

Research

**An Analysis of Secondary Students' Understanding of Farmer Suicide Drivers Following a
State-Wide Essay Competition**

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Introduction

Multiple studies report a higher risk of suicide among agricultural, forestry, and fishery (AFF) workers than the general population (Kennedy et al., 2021; Klingelschmidt et al., 2022; Monteith et al., 2020). According to analysis of data from the CDC, AFF experiences five times the risk of suicide than the general population (Miller & Rudolphi, 2022). Suicide is not only rising among farmers, but among today's youth as well. In a 2005 study conducted among rural secondary youth in Kentucky and Iowa (Peden, et al. 2005), high level of depressive symptoms within 34% of the sample existed, with 9% reporting they had seriously considered suicide in the last year (Peden, et al. 2005). In 2020, the suicide rate was 14.2% per 100,000 young adults between the ages of 15 and 24 (CDC, 2022). Specifically, 6,062 young adults took their life that year.

Conceptual Framework

The Interpersonal Theory of Suicide (2010) was the framework that guided the scope of the study. The Interpersonal Theory of Suicide is used to explain the relationship between emotional and cognitive states and desire to suicide, and the distinction between desire for suicide and the capability to engage in suicidal behavior. The two primary constructs of desire for suicide are thwarted belongingness and perceived burdensomeness (Van Orden et al., 2010). Thwarted belongingness encapsulates a failure for an individual to perceive connections to other people; the need for belonging is unmet (Van Orden et al., 2010). Social isolation is one of the most reliable predictors of suicidal ideation, attempts, and lethal suicidal behavior (Calati et al., 2019). Perceived burdensomeness involves the perception that the individual is a burden to those they are close to – the individual experiences beliefs that they are so flawed they are a liability to others and experiences thoughts of self-hatred (Van Orden et al., 2010). Sentiments indicating burdensomeness might include shame, self-blame, and feelings of unwantedness or expendability.

Methodology

The Kentucky Department of Agriculture facilitates an annual essay contest for high school students with two prompt options: to write a letter to a farmer either thanking them or to extend support in light of the mental health crisis ("Think of Me, We're Thinking of You"). The researchers only analyzed the letters on the latter: approximately 120 essays. Original essays were numbered and copied.

The two researchers coded the essays through the lens of the 2010 Interpersonal Theory of Suicide to examine the research question: How do secondary students express understanding of thwarted belongingness and perceived burdensomeness? Some key constructs under thwarted belongingness, as identified by the theory, included loneliness, social isolation, pessimism, and low levels of social support. Key words and phrases the researchers identified as relating to

thwarted belongingness included: recognition of isolation; “lonely,” and “long hours alone.” Some of the theoretical constructs of perceived burdensomeness include liability, self-hate, physical illness, uselessness, belief that they are unwanted/unneeded, and a belief that they make things worse and are flawed. Based on these concepts, the researchers identified phrases relating to burdensomeness including burden, needed, wanted, and living up to expectations, among others. Key terms were also identified which were on the positive spectrum of each construct: these included efforts at increasing social connection for belongingness, and use of phrases such as “thank you” and “you are appreciated” for burdensomeness. The researchers used this process to independently code each essay, highlighting the phrases mentioned above, and then compared results. Interrater reliability was calculated at 80% for 15 randomly selected essay pairs.

Results

Students both identified drivers for suicide (negative factors) and offered support against those drivers (positive factors) for both perceived burdensomeness and thwarted belongingness within their essays. For perceived burdensomeness, student engagement occurred in the form of both external and internal factors. Internal factors include indications of empathy by the student for the pressure and stress the farmer is under and the feelings of worthlessness which may result. External factors are defined as occupational conditions which may contribute to feelings of burdensomeness, such as financial hardship and strenuous work. The researchers did not code for external factors as they are not unique to those experiencing suicidal thoughts, however we feel as though they should be included due to the overwhelming number of essays which described these factors. Students often recognized external factors but did not often recognize positive factors.

Negative factors for thwarted belongingness included a recognition of loneliness, isolation, and sacrifice of social time to complete work. Students tended to offer more support (positive factors) for thwarted belongingness than perceived burdensomeness. Students frequently stated a need for the farmer to interact with family, friends, and even to have the author come over and visit (for letters written to a known farmer). Many also suggested that the farmer reach out to a therapist or counselor, and additionally recognized the stigma surrounding support-seeking. While more students recognized negative factors for belongingness than burdensomeness, the emphasis was still placed on positive factors.

Conclusions, Implications, and Recommendations

Many students were able to identify components relating to both burdensomeness and belongingness. However, their help-giving advice for belongingness was generally more substantive than that for burdensomeness. The age and life stage of high school students is a possible reason for this divide, as many of the factors relating to the burdensomeness farmers feel come with a level of maturity and responsibility most highschoolers have not experienced. However, most students have probably experienced some form of social isolation and loneliness, and this may have been easier for them to identify and try to support. Students were generally able to connect, at least partially, with the concepts of burdensomeness and belongingness with no prior training or education on the topic of farmer suicide. In order to increase the

effectiveness of their engagement, it is recommended that a program, such as the QPR Institute's Question, Persuade, Refer training or LivingWork's SafeTALK training, be implemented.

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