

# Stress and wellbeing in farmers: The role of social and psychological capital and self-compassion

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## Abstract

Despite erroneous perceptions, farming as an occupation is one of high demands and stress, and is associated with a high prevalence of suicide. It is also associated with low levels of help-seeking. The current study aimed to explore stress and wellbeing in farmers with a focus on possible mediators and outcomes. Members of the farming community (n=274 -199 males and 75 females) completed questionnaire measures of stress, loneliness, mental health and wellbeing, help seeking, coping and support. Participants scored significantly higher on measures of loneliness, depressed and anxious affect, and lower on wellbeing, and sense of community. Loneliness correlated inversely with sense of community and wellbeing. Males exhibited higher levels of stress. Over all 73% of males and 27% of females said they would not seek help. Of significant practical concern is the high level who would not seek help, particularly among males. In addition, the findings on psychological capital and self-compassion point to potential preventative strategies.

## Introduction

Several key drivers of farming stress have been identified throughout the literature including: The inherent risks in farming, long working hours, shifting policies, financial pressures, instability, risk, uncertainty, isolation, service provision and family pressures [1-3]. Consequently, farmers make up the greatest number of suicides compared to any other occupational group in the U K and are reported to be 2.5 times more likely to consider whether life is worth living [4]. Investigation into stress often focuses on repairing impairment following a disease model, neglecting positive concepts which focus on creating an optimum environment that can help individuals resist the damaging impact of stress [5]. An understanding of positively orientated human resource strengths and underlying constructs that mediate one's ability to adaptively cope with occupational stress may facilitate the employment of positive health-promoting behaviours. Thus, the question arises, what differentiates one individual from another in their ability to function 'normally' in adverse times? Three main positive resources used to deal with stressful situations are highlighted throughout the literature: Psychological Capital, Social Capital and Self-compassion. Proposed as a measurable higher-order construct, Psychological Capital (PsyCap) is defined as "an individual's positive psychological state of development and is characterized by self-efficacy, optimism,

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hope and resilience" [6]. Research focusing on occupational stress suggests high levels of PsyCap act as a positive resource, arming one with the ability to combat stress, burnout, conflict and destructive emotions, essentially preventing depressive symptoms [7]. PsyCap is a significant mediator in the development of occupational stress and in the relationship between stress and well-being. The development of individual PsyCap is fundamentally associated with Social Capital. Social Capital is a sociological construct which refers to resources that people may have through their relationships in the different levels of their social ecology. It is about the relationships we have in the networks of which we are a part. Individual SocCap comprises of "both informal, community-focused attitudes (sense of community) and behaviors (neighboring), as well as formally organized behaviors (citizen participation) and attitudes about those organizations and behaviors (collective efficacy-or empowerment)" [8]. The outcome of this for the individual is the level of support they perceive in their lives and is operationally defined in the current study as a combination of support from friends, family, and significant others, and sense of community. Individuals constantly receive feedback from the cultural and social environment in which they live. However, farming work and the farming lifestyle is inextricably connected with the majority of farmers living on relatively isolated farms and working unsociable hours [4]. Feelings of loneliness and isolation are common in small communities and isolation and

low levels of social support are concurrent to suicidal ideation in rural communities [9]. Social support and a sense of belonging buffer against life stress and individuals who have strong social support have better mental health [10]. High levels of SocCap facilitate positive psychological well-being among farmers [11]. Self-compassion encompasses a sensitivity to the experience of one's suffering, together with a desire to ease that suffering [12]. A growing body of evidence supports self-compassion as a predictor of adaptive coping mechanisms in times of stress. Research suggests a lack of self-compassion among the farming population. In reviewing the health and social effects of the recent agricultural downturn in Northern Ireland, found that 17% of people felt that they could not seek help for their mental health, with only 37% willing to speak to a professional. Additionally, 43% felt they could not speak to someone else who may be having a mental health problem. A greater understanding of the mediating effects of self-compassion, particularly in relation to help seeking, in the relationship between stress, coping and health and well-being is needed. The collision of self-compassion and masculine ideology may play a role in a farmer's compassion towards oneself. Masculine ideology exists as the greatest barrier to help-seeking among the farming population - male farmers suffering from psychological distress are less likely to seek professional help in comparison to female farmers in the same situation [13]. Fatalism, unwillingness to express emotions and a traditional focus on practical problem solving as opposed to seeking help, impede help-seeking. Therefore, raising questions as to whether self-compassion plays a protective role among farmers, and by what processes self-compassion impacts on mental health outcomes within this group. In an attempt to investigate the social contexts in which farmers positively engage in health-promoting behaviours, [14] conducted 32 individual qualitative structured interviews with farming men, and a focus group with 5 key informants. The researchers examined how farmers cope with stress alone, and the link of stress and coping to the perceived masculine image of being independent whilst appearing stoic and self-reliant [15,16]. Self-distraction and cognitive strategies appeared as the most important, while taking work breaks was considered to conflict with the perception that a farmer is a "relentless worker". Suggesting self-care and self-compassion among farmers are mediated by masculine ideology. There is a paucity of literature surrounding the effect of farmer's coping styles on their perception of occupational stress. Defined coping styles as a characteristic response to negative or stressful events. Men adopt coping mechanisms which are more "instrumental action" rather than "communicative action"-including cognitive (optimism) and management actions breaks in work; [17]. Coping style may mediate well-being in times of difficulty, but in what way, and is coping mediated by any other construct in the relationship between stress and well-being? As far back as 1969 the structure of affect has been recognized as bi-dimensional in that positive and negative affect are separate dimensions [18]. More recently others have shown positive and negative wellbeing to be independent dimensions [19,20]. In this study we have used separate measures and refer to negative wellbeing as illbeing, defined in Webster's dictionary as "a condition of being deficient in health, happiness, or prosperity". The evidence reviewed suggests that stress has an impact on both wellbeing and illbeing in different directions. The relationship between stress and both outcomes can be ameliorated by the coping strategies used and the psychological resources available to the person. We are suggesting that key resources are psychological capital, social capital and self-

compassion. These relationships are hypothetically illustrated in Figure 1 providing a model which can be statistically tested. The core aim, therefore, is to test the model in Figure 1 and to explore the relationships posited therein.

### Methodology

**Design:** This cross-sectional survey design employed a quantitative approach incorporating a series of structured questionnaires which were completed by all participants.

**Participants:** Participants were 274 operational farmers in Northern Ireland between the ages of 18-69 with a mean age of 40 years. In total, 73% of participants were male and 27% female. Nearly 44% (119) were single; 53% (145) reported being married; the remainder classified themselves as 'other'.

**Education level ranged from:** Lower Secondary Education (15.3%), Upper Secondary Education (25.2%), Post-secondary Non-Tertiary Education (10.6%), Short Cycle Tertiary Education (8.4%), Bachelor or Equivalent Level (26.6%), Masters of Equivalent (3.3%), Doctoral or Equivalent (2.6%) and Other (8%). Participation in this study was on a voluntary basis.

### Measures

**Perceived Stress:** Perceived stress was measured using the Perceived Stress Scale [21]. The PSS-4 is a 4-item self-report instrument revised from the 14-item measure of global perceived stress. PSS measures the degree to which, over the past month, the respondent has considered situations as stressful, particularly the perceived unpredictability and uncontrollability of such situations (e.g. how often have you felt that you were unable to control important things in your life?) All items were assessed using a 5-point Likert scale of agreement ranging from 0=Never, 1=Almost Never, 2=Sometimes, 3=Mostly True, 4=Always True. [21] reported a coefficient alpha reliability of .72 for the 4-item scale.

**PsyCap:** PsyCap was assessed using The Compound PsyCap (CPC-12) Scale which is a composite measure of hope, resilience, self-efficacy, and optimism, encompassing 12 items. Each of the four components is reported on a 6-point Likert scale from Strongly Disagree (=1) to Strongly Agree (=6). It measures psychological capital in a universal manner. The CPC-12 has been demonstrated to have good reliability and external validity [22]. In this study, the Cronbach's alpha for the CPC-12 scale was .93.

**SocCap:** SocCap was assessed by measuring two constructs: [1] Sense of Community and [2] Perceived Social Support.

**Sense of Community:** Sense of Community was assessed using the Brief Sense of Community Scale (BSCS) designed by Peterson. The BSCS is an 8-item scale self-report which measure 4 domains of sense of community including: [1] Membership, [2] Influence, [3] Fulfillment of needs, [3] Shared Emotional Connection. The scale employs 5-point Likert-type scoring. The Cronbach Alpha for this scale was .82 in the current data.

**Perceived Social Support:** The Multidimensional Scale of Perceived Social Support Scale (MSPSS); [23] is a 12-item self-report inventory which assesses the respondent's perception of social support adequacy (e.g How often do you feel as if nobody really understands you?) Three subscales address the respondents perceived support from: [1] Family, [2] Friends and [3] Significant Others, using a 5-point Likert scale (0=Never, 1=Seldom, 2=Sometime, 3=Often, 4=Always). The internal

reliability of the MSPSS has demonstrated a coefficient  $\alpha = .93$  [24]. The Cronbach Alpha for this scale was .88 in the current data.

**Self-compassion:** The Self-Compassion Scale-Short Form (SCS-SF) [25] is a 12-item self-report inventory which measures how one typically acts towards oneself in difficult times (e.g. When I fail at something that's important to me I tend to feel alone in my failure). Responses are measured using a 5-point Likert scale (0=Almost Always to 4=Almost Never). The SCS-SF has demonstrated satisfactory reliability among Dutch and English samples ( $\alpha = 0.86$ ; [25]). Cronbach Alpha for this scale was .77 in the current data.

**Loneliness:** The UCLA Loneliness Scale (Version 3; [26]) was used to assess subjective feelings of loneliness and social isolation. This 10-item self-report inventory used a 5-point Likert scale (0=Never, 1=Seldom, 2=Sometime, 3=Often, 4=Always). The MSPSS has been reported as a highly reliable measure of loneliness ( $\alpha = .89-.94$ ; [26]). Cronbach Alpha for this scale was .93 in the current data.

**Help Seeking:** The construct of help seeking was assessed using a 4-item revised version of the 10-item Self-Stigma of Seeking Help Scale (SSOSH) [27]. This instrument measures a respondent's level of self-stigma in relation to seeking psychological help from a professional (e.g I would feel ok about myself if I made the choice to seek professional help). [27] reported a unidimensional factor structure and good reliability ( $\alpha = .91$ ) using the 10-item scale. Cronbach Alpha for this scale was .74 in the current data.

**Coping Strategies.** The Coping Strategies Inventory-Short Form (CSI-SF) is a revised version of the original 78-item CSI questionnaire [28]. The CSI-SF comprises of 4-subcales: [1] Problem Focused Engagement, [2] Problem-Focused Disengagement, [3] Emotion-Focused Engagement, and [4] Emotion-Focused Disengagement. Emotion-focused coping measures the regulation of one's emotional response to adversity, whilst problem-focused coping measures one's ability to manage adversity [29]. Four items are equally devoted to each subscale for a total of 16-items. The internal reliability of the CSI-SF has demonstrated a coefficient  $\alpha = .58-.72$  [29]. Cronbach Alpha for this scale was 75-77 in the current data.

**Depression and anxiety:** The Patient Health Questionnaire (PHQ-4) is a four-item inventory which consists of a 2-item depression scale (PHQ-4; and a 2-item anxiety scale (General Anxiety Disorder Scale; GAD-2;). Items are measured using a 5-point Likert scale of agreement ranging from 0=Never, 1=Seldom, 2=Sometime, 3=Often, 4=Always. Rated the PHQ-2 as having 97% sensitivity and 67% specificity, thus a useful method in screening for depression. Similarly, the GAD-2 has demonstrated within primary care patients' high sensitivity and specificity for the screening of GAD, as well as high specificity for panic disorder, social anxiety disorder, and post-traumatic stress disorder [30]. Both scales have been reported as reliable and valid ultra-brief measures of depression and anxiety in the general population. The Cronbach's alpha for the scale in this study is 0.79.

**Wellbeing:** Psychological wellbeing: The Warwick Edinburgh Mental Well-being Scale-short form [31] which is made up of seven positively worded items that relate to the different aspects of positive mental health. Each item was rated based on the experience of the respondent over the past two weeks,

with items being ranked on a 5-point Likert scale ranging from 1 = None of the Time to 5 = All of the Time. The summed item scores were used to determine the level of positive mental well-being, with a higher score indicative of a higher level of positive mental well-being. The Cronbach's alpha for the scale in this study is 0.93.

**Health behaviour:** Health behaviour was measured using a highly reliable 4-item self-report developed for the study ( $\alpha = .85$ ). Responses were measured on a 5-point Likert scale (0= Not at all, 1=Sometimes, 2=Often, 3=Mostly, 4=Always).

**Procedure:** Ethical approval was sought from the School of Psychology Ethics Committee at Ulster University. Since many of the farmers in Northern Ireland are member of the Ulster Farmers union (UFU), the unions direct support in hosting the survey was solicited (see Appendix 3). Further permission and support was secured from Young Farmer's Clubs. The survey was delivered online using Qualtrics and distributed by the host organizations to participants via email and social media platforms. The e-mail stated that participation was voluntary and anonymous, participants must be between 18-69 years old and an operational farmer. In addition, the email listed information on health and well-being support, contact details of the researchers and lastly a link to the survey.

## Results

The first aim of the study was to explore perceived stress levels in the farming community, and to test this, stress scores in the current sample were compared to normative scores using one-sample t-tests. Normative means were obtained from [32] and were total population = 6.11, males = 5.56 and females = 6.38. over all the sample did not differ from the norm on perceived stress ( $t(273) = 1.614, p = .108$ ). Separate analysis for males and females shows that while females did not differ from the mean ( $t(74) = 1.201, p = .234, M = 6.15$ ), males did score significantly higher on perceived stress than the norm ( $t(198) = 5.205, p < .001, M = 6.49$ ). One-sample t-tests comparing the current sample construct scores to normative scores revealed that the current sample scored significantly higher on measures of loneliness, depressed affect and anxious affect, and significantly lower on measures of wellbeing, and sense of community (Table 1).

Independent sample t-tests were further used to explore sex differences on all study variables. Males exhibited significantly higher levels of depressed affect ( $t(272) = 2.53; p = .01, 2$ -tailed), anxious affect ( $t(272) = 1.96; p = .05, 2$ -tailed), loneliness ( $t(272) = 2.32; p = .02, 2$ -tailed) and used more avoidance coping, specifically emotion focused disengagement ( $t(272) = 2.18; p = .03, 2$ -tailed) compared to females. While females used more emotion-focused coping ( $t(272) = -6.52; p = .000, 2$ -tailed) and reported significantly higher level of support from family ( $t(272) = -2.00; p = .04, 2$ -tailed), and higher levels of healthiness ( $t(272) = -2.49; p = .01, 2$ -tailed), wellbeing ( $t(272) = -3.35; p = .001, 2$ -tailed) compared to males. The Self-Stigma of Seeking Help Scale (SSOSH) measures the level of negative stigma an individual would experience from seeking help and an independent t-test shows a significant sex difference ( $t(272) = 2.66; p = .01$ ). Males experienced a stronger sense of stigma ( $M = 5.84, Sd = 3.06$ ) than females ( $M = 4.68, Sd = 3.59$ ). One question in the SSOSH questionnaire related to the extent to which participants were likely to seek help in times of psychological difficulty. We recoded this question as a dichotomous measure of either intention to seek help or no intention to seek help. A chi-square

test was conducted to examine the relationship between male and female participants on these categories. Overall 64% of the sample indicated that they would not seek help for emotional problems but with a significant sex difference. For males, this was 78.4% (n=156) while only 28% (n=21) of females said they would not seek help. Pearson Bivariate Correlations were next used to describe the relationships between stress, SocCap, PsyCap, Self-compassion and Health and Wellbeing as shown in Table 2. Next, Structural Equation Modelling using AMOS 24 shows that the model is an excellent fit for the data  $\chi^2(2) = 1.232, p = .540$ ; Comparative Fit Index (CFI) = 1.00; Incremental Fit Index (IFI) = 1.00, Relative Fit Index (RFI) = .979; Root Mean Square Error of Approximation (RMSEA) = .001,  $p$  of Close Fit (PCLOSE) = .721. As shown in figure 2, stress is a direct negative predictor of Well-being and a direct positive predictor of Ill-being (a composite measure of negative affect). Well-being directly predicts Ill-being, and Ill-being directly predicts Well-being. PsyCap, SocCap, Self-compassion, Stress and Coping have a direct relationship with Well-being, while only PsyCap, Self-compassion, Coping and Stress have a direct relationship with Ill-being. The relationship between Stress and Wellbeing is mediated by PsyCap, SocCap and Coping in a positive way and Self-compassion in a negative way. The relationship between stress and Ill-being is mediated by PsyCap and coping in a negative way, and Self-compassion in a positive way. PsyCap

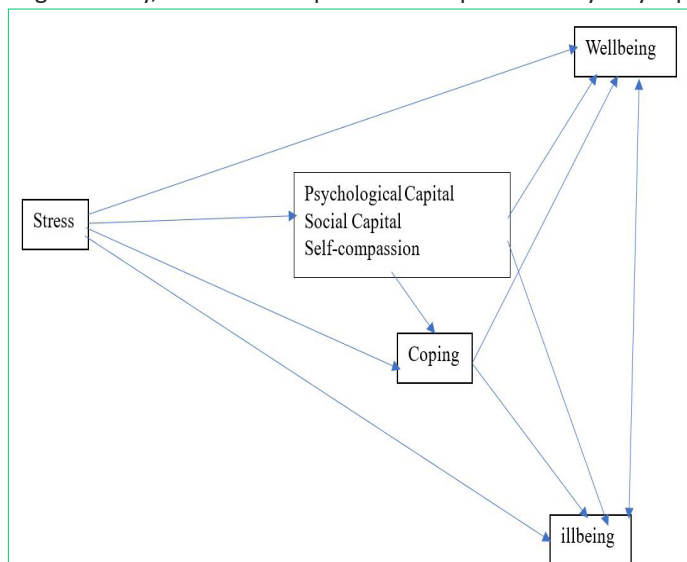
**Table 1:** Loneliness, Depressed Affect, Anxious Affect, Wellbeing and Sense of Community scores in current study compared to normative data.

Construct	Normative data	Current study	One-sample t-test
	Mean (SD)	Mean (SD)	T(df) p
Loneliness	19.00(5.11) <sup>a</sup>	23.43 (9.34)	41.521 (273) .001
Depressed Affect	0.94 (1.20) <sup>b</sup>	3.42 (2.52)	22.39 (273) .001
Anxious Affect	0.82 (1.10) <sup>b</sup>	3.47 (2.69)	21.41 (273) .001
Wellbeing	50.70 (8.79) <sup>c</sup>	24.77 (5.51)	74.48 (273) .001
a)	[35]		
b)	[39]		
c)	[41]		

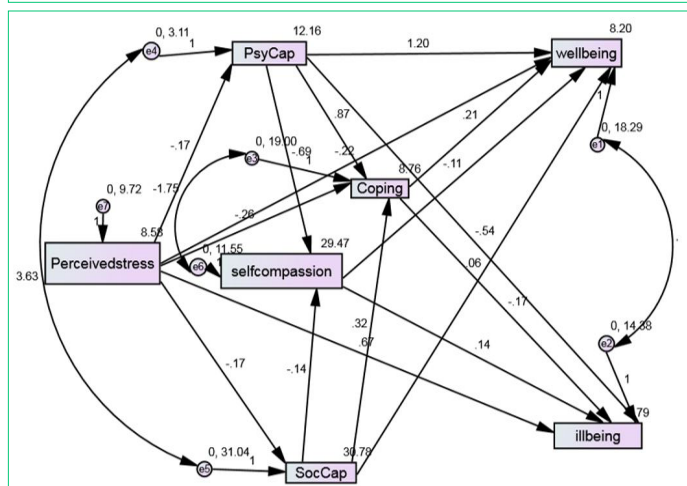
predicts SocCap, and vice versa. PsyCap and SocCap negatively mediate the relationship between both Stress and Well-being, via self-compassion and coping. Coping is mediated by self-compassion.

**Discussion**

The present study confirmed that the farming community in Northern Ireland are experiencing high levels of stress, this may be due to higher levels of loneliness, Ill-being, poor sense of community compared to the general population. A significant gender difference was highlighted among perceived stress in the farming community, males perceive greater levels of stress than the general population and more than their female counterparts. The primary goal of this study was to test the proposed model on the complex relationship between Stress and Well-being focusing on the mediating role of psychological capital, Social Capital, Self-compassion and Coping (Figure 1) and postulate an applicable theoretical framework. It was found that Stress is a direct negative predictor of Well-being and a direct positive predictor of Ill-being (a composite measure of negative affect). Social Capital is a significant mediator in the relationship between stress and Well-being, consistent with the findings of [11]. In particular, strong network of social support from family and friends, or husband and wife buffers against stress in the farming community, protecting Well-being, while poor levels of social support from significant others strongly predicts an increase in Ill-being. Social support may counter-balance stress. Low levels of loneliness were a significant predictor of Well-being, whilst the greatest predictor of Ill-being within the farming sample was high levels of loneliness. The findings are consistent with [9] who highlighted isolation and low levels of social support are linked to suicidal ideation in rural communities. There is a significant sex differences between males and females on levels of loneliness and social support, with females reporting greater support from family which may buffer against stress, explaining sex differences in stress among the sample. Low levels of loneliness and high levels of social support directly protects against stress. Growing one's social network and sense of community can provide a buffer to prevent Ill-being in times of difficulty. Decreasing loneliness within the farming community, particularly among males is an area which calls for attention by UFU and YFC. Psychological capital is a significant mediator in the relationship between stress and wellbeing. Consistent with the findings of [7]. Individuals who report high job performance and low levels of stress, score higher on Psychological Capital than those who report poor job performance and high levels of stress. Specifically, resilience, or ability to tolerate times of hardship is the strongest



**Figure 1:** The proposed model of the relationships between stress, psychological capital, self-compassion and health and wellbeing.



**Figure 2:** Structural Equation Model of the relationship between Perceived Stress, SocCap, PsyCap, Self-compassion and Coping on Wellbeing and Ill-being.

**Table 2:** Bivariate correlations between wellbeing, healthiness, depressed and anxious mood, perceived stress, help seeking and study variables.

	Wellbeing	Healthiness	Depressed affect	Anxious affect	Perceived stress	Help seeking
Help seeking	-.18**	-.21***	.47***	.44***	.37***	1
Age	-.16**	-.04	.08	.09	-.02	-.03
Self-efficacy	.44***	.11	-.35***	-.39***	-.28***	-.04
Optimism	.51***	.27***	-.41***	-.49***	-.31***	-.05
Engagement	.22***	.05	-.20***	-.17**	-.05	-.07
Hope	.54***	.22***	-.32***	-.44***	-.29***	-.02
Resilience	.43***	.22***	-.26***	-.34***	-.21***	.01
Motivation	.30***	.08	-.12*	-.12*	-.09	.04
Over identification	-.57***	-.19**	.43***	.44***	.22***	.00
Self-kindness	.28***	.18**	-.29***	-.28***	-.19**	-.06
Mindfulness	.35***	.12*	-.20***	-.27***	-.17**	-.12*
Isolation	-.41***	-.17**	.31***	.29***	.20***	.08
Common humanity	.14**	.04	-.11	-.17**	-.03	-.11
Self-judgement	-.26***	-.01	.16**	.21***	.13*	.01
Self-compassion	.35***	.15**	-.27***	-.32***	-.14**	-.08
Sense of community	.13*	-.14*	-.19**	-.18**	-.09	.01
Support significant other	.27***	.01	-.15**	-.19**	-.07	.03
Support family	.38***	.14**	-.28***	-.31***	-.11	-.01
Support friends	.25***	.18**	-.19***	-.18**	-.05	.09
Emotion focused engagement	.28***	.11	-.27***	-.26***	-.14*	-.08
Problem focused engagement	.54***	.35***	-.41***	-.46***	-.33***	-.08
Problem focused disengagement	-.26***	-.23***	.37***	.33***	.15**	.10
Emotion focused disengagement	-.46***	-.45***	.44***	.44***	.18**	.14*
Loneliness	-.59***	-.35***	.60***	.61***	.32***	.13*
Psychological Capital	.58***	.23***	-.39***	-.47***	-.29***	-.03

Note: \*\*\* p<.001 \*\* p<.01 \* p<.05

psychological predictor of Wellbeing among the farming sample, indirectly buffering against stress and distress. Teaching farmers how to adopt more adaptive methods of interpreting life challenges, and building confidence to complete tasks will enhance resilience against hardship and a buffer to prevent Ill-being. Consistent with, Psychological Capital directly predicts Social Capital, and vice versa, suggesting both constructs are fundamentally associated. Together, Psychological Capital and Social Capital directly mediate coping, positive indirect effect on Well-being and negative effect on Ill-being. Furthermore, in the relationship between stress and Ill-being both Psychological Capital and Social Capital impact self-compassion. Highlighting the important influence of Social Capital and Psychological Capital not only on each other, but Coping and Self-compassion. Intervention should which consider enhancing both Social and Psychological Capital. Farmers in Northern Ireland have an intention not to seek help, consistent with findings. This observed negative attitude towards help seeking is mediated by low levels of self-compassion. In particularly, over-identification is directly linked to negative attitudes towards help-seeking

and indirectly linked to Well-being, while common humanity is indirectly linked to negative attitudes towards help-seeking and directly linked to Well-being. Suggesting Self-compassion is a significant mediator of attitude towards Help-seeking, which effects Well-being. Negative attitudes towards help-seeking were predominant among male farmers compared to females, females report higher levels of Self-compassion which may have mediated positive attitudes towards Help-seeking. Findings are in line with the existing notion that masculine ideology is the greatest barrier to help-seeking among the farming population [13,33]. However, the contribution of common humanity and over-identification mediating the relationship between stress and wellbeing was substantial, suggesting that lack of self-compassion not only acts as a barrier to help-seeking, but has a direct negative impact on Well-being. The findings emphasise the ever-growing masculine ideology that needs to be broken down, particularly increasing common humanity and decreasing over-identification among young male farmers. Decreasing the paucity of literature surrounding how self-compassion affects mental health outcome [34]. Self-compassion has a direct effect

on Coping Style, indirectly mediating the relationship between stress and Well-being. Females engaged in significantly more emotion focused coping, while males were significantly more likely to use avoidance coping. That is, higher levels of self-compassion mediate positive coping style. Findings are in line with the growing body of evidence that self-compassion is a predictor of adaptive coping mechanisms in times of stress [35]. Enhancing farmers ability to be self-compassionate will facilitate engagement in emotion and problem focused coping, and reduce engagement with negative masculine coping strategies, such as substance abuse, social isolation and suicide. Proving a greater understanding of the mediating effects of self-compassion in the relationship between stress, coping and health and well-being. Of note, irrespective of level of stress, well-being is directly predicted by Psychological Capital, Social Capital, Self-compassion, Stress and Coping. Meaning high levels of Psychological Capital, Social Capital and Self-compassion are not only protective against stress, but also contribute to positive Well-being whether an individual is experiencing high levels of stress and distress. While, Psychological Capital, Self-compassion, Coping and Stress directly predict Ill-being. Suggesting lack of Psychological Capital, Self-compassion and positive coping style directly increases Ill-being, regardless of level of stress. Low levels of Social Capital did not directly predict Ill-being. However, Well-being directly predicts Ill-being, and Ill-being directly predicts Well-being. Suggesting that Well-being and Ill-being may not be a continuum but separate independent dimensions of mental health. It is important to note that the cross-sectional nature of the dataset limits the causal inferences that can be concluded from the model proposed and tested. Support has however been given for potential underlying mediating mechanisms of Psychological Capital, Social Capital, Self-compassion and Coping in the relationship between Stress and Health and Wellbeing. Future research should test the proposed theoretical model using a longitudinal design. Lastly, it is recommended that future research explores the impact of being a farmer's wife on Health and Wellbeing. It is feared that the high levels of stress observed among male farmers will turn and increase within women who undergoing strain of being the main support and holding together a home and family. Noted due to the pressure of being the main confidant to their husband, married women are at larger risk of suffering with Ill-being.

### Conclusion

The proposed model is a good fit for the data indicating that stress is a negative predictor of wellbeing and a positive predictor of illbeing (a composite measure of negative affect). The relationship is mediated by PsyCap, SocCap, Coping and Self compassion. These variables are protective against stress but also contribute to positive wellbeing. Males in the farming community seem to be experiencing more stress than the general population and more than their female counterparts. This may be related to males experiencing more loneliness and using more avoidant coping styles. In addition, this may be related to their predominant intention not to seek help. Females are more likely to seek help and this may mediate their loneliness and distress. In an era of concern about mental health that males in this sample say they would not seek help is of concern.

### Compliance with ethical standards

**Conflicts of Interest:** The authors alone are responsible for the content and writing of the paper. All statements in this report,

including its findings and conclusions, are solely those of the authors.

**Ethical approval:** The study was approved by the Psychology Filter Committee at Ulster University.

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