

The Physical and Mental Wellness of String Instrumentalists

Methodologies

- Released an anonymous survey for student and professors who are active string musicians
- Consulted scholarly literature, medical journals, and scientific studies
- Began implementing possible remedies into my own practice room to study consequences

Final Aspiration of Research

- Illuminate the **severity** and **frequency** of mental and physical injuries among string musicians in addition to offering suggestions on prevention and treatment

Findings in Research

Survey Results

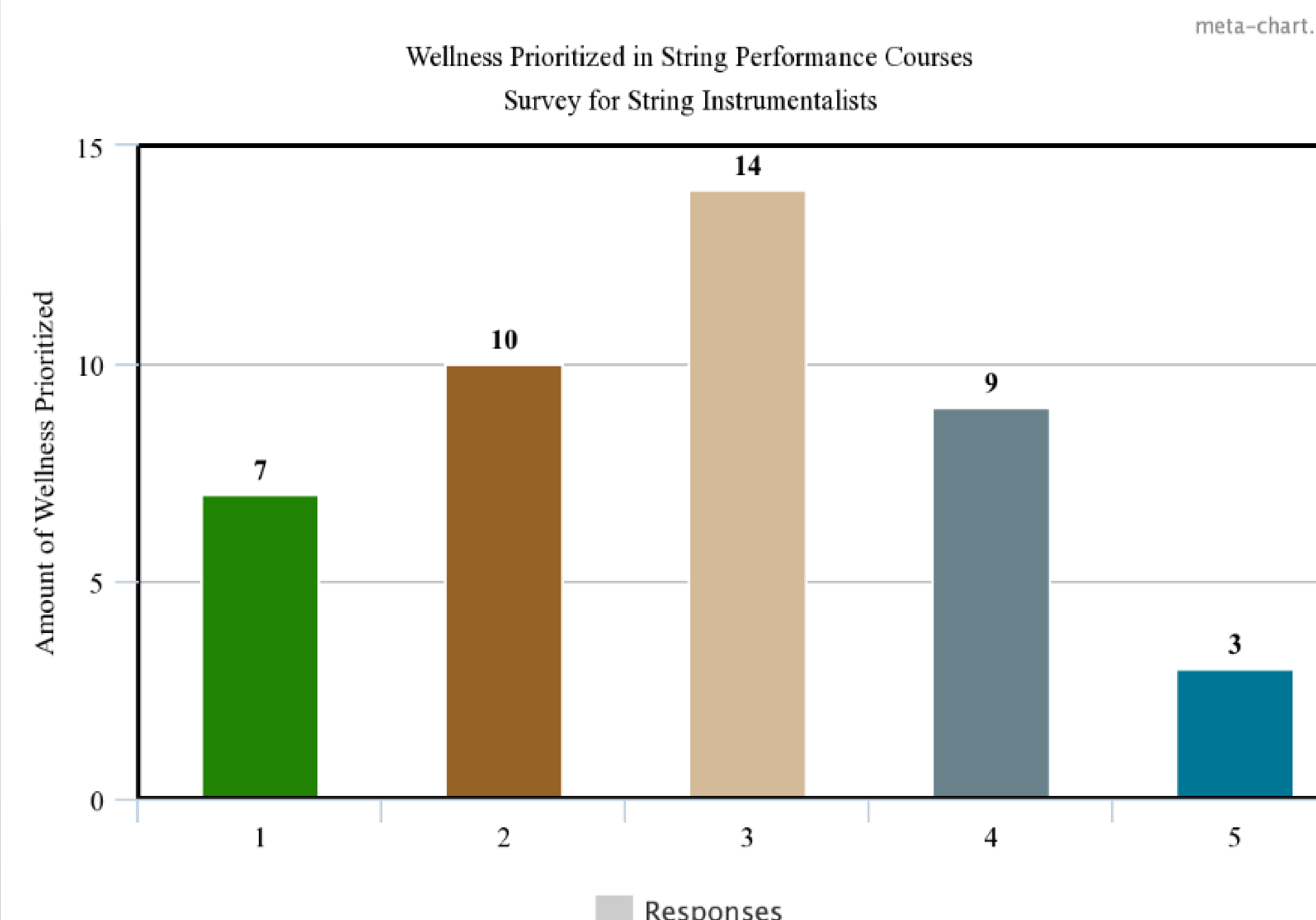
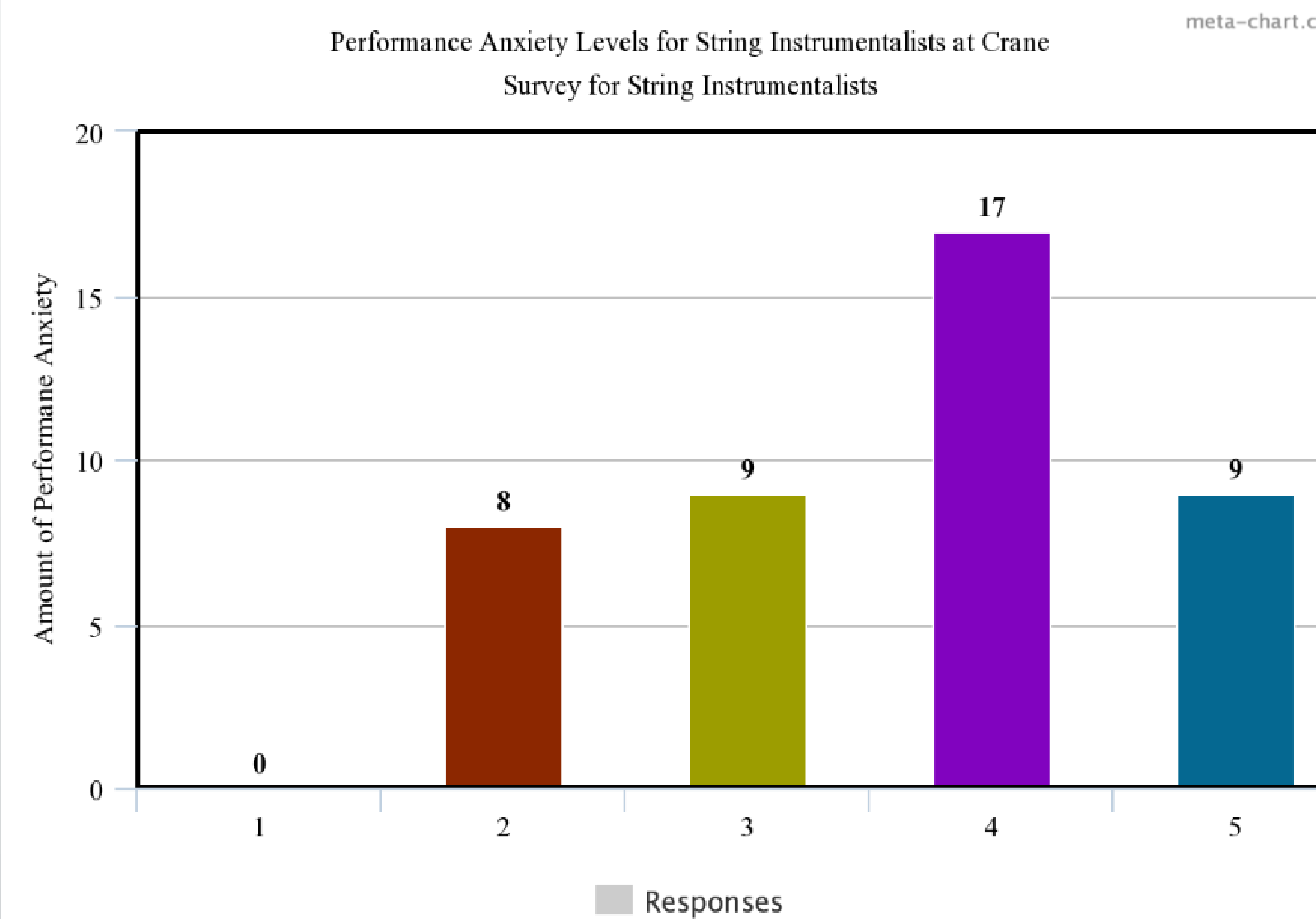
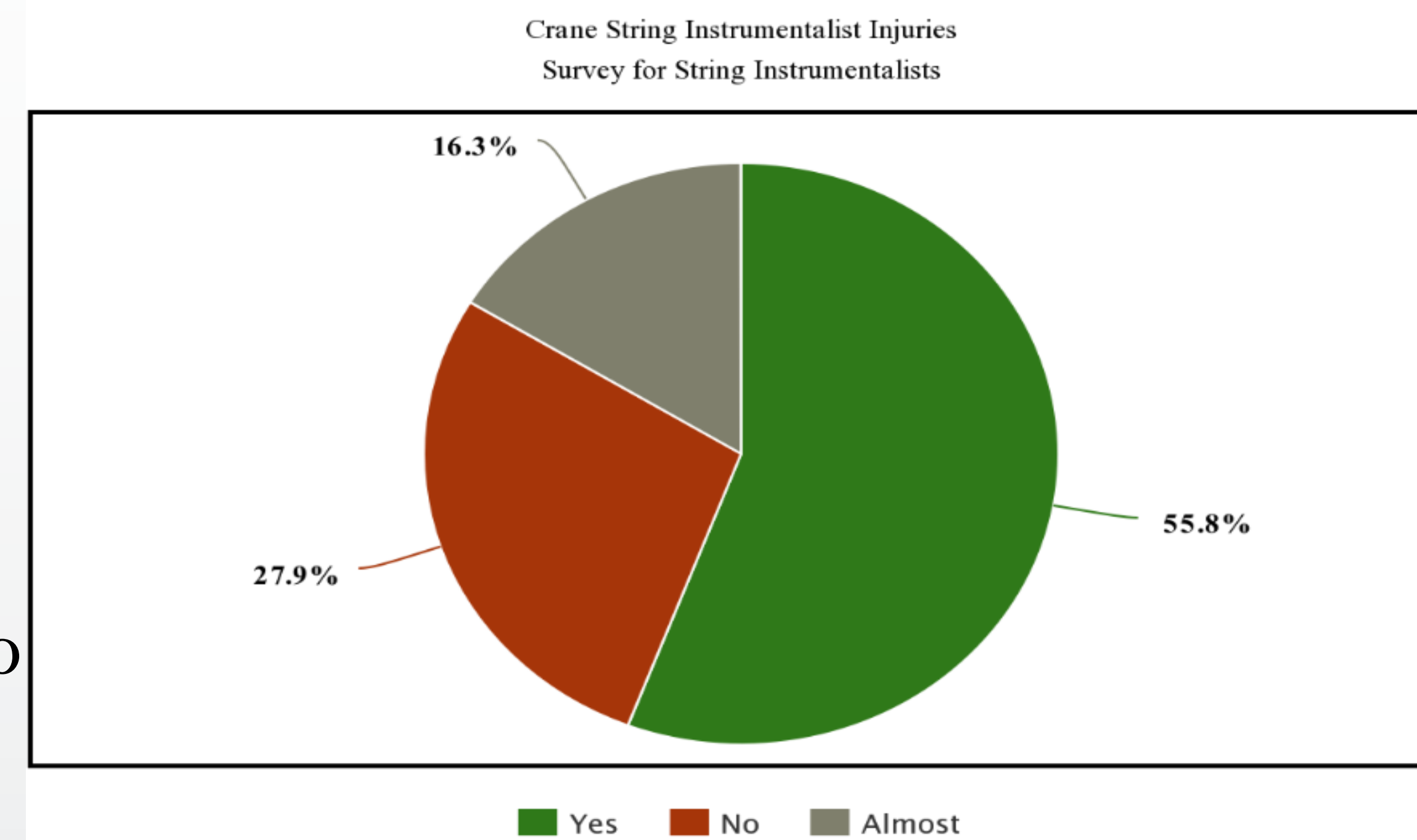
- Obtained a 62.3% survey response rate from string department
- Regardless of how long performers have been playing, 72.1% of participants have experienced or nearly experienced a music-related injury regardless of how long they have been a string instrumentalist

Literature Findings

- String players are at high risk for injury (violins and violas especially) because of the prominent asymmetry and lack of balance when playing their instrument
- String instrumentalists additionally perform more frequently, at higher intensity rates, and for extended periods of time
- Females' smaller stature put them at a higher risk of music related injuries and can endure injuries double of male musicians
- Musicians are often afraid to seek medical aid for their injuries because being told to stop performing their instrument, which can affect create musical advancement and financial hardship
- Musicians who seek treatment from a medic who specializes in musicians are better understood and how to treat their pain without cutting their studies or employment



Survey Charts



Violin and Viola Problem Areas **Cello and Double Bass Trouble Areas**

Left Shoulder	Torso
Neck	Back
Arms	Spine

Methods of Wellness Examples

Alexander Technique Yoga Meditation
Stretching Intentional Breathing

How Crane String Instrumentalists React to Performance Mistakes

- "It takes a toll on me, as I pride myself in my work ethic and product produced as a result of that, and when things go wrong, I feel embarrassed afterwards"
- "I feel incompetent as a musician, and I feel like I'm not good enough to be at Crane."
- "during a performance - move on, the next note is more important; afterwards - there is always some analysis or post-mortem, but I try to move forward and not let things hold me back; preparation for the next challenge is important - staying open to improvement in whatever form is possible in the moment."
- "I'm able to move on during a performance but am very disappointed afterward"
- "I used to feel really embarrassed, but now I've developed a "it is what it is" mindset"

Possible Remedies

Physical Remedies

- Try not to "relax" before a performance as relaxing is a different feeling from performing!
- Teach yourself how to physically "active" and "deactivate" yourself for a performance
- Do not alter your comfort for your instrument and continually evaluate your posture
- Practice with short and frequent breaks rather than vice versa
- Slowing your practice during every step of advancement is key to catching minute problems and make subtle improvements

Mental Remedies

- Do not rely on physical practicing every time, work on habits to mentally practice your instrument (this triggers similar movements in your brain and muscle systems!)
- Consistent and realistic motivation and optimism
- Training yourself to emotionally accept mistakes while making them and continuing a performance
- Making realistic lists of both long and short-term goals to monitor subtle and large advancement in your instrument