

Mental Health Service Preferences Among Illinois Dairy Farmers: A Best-Worst Scaling Approach



Graduate Student: Brianna Messman
Faculty Mentor: Dr. Michael Barrowclough

Problem Statement

In 2017, 1 in 5 United States (U.S.) adults (ages 18 and older) reported a mental health related illness [1]. In that same year, 11.2 million U.S. adults received some type of mental health treatment [1]. It is estimated that the impact of mental health illnesses results in \$193.2 billion in lost earnings per year in the U.S. [2]. In addition to the financial cost of mental health illnesses, there is also an emotional and personal cost that can come from suffering with a mental health illness, or knowing someone who does, particularly when that illness leads to suicide. Suicide was listed as the tenth leading cause of death in the U.S. in 2014 [3]. For individuals between 10 and 34 years old, it was the second leading cause of death [3].

While mental health affects individuals across all sectors, males with an occupation in the “farmers, ranchers, and other agricultural managers” sector were found to have a suicide rate over one and half times that of their national counterparts [4,5]. Many stressors, internal and external, have been cited as to why the agriculture industry has higher suicide rates. Internal stressors that agriculture producers face include labor intensity, extreme work hours, farm related injuries or disabilities, fear of losing the farm, and passing the farm down to future generations [4,6,7,8,9,10]. Weather, diseases, pests, changing government policies and programs, volatile commodity prices, rising input costs, finances, and retaliatory tariffs are just some of the external factors farmers face [4,6,7,8,9,10].

While numerous barriers to mental health services exist, access to such services could be beneficial to those involved in the agriculture sector. Symptoms associated with a decline in mental health can include to anxiety depression, other stress related illnesses, and in some cases a more traumatic outcome, suicide [4,11,12,13,14,15]. The dairy industry in particular has seen a major decline in mental health levels recently. [12,14,15]. Some of the reasons for increased mental health issues, including suicide and other stress related issues, involve increased input prices (corn), excess supply, and declining milk prices [11,12,16]. The decline in milk prices comes as a result of the decrease in consumption of dairy products, predominantly milk [17,18]. Since 1975, there has been an average decline in milk consumption of 1.2% [18]. Although it may seem low, it has been persistently ongoing for a time span of five decades [18]. Retaliatory tariffs imposed by Mexico and Canada as a result of the U.S. imposing steel and aluminum tariffs on China has been another factor [4,11,16]. More recently, the unexpected coronavirus pandemic of 2020 is only adding to the expected downward projection for the dairy industry [19].

Purpose Statement

With the current economic state and growing concern over mental health issues in the agricultural community, the importance of this topic is rapidly increasing. The goal of this study is to gain insight into the preferences for mental health services among Illinois dairy farmers, for which no literature currently exists. This will be done by completing the following five objectives: 1) identify mental health service options preferred by Illinois dairy farmers willing to seek help, 2) quantify trade-offs that Illinois dairy producers are willing to make when choosing between service options, 3) determine factors that affect the tradeoff decisions being made when choosing between service options, 4) examine anxiety and depression levels among Illinois dairy producers and the role that plays on decision making, and 5) identify subgroups of Illinois dairy producers, if any, that may influence the trade-off decisions being made.

Methodology

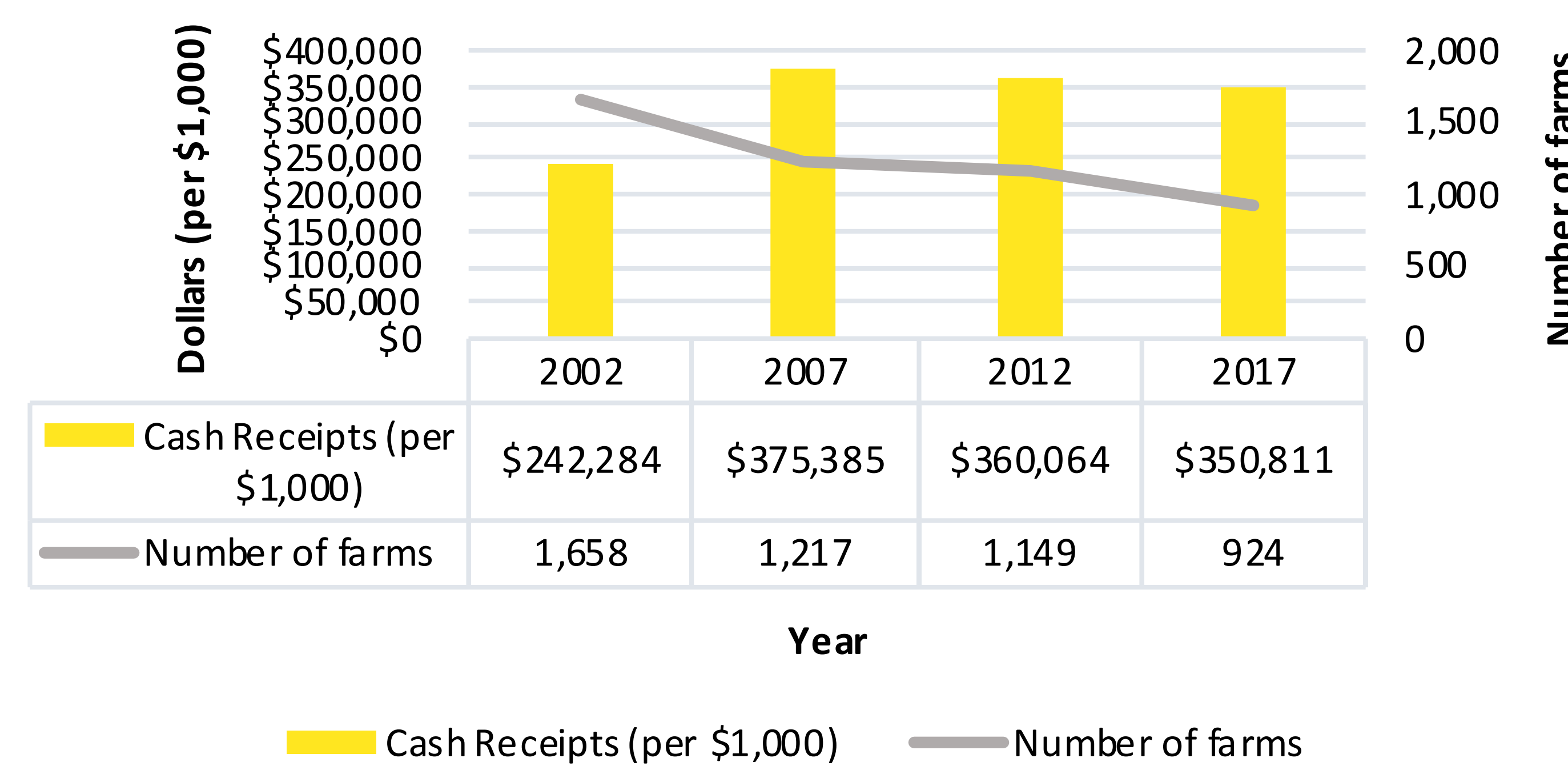
A questionnaire will be administered using the best-worst scaling approach to collect qualitative data in regards to the mental health of dairy farmers in order to achieve this goal. This data will be examined in order to acquire a greater understanding of this topic such as service preferences, possible mental health disorders, and various demographics. Such demographics include age, gender, full-time vs. part-time farming, family farm that has been/may continue to be passed down through generations, percent of farm that is dairy, percentage of income that comes from dairy.

Results

The results from this study could aid agricultural organizations and policymakers at the local, state, and federal level to create programs and policies beneficial to dairy producers seeking help for a mental health related illness.

There is also a potential benefit to other states in the Midwest that have dairy industries similar to Illinois. These similarities include the increase in farm bankruptcies, which can lead to higher stress levels and other mental health concerns [20,21,22]. Dairy, along with the beef industry, has been found to have higher suicide rates than other agricultural sectors [12,13]. The dairy industry has seen this in the state of Wisconsin [11]. In 2017, there were 915 individuals in Wisconsin that committed suicide, a significant number were reported as dairy farmers [11]. If such policies and programs are created to align with the preferences of those using them, it could lead to an increase in the use of mental health services and hopefully a decline in mental health illnesses and incidents, such as suicide.

Illinois Dairy Farms



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Graph 1: Illinois Dairy Farms

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