age of Companion Animals

Rashidi Kabamba

Fanshawe College Canada

Abstract:

The purpose of this abstract is to present listeners with a detailed understanding of why robotic animal companions should be used in clinical care for mental health patients diagnosed with schizophrenia, depression, and anxiety. In Canada alone 1 in 5 Canadians suffer from mental health and the economic spending for mental health is rising to about \$2.5 trillion dollars. Now let's begin our abstract.

Prevalence

- In any given year, 1 in 5 Canadians experiences a mental illness or addiction problem.¹
- By the time Canadians reach 40 years of age, 1 in 2 have—or have had—a mental illness.¹
- Who is affected?
- 70% of mental health problems have their onset during childhood or adolescence.
- Young people aged 15 to 24 are more likely to experience mental illness and/or substance use disorders than any other age group.³
- 34% of Ontario high-school students indicate a moderate-to-serious level of psychological distress (symptoms of anxiety and depression). 14% indicate a serious level of psychological distress.

Based on the information provided below, robotic companions aid mental illnesses due to the

simple fact that it enables patients to feel relieved. Relief is the feeling of assurance and

relaxation from anxiety or distress. By products of schizophrenia, anxiety, and depression are

loneliness, detachment, decreased social interaction, sadness, etc. These are all countered



when you use a therapeutic robotic pet. It's not going to take the symptoms away, but rather lower them and also provide a way to decrease the burden of the staff in the nursing home. Below are articles and reports to justify this summary and back it in order to emphasize the emotion highlighted.

Biography:

My name is Rashidi Kabamba and I am a student robotpreneur in the electromechanical engineering and robotics program at Fanshawe College, as well as Udacity Robotics for online learning. I live in London, Ontario and this is my first presentation as a speaker/delegate. My goal is to innovate robotics which will have a lasting impact in the healthcare and mining industries.

Publication of speakers:

1. Generative adversarial imitation learning, Pin Wang, 2016
2. Learning robust rewards with adversarial inverse reinforcement learning, Pin Wang, 2018
3. Areinforcement learning based approach for automated lane change maneuvers, Pin Wang, 2018
4. Evolving Mario levels in the latent space of a deep convolutional generative adversarial network, Niels Justesen, 2018

8TH International conference on Robotics and Artificial Intelligence, August 10-11, 2020 London, UK

Citation: Rashidi Kabamba, Charlie: The Age of Companion Animals, Euro Robotics 2020, August 10-11, 2020 London, UK