



Pickleball noise: The role of non-acoustic factors in community annoyance

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Background

Noise disruptions from pickleball courts in residential areas have sparked widespread conflicts. While sound level (i.e. decibels) is important, other acoustic factors such as impulsivity, frequency, and number of noise events play a role in the adverse human impact of pickleball noise. However, even when considering the full spectrum of acoustic measurements, sound assessments which evaluate only acoustical factors are failing to capture the full scope of community impact.

Non-acoustic factors are factors that affect the human perception of sound but are not measurable qualities of the sound itself. The importance of non-acoustic factors is highlighted in the recent International Standards Organization Technical Specification (ISO-16755-1), published in June 2025 (1). Non acoustic factors are rarely reported in pickleball sound studies and the role of these non-acoustic factors in pickleball conflicts and annoyance has not been previously investigated. .

This study seeks to better understand the impact of pickleball noise on nearby residents by evaluating the role of non-acoustic factors with pickleball noise.

METHODS

- Neighbors affected by pickleball noise have provided a wealth of personal accounts describing non-acoustic factors that have emerged as a result of chronic exposure to the noise.
- Between 2023 to 2025, the authors closely monitored news reports, social media podcasts, Zoom broadcasts of public meetings, and legal filings pertaining to pickleball noise
- Findings were evaluated in the context of the recent ISO specifications on non-acoustic factors that influence the human response to noise.



RESULTS

Representative qualitative examples from public sources demonstrate examples of each type of non-acoustic factor.

1.Negative impact on daily activities Residents living near courts frequently note that their regular daily activities are significantly limited by exposure to the noise. Courts are located as close as 11 feet to homes (Barbera). Additionally, play on public courts can start as early as 6 am and continue until as late as 10 pm. The impact of pickleball noise on activities within homes located near to courts is described

The harsh and disturbing noise from pickleball play enters my home, 11 hours per day, 7 days per week, 365 days a year.
[Ball, Facebook 2023](#)

The noise has prevented Plaintiffs from reading in peace, having conversations with guests, resting during the day walking in their garden, having social daytime gatherings, and performing professional work in their home. Barbera v. City of Newport, RI 2024

This means that nearly 70% of the Plaintiffs waking hours are potentially subject to the constant barrage of impulsive noise, leaving them less than one-third of their conscious tie to conduct activities requiring concentration, engage in conversation, or simply enjoy peace in their home without interruption. Dougherty v City of Boise 2025

2. Perceived unfairness is common theme with pickleball noise, with residents expressing a sense of injustice when smaller number of residents living near courts face the much larger population of players, and the desire for recreation seems to outweigh the right to be able to enjoy their homes in peace

"It's absurd that we're all barricading ourselves in our homes"
[Knudson Facebook 2025](#)

When presented with this clear evidence of community concern, the director of Parks and Recreation, Doug Holloway, dismissively said "that just doesn't matter to me". Dougherty vs City of Boise

I have a feeling that the Board will allow PB play...There are roughly 290 residences in our HOA, but the courts only affect about 20 units.
[Stern, Facebook, 2024](#)

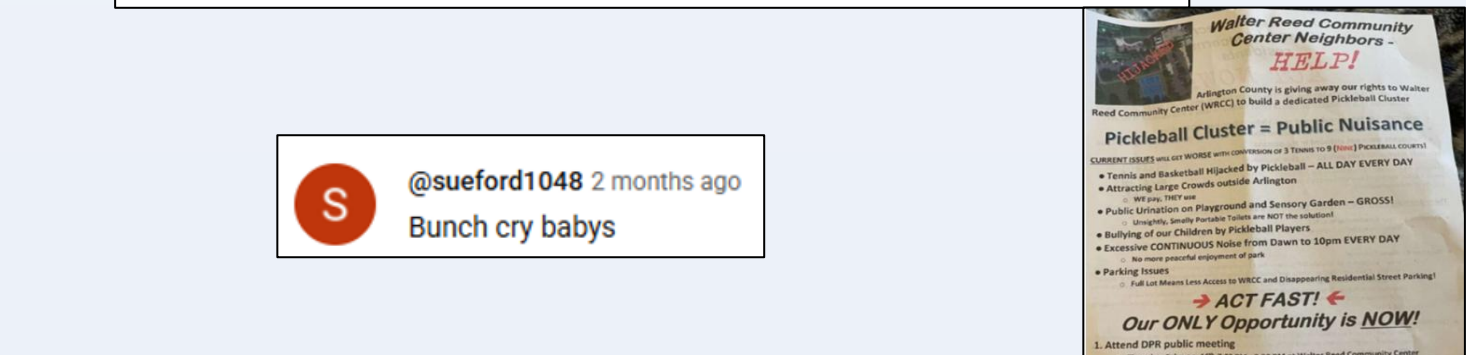
@jonnickels9027 2 months ago
I dont play pickleball , but i think these home owners need a crying towel . The needs of the many outway the needs of the few .

3. Social conflict arises when residents living near the courts experience denial of facts, minimization of their concerns, or harassment and threats from others in the community for speaking out.

Pickleball Noise Relief
12 weeks ago · 347.2K views
507
In a video posted to Pickleball Noise Relief, a small support group on Facebook, the resident shares her experience saying "this is what I listen to from 7 am-9 pm, 7 days a week". It was reposted on The Dink Pickleball site, a site for pickleball enthusiasts, where it garnered almost 350,000 views. Some of the collected comments are below. [video link](#)



@davidmelendez11 4 months ago
There is no noise problems just dumb ass karens complaining! Move if you don't like it!



@DavidFry ✓ 1 month ago
You might want to look into how much being an entitled busybody can raise your cortisol levels. You may want to consider mindfulness meditation as a way to get a grip.

"Pickleball players have been intimidating kids off of the concrete so they can set up their Pickleball nets and start playing. In some cases, people have been called "a-hole", yelled at in front of children, and they have used their paddle to scoot children our of the way. Wittich, [Block Club Chicago 2023.](#)

4. Loss of perceived control Perceived control (locus of control) describes whether people see outcomes as driven by their own actions or by external circumstances. Popular public courts may open as early as 6 am, remaining busy until as late as 11 pm. There is no on/off button for residents nearby. People are wearing noise canceling headphones in their homes, replacing windows at extravagant cost, and leaving their homes for hours or days at a time.

So, these people are suffering through the equivalent of an alarm going off every 8 seconds for 10 of their 16 waking hours. The difference being of course that you can turn off an alarm clock. No one in these neighborhoods can turn off the popping sound of the pickleball courts. [Flamm, The Dink Newsletter, 2024](#)

5. Fear of negative health effects or of harassment, if they choose to speak out, can lead to anxiety, activation of the amygdala fight or flight stress response.

Who doesn't want to speak out... It's an elderly person who does not want to disagree with anyone. It's anyone feeling vulnerable or fearful of the mob of picklers. Anyone who is in a position of dependency.... Parents protecting their kids that identify as lgbtq and do not want the added burden of attention. Neighbors who are in a subservient position to community leadership.
[Mastroliaanni, Facebook 2025](#)

"It's a serious thing when you hear things which are not real," Scafesi said. [Saunders, Niagara Now, 2023](#)

[Mastroliaanni](#)

6.Loss of trust in authorities is mentioned frequently. Authorities are seen as having created the problem in the decision to build the poorly sited courts , as ignoring residents when they rais concerns, and even undermining local rules to assist pickleball players get access.

"Labor Day, Monday September 5, 2022, when the courts were locked, the pickleball players climbed the fence in order to play pickleball, thus creating noise and trespassing on the locked City courts, until, later in the day, when Marty Weinberg, the San Clemente pickleball ambassador, called Beaches, Parks, and Recreation Director Samantha Wylie.

Ms. Wylie "located a key" and personally unlocked the courts. When asked by Plaintiff where she got the key on a holiday, Ms. Wylie refused to answer". (Martin v. City of San Clemente, 2023

"My nerves are frayed from the piercing noise activating my flight or fight response... it's negatively affecting my daily functioning and my overall quality of life. The lack of responsible action by the authorities to enforce the law as well as the ongoing harassment by pickleball fanatics is making it so much worse" (emphasis added).
[Mana, Facebook, 2025](#)

DISCUSSION

An effective approach to pickleball noise must address both acoustic and non-acoustic dimensions. Traditional factors—sound level, impulsivity, and frequency—describe the acoustic environment but cannot fully predict community response. Decibels alone explain only about one-third of noise annoyance (2,3).

Additional influences arise from the context, the non-acoustic factors that are not measurable with traditional acoustical tools, that shape how residents experience sound. ISO 16755-1 states that these factors may explain up 1/3 of the variance in annoyance (1). Given the significant social context with pickleball, the actual contribution to annoyance may be even more than predicted.

Non-Acoustic Factors, Pickleball Noise and ISO 16755-1	
ISO 16755-1 Categories	Pickleball Noise Examples
Social	Social conflict, threats, and harassment Perceived fairness Loss of trust in authorities Disruption of neighborhood relationships
Situational	Noise heard inside homes Ability to do usual activities at home is impacted Noise heard outside of daytime hours
Personal	Fear, of harassment and health issues Perceived lack of control
Physical	Distance/orientation of courts, related to homes Courts visible from homes Neighborhood characteristics.

Decades of research in environmental acoustics show that human responses to noise go beyond annoyance, affecting mental and physical health (APHA). Chronic noise can trigger the amygdala and a stress response linked to cardiovascular disease, sleep disturbance, and anxiety(4,5).

Non-acoustic factors—perceived fairness , control, social conflict, and fear—also activate this amygdala-mediated stress response, as shown in neuroscience, psychology, and sociology research(6,7,8).

When nearby residents have experienced long-term exposure to pickleball noise, effective mitigation becomes increasingly complex. Conventional engineering responses typically include installing barriers to reduce sound pressure levels (decibels), limiting hours of play, or recommending quieter paddles and balls. While barriers may slightly lower measured decibel levels, they do not eliminate the impulsiveness, frequency, or unpredictability of paddle strikes. Reducing decibel readings does not significantly lower annoyance levels if the underlying noise patterns are unchanged (9).

Preliminary findings (10) suggest that non-acoustic factors are more frequently reported in communities with longer-established courts. This underscores the limitations of traditional mitigation, which fails to address the situational, social, and personal dimensions of noise annoyance. In cases of prolonged exposure, meaningful relief may require more substantial interventions, such as court relocation or complete removal.

Conclusion:
Successful resolution of pickleball noise conflicts requires an evidence-based multi-dimensional approach that includes an evaluation of the acoustic factors and the non-acoustic factors that contribute to the human impact.

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