

Investigating the Efficacy of Application of Taping Interventions for Individuals Suffering from Patellofemoral Pain Syndrome

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MISSION STATEMENT:

The mission of the Messiah University Doctor of Physical Therapy Program is to graduate ethical, compassionate, autonomous doctors of physical therapy who are competent to practice in diverse settings. Graduates will be life-long learners informed by evidence-based practice who exemplify the values of Messiah University and the physical therapy profession.

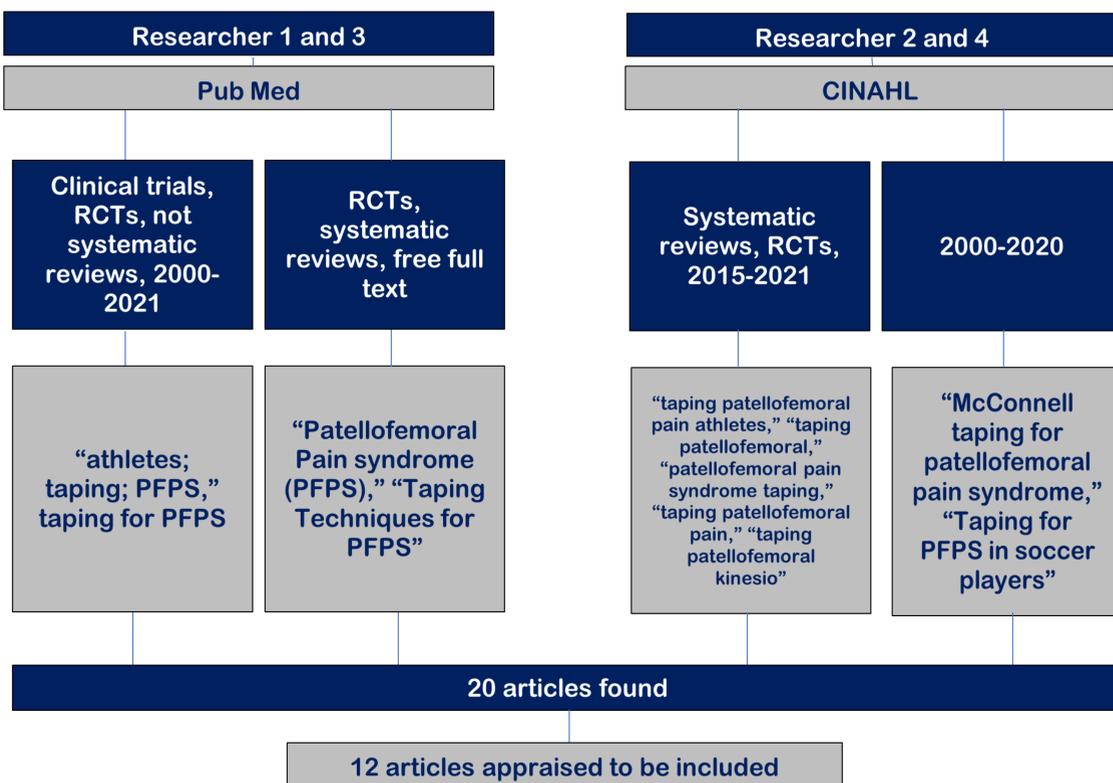
INTRODUCTION / PURPOSE

- Patellofemoral pain syndrome (PFPS) occurs in 25% of adolescents and adults^{2,4}
- PFPS is a result of biomechanical imbalances, trauma, and muscle tightness/weakness⁶
- Anterior knee pain is the primary complaint of patients with this condition^{3,5,7}
- McConnell taping and Kinesio taping are two techniques that physical therapists often use for treatment

Purpose:

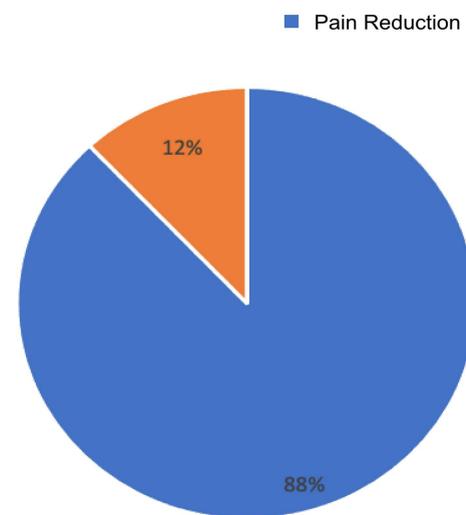
- To examine the literature comparing the effectiveness of two taping techniques — McConnell and Kinesio taping, and their respective impact on reducing pain in patients with PFPS

METHODS



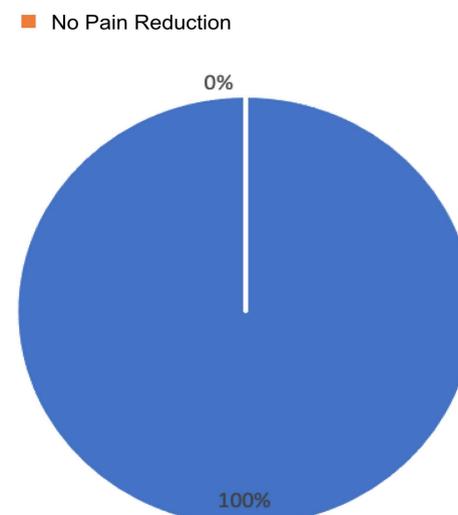
RESULTS

Taping Technique Alone



*8 articles compared taping technique alone vs no taping

Taping + Exercise



*7 articles compared outcomes of taping with exercise

- **Both** techniques can **decrease** perceived **pain**
- **Both** employ same mechanism associated with **Gate Control Theory**
- No single technique produced greater results than the other
- **Good evidence** with taping compared to no taping; **best evidence** when taping in conjunction with exercise
- More research necessary

SELECTED REFERENCES

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CLINICAL RELEVANCE



Kinesio Taping Example



McConnell Taping Example

- Clinically significant pain reduction with the use of patellar taping **regardless of the specific taping technique used**
- Exercise alone is **not as effective** as taping (+) exercise
- Taping with exercise is associated with **greater increase in pain reduction** than taping alone
- Optimal treatment of PFPS should **involve taping and appropriate exercise**

CONCLUSION

- We were **unable to identify one taping technique as superior to another**
- Utilization of a **taping technique + exercise yielded the most clinically significant pain reduction**
- Current research is variable & evidence **supporting and opposing (+)** outcomes **ALSO** exists
- The analgesic effect of taping application may be related to sensory input it provides to the CNS^{4,12}
- Both taping techniques employ a pain gate control mechanism to achieve pain modulation¹²