

FEBRUARY 03 2026

A survey of the community impact of pickleball noise: A pilot study

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Proc. Mtgs. Acoust. 60, 040001 (2025)

<https://doi.org/10.1121/2.0002238>



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Noise: Paper 1pNSc5**A survey of the community impact of pickleball noise: A
pilot study****Kathleen M. Romito***Scientific Advisory Board, Quiet Communities, Inc., Lincoln, MA, 01773, USA; kathleen@romitoresearch.org***Jamie Banks***President and Founder, Quiet Communities, Inc., Lincoln, MA 01773, USA; jamie@quietcommunities.org*

As pickleball grows in popularity, pickleball noise in residential settings is increasingly recognized as a potential acoustic intrusion and health hazard to neighbors. Current recommendations for appropriate mitigation are currently based on expert opinion from sound professionals and industry leaders. While expert recommendations have provided valuable guidance, a lack of publicly accessible data—particularly from those living near the courts—can present a challenge for local decision makers, who must balance the harm resulting from pickleball noise with the interests of a growing player base. This study aims to help fill that gap through a survey of residents living within 1000 feet of public, club-operated or homeowners association (HOA)-managed pickleball courts. Survey questions gathered data on the number of courts, exposure duration across time, sound levels, the existence of mitigation means, and the respondents' current levels of annoyance, disturbance, and/or other harms. This research on the lived experience of communities is essential to evidence-based decision making that protects the health and well-being of the neighboring residents while also providing the desired access to pickleball recreation.

1. INTRODUCTION

Pickleball is an increasingly popular racquet sport played with hard paddles and plastic balls that produce loud “pops.” These repetitive impulse sounds introduce a new and distinctive source of unwanted and potentially harmful noise in residential environments, exposing residents living near busy courts to thousands of sharp “pops” each day. An audio recording of the noise from 4 pickleball courts can be heard at <https://doi.org/10.5281/zenodo.15566001> (1).

In 2024, 18,455 new courts were built in an estimated 4,000 new locations (2). As new courts are constructed, pickleball noise is disrupting the soundscape in residential areas, leading to conflicts and complaints. One Google Map identifies more than 500 pickleball noise hotspots across North America (3). The issue has been covered in hundreds of news reports, generated countless social media posts, and led to approximately 200 legal claims in the United States (4).

Although local decision makers and acoustic professionals responsible for decisions regarding court locations usually understand the health and social benefits of pickleball recreation, they are less likely to be familiar with the potential harm to residential neighbors who are chronically exposed to pickleball noise. A previous content analysis of self-reported health concerns linked to pickleball noise found significant issues amongst residents exposed to chronic pickleball noise, including trauma-like symptoms, phantom sounds (pops), and severe psychological distress (5).

This pilot study aims to better understand the impacts of pickleball noise on the lives and health of community members who are exposed and to inform guidelines for court locations and noise mitigation strategies.

2. METHODS

A. SURVEY DEVELOPMENT

An eighteen-question online questionnaire was developed using Survey Monkey (SurveyMonkey Inc, San Mateo, CA; www.surveymonkey.com). The survey questions were drafted based on scientific literature on the effects of noise and on impacts reported by affected community members. The draft survey underwent face validation with a focus group, was revised accordingly, and submitted to an ethics committee for approval.

The first ten questions focused on the respondent's zip code location and details of the physical arrangement of the courts located nearby, including geographic features and existing noise mitigation measures. Participants were instructed to estimate the distance between their residence and the courts using Google Earth or by pacing the distance, with each step approximating three feet. The remaining eight questions addressed the nature and severity of the impacts experienced, as well as respondents' concerns about their noise exposure. Free text comments were permitted in Questions 3, 6, 7, and 10-18 without restrictions on the number of comments. Open-ended responses for questions 11 & 12 were analyzed using thematic analysis. Responses were coded, grouped into categories, and synthesized into higher-order themes reflecting common experiences and perspectives. No demographic information was requested from respondents.

B. SURVEY SAMPLE AND DISTRIBUTION

The survey was open for three weeks in September–October 2025. The survey was directed at individuals who currently live, formerly lived, or anticipate living within 1000 feet of pickleball courts. “Exposed” individuals are defined as those respondents who currently live or have lived near courts and who hear or have heard chronic pickleball noise. Respondents were instructed to submit one survey only. Duplicate responses from the same device were not allowed and IP addresses were scanned for multiple responses.

To recruit neighbors with both ongoing concerns as well as successfully resolved concerns, two acoustic firms that regularly address pickleball noise were invited to share the survey with past clients. Four community advocates were invited to distribute the survey link to community members who had previously reached out to them regarding pickleball noise. The survey was also posted on two Facebook groups: Pickleball Noise Relief (focused on affected neighbors) and Pickleball Sound Mitigation (administered by an acoustic firm, focused on finding technical solutions). The author also posted messages in each group soliciting successful noise mitigation experiences.

C. ANALYSIS

For this paper, survey responses were analyzed using descriptive statistics only. A detailed statistical analysis is underway to determine the contribution of co-variables, such as distance from courts and duration of noise exposure, on the impacts of pickleball noise on the lives and health of the surrounding residents.

3. RESULTS

A. SURVEY RESULTS

Within the three-week open survey period, 440 responses were received from 264 communities, 229 of which were from the United States, evenly distributed across the North, South, East, and West. In four zip codes, there were two distinct locations (i.e., sets of courts) where noise concerns occurred. International responses came from 29 postal codes in Canada, and from one postal code each in Australia and New Zealand.

Three hundred eighty-six of the 440 surveys received were from community members who were exposed to pickleball noise in their neighborhood, either presently or in the past. Thirty-three of the survey participants reported that courts were planned nearby, 11 reported they had never lived near existing or planned courts, and 10 declined to state whether they had lived near courts (Question 2). Overall, 87.7% of respondents met the study's definition of "exposed" individuals. Fifteen submissions were received from respondents living more than 1000 feet from courts and their responses are included in the results.

Results from exposed respondents were analyzed and described in the following tables: the physical characteristics of courts (Tables 1–2), amount of exposure (Table 3), acoustic and non-acoustic factors affecting the experience of the sound (Table 4), annoyance (Tables 5, 6, 7), interference with daily activities (Figures 1–5), consideration of moving (Figure 6), and health concerns (Figure 7). The remainder of the questions were analyzed using all community responses.

The physical characteristics of the neighborhood courts are shown in Table 1 and the presence of noise mitigation currently in place is shown in Table 2.

Table 1. Characteristics of pickleball courts

Q3. Type of courts (n=365)		Q4. # of courts (n=383)		Q5. Setback distance (n =385)		Q6. Geography (n=302)	
Public	220 (60.3%)	1	23 (6.0%)	<100 ft	167 (43.4%)	Home above courts	139 (46.0%)
HOA*	92 (24.9%)	2-4	229 (59.8%)	100-300 ft	119 (30.9%)	Body of water	15 (5.0%)
Private/Club	33 (9.0%)	4-8	92 (24.0%)	300-500 ft	46 (11.9%)	Geography focuses noise	65 (21.5%)
Neighbor	21 (5.8%)	>8	39 (10.2%)	500-1000 ft	38 (9.9%)	None	114 (37.5%)
				>1000 ft	15 (3.9%)		

*Homeowner Association

Table 2. Existing noise mitigation (n=374)

Thick vinyl sound barriers	57 (15.2%)	Mesh netting	70 (18.7%)
Limited hours, recommended	66 (17.7%)	Limited hours, enforced	31 (8.3%)
Quiet paddles, recommended	54 (14.4%)	Quiet paddles, enforced	5 (1.3%)
Quiet balls, recommended	45 (12.0%)	Quiet balls, enforced	6 (1.6%)
No mitigation in place	172 (46.0%)		

*Multiple responses allowed

Qs. 8, 9. What is the duration of exposure to pickleball noise? While some courts are used only occasionally, many public courts—due to pickleball's popularity—are in near-constant use from daybreak to sunset. The addition of lights, in some situations, can extend the hours of play into the late-night hours. Pickleball is a relatively new sport and most respondents have less than 5 years of exposure to the noise. See Table 3.

Table 3. Exposure to pickleball noise

Hours per week, courts open (n=379)	Responses (%)	Years of exposure (n=382)	Responses (%)
<30 hours per week	32 (8.4%)	< 1 year	41 (10.9%)
30-50 hours per week	50 (13.2%)	1-3 years	162 (43.1%)
50-70 hours per week	76 (20.1%)	3-5 years	119 (31.6%)
>70 hours per week	221 (58.3%)	>5 years	54 (14.4%)

Q10. Which of the following can be used to describe your experience with pickleball noise? While 2/3 of respondents described the noise as loud, almost 90% described the noise as repetitive pops or clicks. Almost 3/4 of participants reported being able to hear the noise inside their home or office and almost 2/3 reported being exposed to nighttime pickleball noise. Nearly half of all residents reported experiencing harassment from pickleball players after raising concerns about the noise. Several respondents further described incidents involving “assault,” “threats,” or “being accosted,” and at least three indicated that police involvement was required.

Table 4: Acoustic and non-acoustic factors affecting residents' experience of the sound (n=384)

Acoustic Factors: How Residents Describe the Sound	Responses (%)	Non-Acoustic Factors: How Residents Experience the Sound	Responses (%)
Repetitive (e.g., pops, clicks)	377 (88.1%)	Noise heard inside home or office	316 (73.6%)
Chronic	286 (66.8%)	Being ignored by decision makers	280 (65.4%)
Loud	282 (65.9%)	Courts visible from home	275 (64.3%)
Unpredictable	254 (59.4%)	Noise during the night, 6 pm-8 am	274 (64.0%)
Intermittent	189 (44.2%)	Harassment from pickleball players	203 (47.4%)

*Multiple responses allowed

Q11. Does the word “annoyance” adequately describe your experience of pickleball noise? (n=358)

While the term “annoyance” is used by acousticians to define a sound problem that requires a remedy, lay people, including local decision makers, more often use the term to describe an irritant, without the implied need to remedy the situation. More than half of respondents reported “no” when asked if the word “annoyance” was adequate to describe their experience. Of the twenty-eight (7.5%) respondents who skipped the “yes/no” question, 26 left comments describing their experience as more than an annoyance using phrases such as “tortuous”, “unbearable”, and the “popping sound triggers PTSD from the military”. Their responses are included as “no” in the table below. See Appendix, Table A1.

Table 5. The word “annoyance” adequately explains the experience of pickleball noise (n=386)

The word “annoyance” adequately explains the experience	Respondents (%)
Yes	157 (40.7%)
No	229 (59.3%)

A total of 206 respondents provided an open comment to the question about the adequacy of the term “annoyance,” with nearly 2/3 of them communicating severe psychological or emotional distress, mirroring the 26 comments from those who did not answer the structured question. See Appendix, Table A2.

Q12. How often does the issue of pickleball noise interfere with your ability to do the following activities? Most respondents reported that pickleball noise either often or constantly interferes with the ability to be mindful, enjoy their home, communicate at home, or work productively (Fig 1-4). Almost half report it often or constantly interferes with sleep (Fig. 5)

How often does the noise affect your ability to:

Fig.1 Be mindful, rest, be calm or think (n=377)

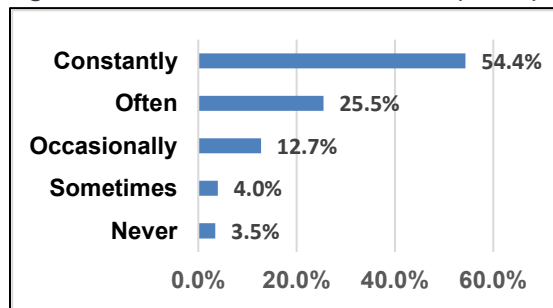


Fig.2 Enjoy indoors/outdoors at home (n=374)

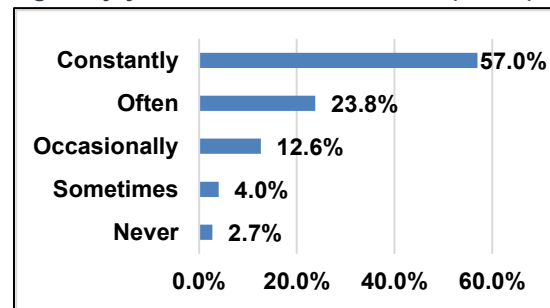


Fig.3 Talk, socialize, do activities at home (n=368)

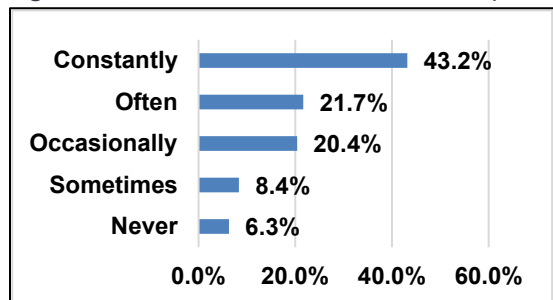


Fig.4 Concentrate or work productively (n=364)

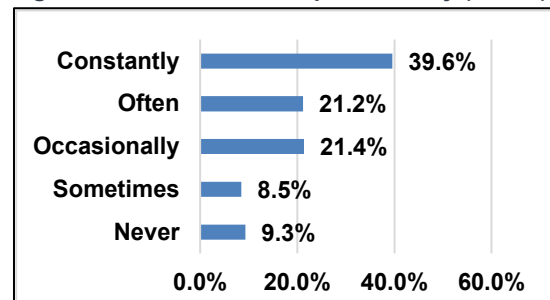
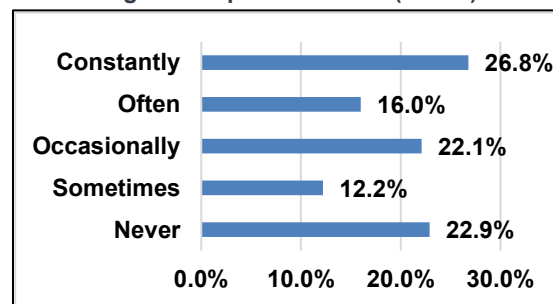


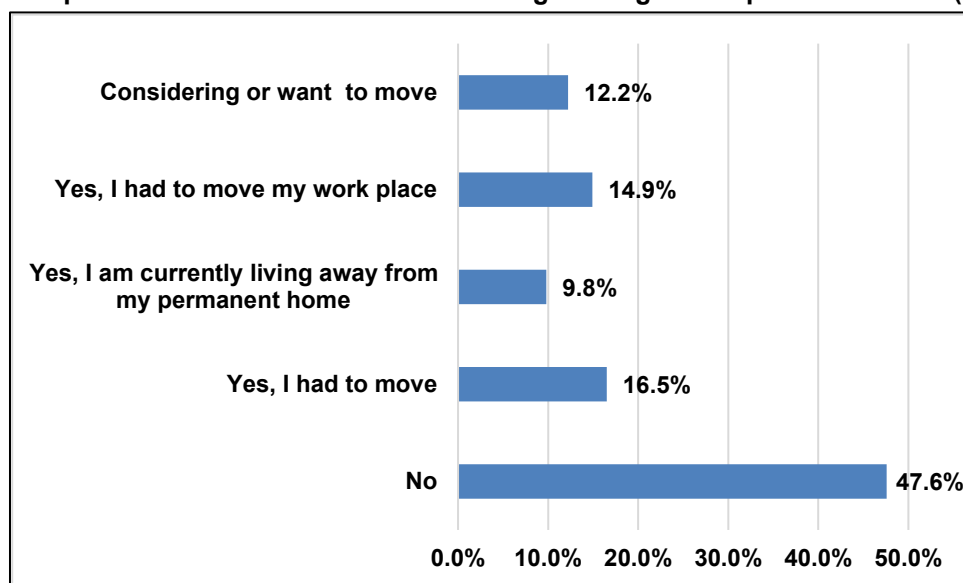
Fig.5 Sleep undisturbed (n=362)



Open ended comments from 84 respondents further describe disruption of rest, well-being, and quality of life among those exposed to pickleball noise. See Appendix, Table A3.

Q 13 Have you had to significantly modify your life because of pickleball noise? 226 of 386 participants responded to the given response options. Of the remaining 160 (41.5%), 31 provided open-ended comments that expressed a desire to move with some unable to and others considering or preparing to move. These responses are included in the results below. More than half of the respondents reported either having to move or wanting to move. See Figure 6.

Fig 6. Proportion who moved or are considering moving due to pickleball noise (n=257)



Q14. What feelings best describe your response to pickleball noise? Almost all respondents reported at least one type of negative emotional response to pickleball noise. Frustration, feeling anxious/agitated, stress, and feelings of powerlessness were all reported by more than 2/3 of respondents. See Table 6.

Table 6. Emotional responses to pickleball noise (n=418)

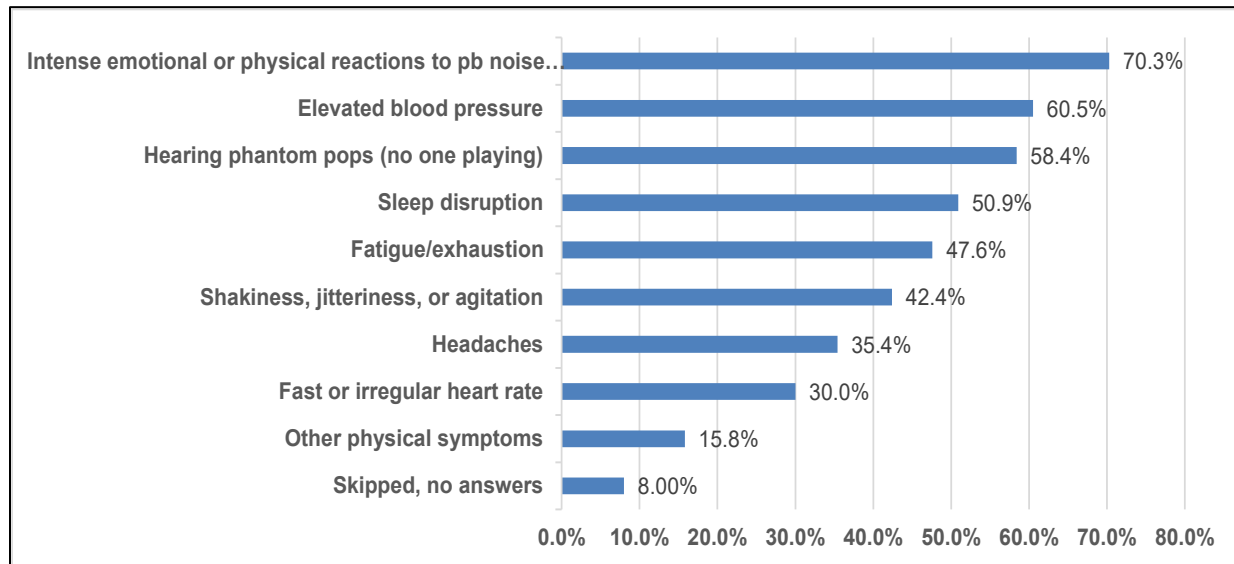
Feelings	Responses (%)
Frustration	343 (82.1%)
Stress	312 (74.6%)
Feeling of Powerlessness	302 (72.3%)
Anxious/Agitated	302 (72.3%)
Anger/Rage	269 (64.4%)
Resentment	265 (63.4%)
Hopeless	186 (44.5%)
Depressed	151 (36.1%)
Fear	75 (17.9%)
No strong feelings	19 (4.6%)

*Multiple responses allowed

65 respondents left additional comments, reflecting the above themes. One commenter reported “feeling suicidal” and another was so enraged they thought they would “end up in prison due to violence”. Many reported trauma-like responses using descriptive terms such as “trauma”, “torture”, and “PTSD.” One respondent commented, “It honestly made my PTSD from my military service much worse. The constant high pitch in a random and irregular pattern was just nerve-racking all the time inside and outside my home”.

Q15 What concerns do you have about the possible effects of pickleball noise on your health or that of your family members? More than 90% of all respondents reported at least one health concern. More than 2/3 of respondents reported intense emotional or physical reactions to pickleball noise or its reminders. See Figure 7.

Figure 7. Health concerns from pickleball noise (n=393)



*Multiple responses allowed

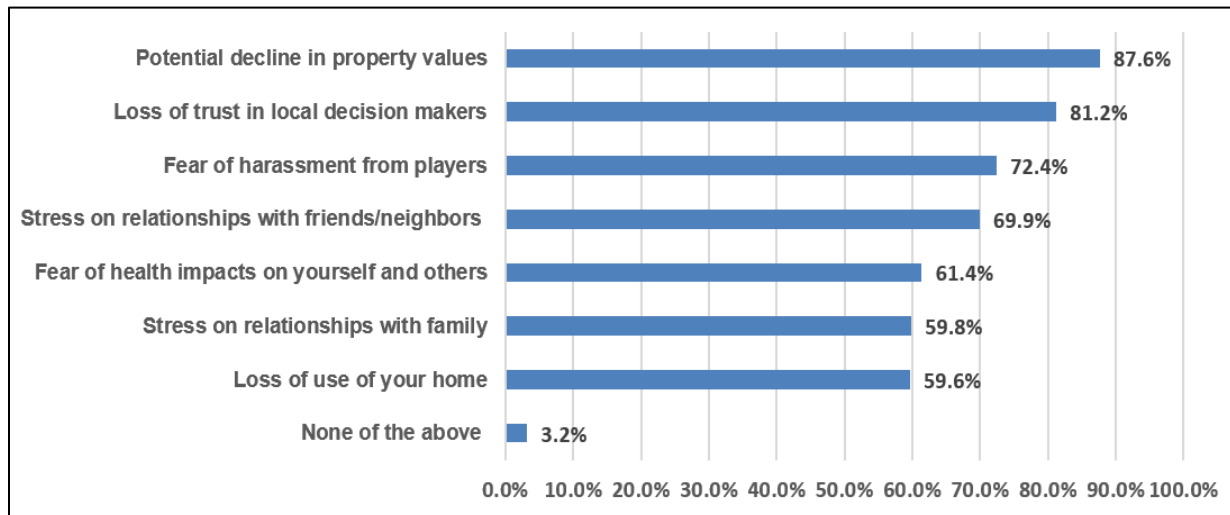
Q16. How concerned are you about the impacts of pickleball noise on your community? More than half of the community reported being extremely concerned about the impact on each of the following: children or infants, seniors, veterans or others with PTSD, and people with learning disorders, neurologic disorders, or other disabilities. See Table 7.

Table 7. Level of concern about specific impacts on community from pickleball noise (n=430)

Answer choices	Not concerned	Not very concerned	Moderately concerned	Very concerned	Extremely concerned
Impact on children or infants	42 (11.7%)	25 (7.0%)	56 (15.6%)	50 (13.9%)	186 (51.8%)
Low income and/or minority populations	87 (26.1%)	36 (10.8%)	61 (18.3%)	38 (11.4%)	111 (33.3%)
Effect on environmental quality and ecosystems	29 (7.9%)	20 (5.4%)	59 (16.1%)	69 (18.9%)	189 (51.6%)
Impact on seniors, especially those with pre-existing conditions	20 (5.4%)	9 (2.4%)	36 (9.7%)	66 (17.7%)	242 (64.9%)
Impact on veterans or others with PTSD	22 (6.2%)	15 (4.3%)	36 (10.2%)	47 (13.3%)	233 (66.0%)
Children and adults with learning and/or neurological disorders, e.g., autism, sensory deficit disorders	27 (7.7%)	18 (5.1%)	43 (12.2%)	56 (15.9%)	208 (59.1%)
Children and adults living with disabilities	34 (9.6%)	16 (4.5%)	52 (14.7%)	53 (15.0%)	198 (56.1%)

Q 17. What other impacts of pickleball noise concern you? Property values, fear of harassment and health impacts and stress on relationships both with family members and within the community were all areas of significant concern to the respondents, with more than 60% of respondents indicating a concern for each issue. See Figure 8.

Figure 8. Other concerns about impact of pickleball noise (n=435)



*Multiple responses allowed

Q18. Are there any other details about your experience that you think are important to know? 280 open-ended responses to this question were received and mirrored the hundreds of other open-ended responses received to the above questions.

B. SURVEY RESULTS ON NOISE MITIGATION STRATEGIES

Physical sound barriers, quiet paddles and balls, and setbacks from homes are often recommended by acoustic professionals. The authors have not found any published research regarding the effectiveness of these strategies that include input from residents living near courts. A limited descriptive analysis is provided below. A detailed statistical analysis is underway to determine the contribution of co-variables, such as noise mitigation strategies and duration of noise exposure, to the impacts of pickleball noise on the well-being of the surrounding residents and will be the subject of a separate manuscript.

I. VINYL SOUND BARRIERS

Sixty-seven respondents reported that their local courts have thick vinyl sound barriers with setbacks ranging from less than 100 feet to more than 1000 feet. Sixty-one of these respondents provided comments, of which almost all (n= 59, 96.4%) suggested the barriers are not adequately addressing the noise problem.

II. SETBACKS

About 1 in 8 respondents (53) report living more than 500 feet from courts. A significant proportion of this group reports a notable impact on their ability to be mindful (n=31, 62%), enjoy being indoors/outdoors at home, (n=31, 62%), or communicate/socialize at home (n=22, 46%). Almost half of this group said the term “annoyance” is not adequate to describe their experience of pickleball noise (n=24, 49%). Almost 2/3 of this group report concerns about intense emotional or physical reactions to pickleball noise or its reminders (n=27, 65.9%) and almost half report concerns about high blood pressure (n=20, 48.8%).

III. QUIET EQUIPMENT

Six respondents reported that playing with quiet balls was enforced at their neighborhood courts. All six had homes located within 100 feet of courts. Only one commented “no impact on daily activities”. The other five reported “a nightmare”, “tortuous”, “it has ruined the enjoyment of our home”, “unbearable annoyance”, and “abusive noise”.

4. DISCUSSION

The results of this pilot survey show that pickleball noise has a substantial impact on the health and well-being of people in the nearby community.

A. ACOUSTIC AND NON-ACOUSTIC FACTORS

Characteristics other than decibel levels can affect human response to noise; for example, frequency (in Hz), number of noise events, and impulsivity (6,7,8,9). Pickleball courts can generate up to 900 pops per court per hour, with four busy courts producing over 35,000 pops per day in irregular patterns at ~1,200 Hz—a frequency to which the human brain is highly sensitive. Respondents highlight that it is “not just decibels.” A higher percentage of respondents described the sound as *repetitive pops* compared with *loud* (88% vs 66%, respectively).

More than 3/4 of respondents reported possible exposure to the noise for more than 50 hours per week. Although courts may not be in constant use, residents emphasized the uncertainty of when play might begin, an anticipatory stressor that prevents relaxation. Nearly 90% have lived near active courts for more than one year. While it is commonly believed that noise tolerance increases with continued exposure, research suggests that in some situations, annoyance increases with extended exposure (10).

Non-acoustic factors unrelated to the physical, measurable characteristics of a sound, such as social context and stress have been found to explain up to 1/3 of the variance in noise annoyance (11). Examples from this survey include being able to hear the noise inside one’s home, reported by almost 3/4 of respondents. Another is the harassment from pickleball players after speaking up about the noise, reported by nearly half of all respondents. These results underscore the importance of considering factors other than decibels when evaluating the human response to pickleball noise.

B. IMPACTS ON DAILY LIFE

For many respondents, the noise has severely disrupted daily life and caused significant stress. Most residents report being impacted constantly or very often. People report being unable to enjoy their homes, gardens, or outdoor spaces, and many have altered routines or even relocated to avoid the noise. Comments frequently describe an ongoing sense of intrusion— “*I cannot think, I cannot concentrate, I can’t do anything in my house*” and a feeling that they are being driven indoors or away from home.

Some report major life decisions such as delaying retirement or giving up hobbies, because of the noise. Over half of respondents have either already moved, want to move, or have moved part time from their home, due to the noise. These experiences are clearly very stressful and clearly meet common definitions of an environmental nuisance: interference with the comfortable enjoyment of life or property.

C. HEALTH CONCERNS AND PHYSIOLOGIC STRESS RESPONSE

The high level of concern over the impact of pickleball noise on health and the reports of specific impacts, e.g., elevated blood pressure, sleep disturbance, anxiety and jitteriness, are consistent with extensive scientific evidence on the ability of noise to trigger the body’s stress response. Noise stimulates the amygdala and activates the autonomic nervous system leading to inflammation and oxidative stress, resulting in damage to the vascular endothelium (12). Chronic activation of the stress response increases the risk of cardiovascular, cerebrovascular, and metabolic harms as well as of mental health disturbances like anxiety and depression (13,14). In addition to these non-auditory impacts, the reported concern by well over half of respondents over “phantom pickleball pops,” i.e., hearing sound in the absence of play, may represent a trauma-related reactivity or a form of noise-induced tinnitus. It is reported that these

phantom sounds may cause sleep disruption and, for some, have lasted for weeks or months after moving away (5).

The potential for pickleball noise to trigger trauma-like responses warrants further consideration. Previous research found that a self-reported sense of trauma, feeling tortured, and/or severe distress was noted frequently by people who spoke publicly about their concerns with pickleball noise (5). More than 2/3 of survey respondents reported intense emotional or physical reactions to pickleball noise or its reminders—a measure designed to assess trauma-like symptoms. Evidence for this possibility is further supported by the finding that 2/3 of respondents expressed extreme concern about the effects of pickleball noise on veterans and individuals with PTSD, the highest concern among all vulnerable groups. Such trauma-like responses may arise when individuals or communities face persistent, uncontrollable, and distressing noise that overwhelms coping capacity, leading to chronic distress, hypervigilance, or sleep disruption.

D. COMMUNITY LEVEL IMPACT

Significant community and social disruption was reported in relation to pickleball noise, with a majority reporting stress on relationships with neighbors, friends, and relatives. Fear of harassment from pickleball players and a loss of trust in local decision makers, reported by most respondents, are factors that exacerbate disruption of community and social relationships.

Beyond individual effects, respondents describe broader concerns for the community. Significant majorities expressed concern for other vulnerable groups, including children and infants, children and adults with disabilities including neurologic and cognitive issues, as well as the elderly.

E. ROLE OF MITIGATION

Current guidance, based on expert opinion, has suggested that full relief is unlikely within 100 feet of active courts, and significant multi-faceted mitigation is needed within 400 feet (5). Most respondents in this survey live within 300 feet of courts which might suggest that the impacts are greater closer to courts.

However, preliminary results suggest that while proximity may increase the percentage of people affected, meaningful impacts persist for residents living at even greater distances from the courts. Initial results also suggest that current implementation of various mitigation techniques, including quiet paddles/balls or sound barriers, may not provide adequate relief in many situations.

Further statistical analysis is needed to better understand the multifactorial relationships between setbacks, geography, mitigation, and duration of exposure and how these factors affect the significant impact currently being reported by many residents.

F. LIMITATIONS

Purposeful sampling, used in this pilot study, is commonly used in exploratory and early-stage environmental health research to document the existence of a new problem and characterize the range of responses. Given inherent response bias, typical in surveys of this type, participation was likely weighted toward those most impacted. Additionally, two experienced acoustics firms were invited to share the survey with their clients to solicit examples of successful implementations. One firm declined to participate, although it allowed the survey to be posted on its Facebook page. As a result, the pool of potential success cases may have been reduced, which may have increased bias. Random sampling is not included in this methodology but can be used in subsequent studies to help measure the prevalence of concerns.

The survey underwent face validation but no other psychometric testing. The study relied on self-reported data, and no objective measurements were collected to validate respondents' estimates of factors such as distance from courts, duration of exposure, or noise intensity.

Statistical analyses are ongoing and not included in the current paper; the lack of demographic data (e.g., age, gender, time spent at home) prevents assessment of potential variation across population subgroups.

G. POLICY IMPLICATIONS

As pickleball continues to grow in popularity, acoustic professionals and local policy makers must be made aware of the potential negative impacts on pickleball noise on the daily lives, health, and well-being of surrounding community members. For many, the effects extend beyond simple annoyance. Decisions about appropriate court locations must rely on factors that are meaningful to the lived experience of communities. In addition to assessing loudness (e.g., decibels), other characteristics of the sound must be considered including impulsivity, number of noise events/day, and total duration of exposure. It is equally critical to account for non-acoustic factors that shape human perception of noise such as the intrusion of sound into the interior of the home and the presence of social conflict. A framework for planning and zoning that incorporates these considerations has been proposed (15), but further development and broader dissemination of evidence-based guidelines for court siting and mitigation strategies are needed.

5. CONCLUSION

Survey responses from 264 communities show that pickleball noise has a substantial impact on nearby residents. Residents describe both loss of enjoyment of home and property from chronic noise exposure and significant health concerns consistent with a physiological and psychological noise-induced stress response. Municipalities and local leaders tasked with providing opportunities for pickleball recreation are also responsible for protecting the well-being and health of neighbors living in proximity to pickleball courts. Evidence-based guidelines are needed to help guide these decisions.

6. ACKNOWLEDGEMENTS

The authors gratefully acknowledge the assistance of Rob Mastroianni, Nalini Lasiewicz, Lance Willis, and Pickleball Sound Mitigation.

7. APPENDIX

Table A1. Comments from the respondents who skipped the “annoyance” question (Q.11, n=26))

<i>The popping sound triggers PTSD from the military</i>	<i>Racquet noise and yelling</i>	<i>Tortuous</i>
<i>Aggressive, oppressive</i>	<i>Irritating, impulsive</i>	<i>Anxiety trigger</i>
<i>Daily torture</i>	<i>Disturbing</i>	<i>Constant nightmare</i>
<i>I flinch</i>	<i>Unwanted noise</i>	<i>Nuisance against our covenant</i>
<i>Unbearable</i>	<i>Obnoxious</i>	<i>Noise piercing</i>
<i>Worse than annoyance, health risk</i>	<i>Unbearable</i>	<i>Absolute torture</i>
<i>Annoyance + health impact</i>	<i>Tortuous</i>	<i>Extremely annoying, disruptive</i>
<i>Torturous</i>	<i>Difficult to have a conversation</i>	<i>Drives a person crazy</i>
<i>Stressful</i>		<i>Enjoyment, exercise</i>

Table A2. All open comments to the question about “annoyance” (Q.11, n=206)

Category	% of total	Representative Comments
Severe psychological distress emotional distress	65.0%	<i>“Psychologically damaging is more like it!”, “auditory assault”, “Sonic harassment or torture”, “Absolute torture”, “CRIMINAL ASSAULT”, “soul destroying”, “abusive”</i> <i>“Painful, PTSD inducing, nails on chalkboard”.</i>
Impacted quality of life	23.3%	<i>“It sounds dramatic, but it affects my quality of life.”</i> <i>“It has ruined the enjoyment of our home”,</i> <i>“It is impossible to live in our home”, “I think nuisance is better word.”</i> <i>“I would call the sound maddening. Have to go inside.”</i>

Impacted health	8.7%	"We both have been diagnosed with health issues due to the noise", "Documented health risk affecting each family member differently "Mental health and overall well-being was extremely affected to the point of a breakdown."
Positive or neutral	2.9%	"Joy, fun", "Enjoyment, exercise"

Table A3. Open comments to question about interference with daily activities at home (Q12, n=84)

Category	% of responses	Representative comments
Impacted daily activities	58.3%	"Stopped playing outside with my child", "I cannot think, I cannot concentrate, I can't do anything in my house", "We are retired so forced to leave our house on a daily basis multiple times a day", "Interferes with my ability to read, converse with my spouse, work in my yard, use the front half of my house for anything at all"
Stress and/or health effects	13.1%	"Anger", "Blood pressure risen", "Hallucinations", "It's nerve wracking and it's impossible to relax" "I'm now triggered just by the mention of the P word"
Sleep disturbed	11.9%	"We cannot sleep in the master bedroom". "Even when they are not playing, you wake up in the night thinking you hear it"
Coping	8.3%	"Fighting court expansion near my home is a part time job", "You man up and do what you have to"
Other	8.3%	"Traffic"

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