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The relationship between social support correlates and feelings of loneliness among male UK recreational anglers.

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Abstract: The benefits of access to blue spaces (exposure to aquatic environments) have been well reported. One common activity conducted in these spaces is recreational angling. Studies have shown that several correlates are associated with recreational angling, including lower incidence of anxiety disorders compared to non-anglers. What is currently unknown, is how measures of social support relate to feelings of loneliness in this population. The aim of this study, therefore, was to examine experiences of loneliness and social support in male UK anglers. In total, 1752 participants completed an online survey. Results showed a positive linear trend between the number of friends and family that anglers (a) heard from at least once a month; (b) trust enough to talk about private matters, and (c) could call upon for help and feelings of loneliness. Furthermore, more than half of the sample reported hardly ever or never having feelings of loneliness, suggesting that recreational angling does not affect feelings of loneliness.

Keywords: angling; fishing; loneliness; friend; relative

1. Introduction

The benefits of access to blue spaces (exposure to aquatic environments such as rivers, lakes, the sea, and canals) have been well reported. For example, one systematic review including 35 studies reported positive associations between exposure to blue spaces and mental health, overall wellbeing, and levels of physical activity.[1] The review highlights that these positive associations are likely owing to visiting blue space reducing psychological stress, increasing social contacts and place attachment. One common leisure activity undertaken in blue spaces is recreational angling, with a reported 105,000 people in England participating in the sport in 2020-2021.[2] Furthermore, the UK government has reported that recreational angling adds £1.4b into the UK economy.[3] Further, research has shown that there is a lower incidence of anxiety disorders in recreational anglers.[4] Another interesting finding from this study was that anglers were significantly older than non-anglers – indeed, almost half of the population was over 55 years of age.[4] In this older population, several social correlates decrease compared to younger adults. For example, in a large cohort study with 28 years follow up, high levels of loneliness (i.e., the perception of being alone and isolated) developed in a significant proportion of the cohort, with reduced social activities significantly mediating this relationship.[5]. Furthermore, the findings of another large cross-sectional study found that levels of loneliness were higher when people had less contact with their friends and family [6]. Whether these associations exist in the angling population, which is commonly (although not always) a solitary hobby, is not known. The aim of this study, therefore, was to determine whether social support networks influence feelings of loneliness in a cohort of recreational anglers.

2. Materials and Methods

The full methods of this study have been fully published elsewhere.[7] In brief, participants (anglers and non-anglers) were invited to take part in an online survey from October 2021 – January 2022. The online survey was advertised through Angling Direct and Tackling Minds Instagram, Facebook and Twitter accounts. Angling Direct also sent the survey link to their mailing list and the link was distributed via the Anglia Ruskin University Twitter account. The survey was open to all UK residents aged 18 years and over. Several variables were collected from participants, including demographic details (e.g., age [years], gender [Male/Female/Non-binary/Intersex/other]) and nine measures of social support. Regarding these social support measures, the following nominal questions were asked to participants:

- 'Considering the people you are related through birth, marriage, adoption and so on, how many relatives do you see or hear from at least once a month?'
- 'Considering the people you are related through birth, marriage, adoption and so on, how many relatives do you feel at ease with that you can talk about private matters?'
- 'Considering the people you are related through birth, marriage, adoption and so on, how many relatives do you feel close to such that you could call on them for help?'
- 'How many of your friends do you see or hear from at least once a month? '
- 'How many friends do you feel at ease with that you can talk about private matters?'
- 'How many friends do you feel close to such that you could call on them for help?'

Questions about loneliness included questions regarding perceived companionship, feeling left out, and feeling isolated. Specifically, these three nominal questions were asked:

- 'How often do you feel that you lack companionship?'
- 'How often do you feel left out?'
- 'How often do you feel isolated from others?'

Participants read a participant information sheet and subsequently provided informed consent prior to the completion of the survey. Ethical approval for the present study was granted by the Anglia Ruskin University Sport and Exercise Science Ethics Panel.

2.1 Analysis

All statistical analyses were conducted using SPSS Version 28. 0.0.0 (190) (Chicago, IL, USA). Data from the social correlate variables were analyzed using a descriptive analysis. To determine associations between social correlates (hearing from family/friends at least once a month; how many family/friends do they feel at ease to talk about private matters; and family/friends do they feel so close to such that you could call on them for help) and lack of companionship, feeling of being left out, and feeling isolated from others, a Mantel-Haenszel test of trend was performed.

3. Results

Originally, a total of 1,792 participants completed the online survey, however of this sample there were a very small number of female respondents (n=40). It was therefore deemed appropriate to only include the male sample. In total, 1,752 male participants filled completed the online questionnaire. The majority of participants were either aged between 55-64 (25.8%), aged 45-54 (20.8%), or aged 65-74 (20.4%).

Regarding how many relatives male anglers hear from a least once a month, the majority of participants answered that they either heard from 3-4 (34.5%), or 5-8 (27.8%) relatives. When the same question was asked about how many friends they hear from at least once a month, the majority of participants had also heard from 3-4 (29.6%), or 5-8 friends. Regarding how many relatives participants feel at ease that they can talk about private matters, the majority of participants stated 3-4 (27.5%), followed by 1 (22.1%). When the same question was asked regarding friends, results were similar, with 27.6% of participants saying that they had 3-4 friend they could talk to about private matters. Regarding how many relatives they feel close to such that they can call on them for helps, the majority of participants indicated 3-4 (31.9%), followed by 2 (20.7%). Results were similar when asked the same question about friends that they could call on for help. See Table 1 for full information.

Table 1. Distributions for social support questions in male anglers.

	0	1	2	3-4	5-8	9 or more
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How many relatives do you hear from at least once a month?	3.7% (65)	7.7% (134)	16.2% (283)	34.5% (602)	27.8% (485)	10.1% (177)
How many of your friends do you see or hear from at least once a month?	9.6% (167)	11.4% (199)	16.4% (286)	29.6% (516)	18.9% (329)	14.1% (246)
How many relatives do you feel at ease with that you can talk about private matters?	15.6% (272)	22.1% (385)	20.8% (363)	27.5% (480)	10.3% (179)	3.8% (67)
How many friends do you feel at ease with that you can talk about private matters?	20.1% (350)	17.8% (310)	22.8% (398)	27.6% (481)	7.6% (133)	4.0% (70)
How many relatives do you feel close to such that you could call on them for help?	9.2% (161)	15.3% (266)	20.7% (361)	31.9% (557)	16.5% (287)	6.4% (112)
How many friends do you feel close to such that you could call on them for help?	15.3% (266)	16.5% (287)	23.9% (416)	28.4% (495)	9.5% (166)	6.4% (111)

Regarding companionship, most participants (57.5%) stated that they hardly ever or never felt a lack of companionship. Regarding feeling left out, 55.2% stated that they hardly ever or never felt left out. Lastly, regarding isolation, the majority of participants (57.2%) stated that they hardly ever or never felt isolated from others. Table 2 shows full information.

Table 2. Distributions for companionship questions in male anglers.

	Hardly ever or never	Some of the time	Often
How often do you feel that you lack companionship?	57.5% (1004)	31.3% (546)	11.2% (196)
How often do you feel left out?	55.2% (962)	34.5% (601)	10.3% (179)
How often do you feel isolated from others?	57.2% (996)	31.1% (541)	11.8% (205)

3.1 Trends

3.1.2 Lack of companionship

The Mantel-Haenszel test of trend between how many relatives recreational anglers see or hear from once a month, and feeling of a lack of companionship showed a statistically significant linear association, $\chi^2(1) = 85.80$, $p < 0.001$, $r = -0.22$. A similar trend was also found regarding the association between how many friends recreational anglers see or hear from once a month, and feeling of a lack of companionship ($\chi^2(1) = 92.96$, $p < 0.001$, $r = -0.23$). A significant trend was also found between how many relatives recreational anglers feel they can talk about private matters and lack of companionship ($\chi^2(1) = 117.40$, $p < 0.001$, $r = -0.32$) with a similar trend found for friends ($\chi^2(1) = 117.40$, $p < 0.001$, $r = -0.29$). Lastly, a significant trend was also found between how many relatives recreational anglers feel that they could call them for help and lack of companionship ($\chi^2(1) = 207.52$, $p < 0.001$, $r = -0.35$), with a similar trend being found for friends ($\chi^2(1) = 208.91$, $p < 0.001$, $r = -0.35$).

3.1.2 Feeling left out

A Mantel-Haenszel test of trend between how many relatives recreational anglers see or hear from once a month, and feeling of a being left out showed a statistically significant linear association, $\chi^2(1) = 94.79$, $p < 0.001$, $r = -0.23$. A similar trend was also found regarding the association between how many friends recreational anglers see or hear from once a month, and feeling of being left out ($\chi^2(1) = 122.73$, $p < 0.001$, $r = -0.27$). A significant trend was also found between how many relatives recreational anglers feel they can talk about private matters and feeling left out ($\chi^2(1) = 197.71$, $p < 0.001$, $r = -0.34$) with a similar trend found for friends ($\chi^2(1) = 184.42$, $p < 0.001$, $r = -0.33$). Lastly, a significant trend was also found between how many relatives recreational anglers feel that they could call them for help and feeling left out ($\chi^2(1) = 203.51$, $p < 0.001$, $r = -0.34$), with a similar trend being found for friends ($\chi^2(1) = 212.61$, $p < 0.001$, $r = -0.35$).

3.1.3 Feelings of isolation

A Mantel-Haenszel test of trend between how many relatives recreational anglers see or hear from once a month, and feelings of isolation showed a statistically significant linear association, $\chi^2(1) = 129.48$, $p < 0.001$, $r = -0.27$. A similar trend was also found regarding the association between how many friends recreational anglers see or hear from once a month, and feelings of isolation ($\chi^2(1) = 156.73$, $p < 0.001$, $r = -0.30$). A significant trend was also found between how many relatives recreational anglers feel they can talk about private matters and feelings of isolation ($\chi^2(1) = 245.46$, $p < 0.001$, $r = -0.35$) with a similar trend found for friends ($\chi^2(1) = 191.83$, $p < 0.001$, $r = -0.33$). Lastly, a significant trend was also found between how many relatives recreational anglers feel that they could call them for help and feelings of isolation ($\chi^2(1) = 241.42$, $p < 0.001$, $r = -0.37$), with a similar trend being found for friends ($\chi^2(1) = 230.39$, $p < 0.001$, $r = -0.36$).

4. Discussion

This study examined trends between social support correlates and feelings of isolation in a cohort of male recreational anglers. The results of this study showed that the higher number of friends or family that anglers hear from and feel close to, the less likely they are to report lack of companionship, the less likely they are to report feeling left out, and were less likely to report feelings of isolation. These findings are in concurrence with previous studies that have found similar associations between social support and loneliness in general populations [6], however this is the first study to report these findings in a cohort of recreational anglers. The findings in this specific population are important in that recreational angling is often a solitary hobby/sport, and therefore feelings of loneliness may differ with this population. Our findings suggest this is not the case. Indeed, a significant proportion of this sample reported 'hardly ever or never' having feelings of lack of companionship, feelings of being left out, and feelings of loneliness, indicating that recreational fishing can have positive benefits to overall social wellbeing, or at the very least, not have detriments in overall wellbeing. Indeed, higher levels of social support has generally been reported to be associated with greater levels of wellbeing across several types of population,[8; 9;10]. A Turkish study of recreational anglers found that 65.2% of recreational anglers did so to be with friends, with 22.6% did so to be alone. Furthermore, they found that a key motivation for recreational anglers was to 'be happy'[11]. This, combined with the results of this study, add to the growing body of evidence to the potential positive benefits of recreational angling. Further studies should aim to compare anglers with non-anglers to determine if differences exist between the two populations.

Findings from this study should be interpreted in light of its limitations. Firstly, because of the cross-sectional nature of the study, and the impossibility of determining dependent and independent variables in the Mantel-Haenszel test, causal inference could not be determined. Future longitudinal cohort studies are now required. Secondly, the methods of recruiting the sample of recreational anglers could be open to potential selection bias. For example, the use of an online survey could exclude groups who are less likely to have internet access or access to social media. Therefore, populations on lower incomes, with lower levels of computer literacy and older adults, may be under-represented in this study. Thirdly, the study variables were self-reported and thus potentially introducing social desirability and recall bias into the study findings. Finally, very few females responded to the online survey and thus were removed from the present analysis. Future research in the female angling population is now required.

5. Conclusions

In conclusion, in the present study including a sample of 1,752 male recreational anglers from the UK it was found that who reported having more friends and family that they hear from, can call upon for support, and trust enough to talk about private matters are less likely to report feelings of lack of companionship, feelings of being left out, and feelings of isolation. Furthermore, a significant proportion of recreational anglers reported having very few feelings of lack of companionship, feelings of being left out, and feelings of isolation, despite having a sometimes solitary hobby. Future longitudinal cohort studies are now required before any concrete recommendations can be provided. Moreover, it would be prudent to repeat the present study in a representative sample of female anglers to elucidate on whether findings apply also to females.

Author Contributions: Conceptualization, MT;MT:LS;AT. Methodology, MT; validation, MT,MT,LS.; formal analysis, MT.; resources, AT.; writing—original draft preparation, MT.; writing—review and editing, all authors.; supervision, MT,LS.; All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki and approved by the Institutional Review Board of ANGLIA RUSKIN UNIVERSITY for studies involving humans.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study

Data Availability Statement: All data for this study is available from the corresponding authors upon reasonable request.

Conflicts of Interest: Andy Torrance is an employee of Angling Direct. All other authors declare no conflict of interest.

References

1. M. Gascon, W. Zijlema, C. Vert, M.P. White, and M.J. Nieuwenhuijsen, Outdoor blue spaces, human health and well-being: A systematic review of quantitative studies. *Int J Hyg Environ Health* 220 (2017) 1207-1221.
2. Statista, Angling participation England 2015-2021, 2022.
3. U. Government, Recreational angling puts £1.4bn into English economy, 2018.
4. M. Trott, L; Wilson, J. , Mental health and recreational angling in UK adults: a cross-sectional study. *Epidemiologica* (Under review).
5. M. Aartsen, and M. Jylha, Onset of loneliness in older adults: results of a 28 year prospective study. *Eur J Ageing* 8 (2011) 31-38.
6. A Kearns, E Whitley, C Tannahill, and A Ellaway. Loneliness, social relationships and health and well-being in deprived communities. *Psychology, health and medicine* (2015) 332-344
7. R.K. Lindsay, C. Carmichael, P.M. Allen, M. Fossey, L. Godier-McBard, L. Butler, M. Trott, S. Pardhan, M.A. Tully, and J.J. Wilson, Fishing Participation, Motivators and Barriers among UK Anglers with Disabilities: Opportunities and Implications for Green Social Prescribing. *International journal of environmental research and public health* 19 (2022) 4730.
8. J. Golden, R.M. Conroy, I. Bruce, A. Denihan, E. Greene, M. Kirby, and B.A. Lawlor, Loneliness, social support networks, mood and wellbeing in community-dwelling elderly. *Int J Geriatr Psychiatry* 24 (2009) 694-700.
9. M. Zeidner, G. Matthews, and D.O. Shemesh, Cognitive-Social Sources of Wellbeing: Differentiating the Roles of Coping Style, Social Support and Emotional Intelligence. *Journal of Happiness Studies* 17 (2016) 2481-2501.
10. S. Stronge, N.C. Overall, and C.G. Sibley, Gender differences in the associations between relationship status, social support, and wellbeing. *Journal of Family Psychology* 33 (2019) 819.
11. F. Ardahan, and T. Turgut, Motivational factors for recreational fishing, the profile and life satisfaction level of recreational fishers and nonparticipants of fishing in Turkey. *Turkish Journal of Sport and Exercise* 15 (2013) 58-72.