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Unmasking Experiences of Occupational Therapists Providing Assistive Technology Services (ATS)

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Reflexivity

- Graduate of University of St Augustine in Austin, TX
- Currently working in pediatrics in Bentonville, AR
- Capstone experience at ImprovAbility in Austin, TX
- Study completed as part of OTD capstone project

Purpose

- To examine occupational therapists' **pursuit of mastery** for high tech ATS for providing client centered care

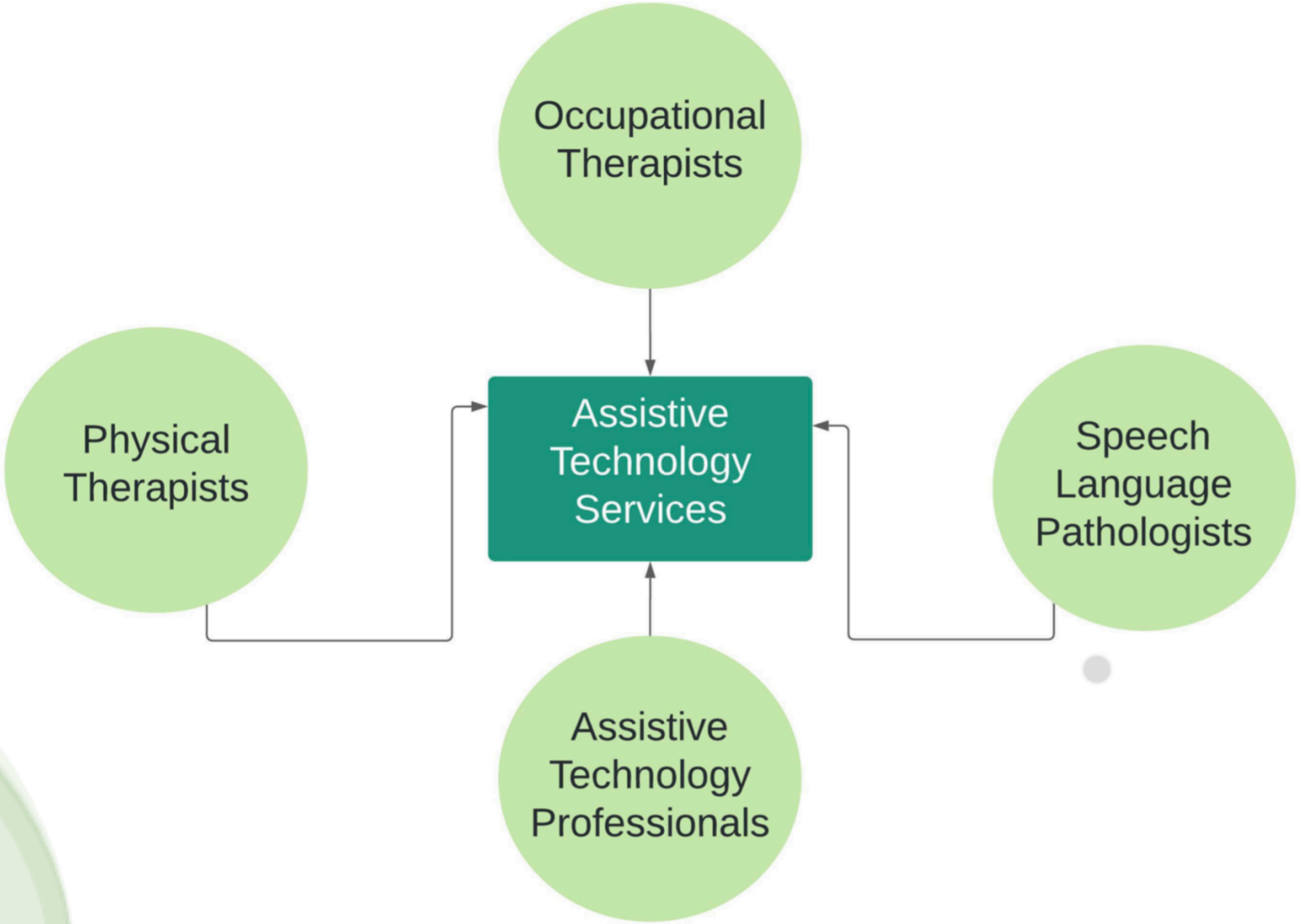
Background

- **High Tech**: A highly customized, more expensive, electronic or mechanical device
  - More complex in their engineering but simple for use
- **Assistive Technology Services**: Acquisition, education, provision, and maintenance of assistive technology

Background: OT Scope of practice

- Positioned to **optimize** a client's environment and activities to **enhance** their **occupational performance** and overall **quality of life**

Background: ATS Team



Background: Need for OTs in ATS

- Over **54 million** people utilize an assistive device in the United States
- The assistive technology (AT) industry is expected to reach **24-31 billion dollars** and continue to rise
- Despite the availability and access to a range of technologies, therapists are **not able to keep up with the advances in technology**
- **There is a need for proficient OTs to engage in ATS**

Background: Therapist Competency

- Studies report therapists (OTs & PTs in general) **do not possess the competency or confidence** to deliver skilled ATS
  - **51%** of allied healthcare providers in Canada, report needing assistance with assistive technology
  - **2%** report being 'very confident'
- 59% of Allied health therapists report being somewhat **dissatisfied** with their training in AT
  - PTs have voiced **lack of comfort** with AT selection process and do not feel well prepared in this area
  - SLPs have expressed feelings of **inadequate training** and limited knowledge
  - OTs reported **not being confident** with service delivery when needed and need **continuing education**

Background: Challenges Encountered with ATS

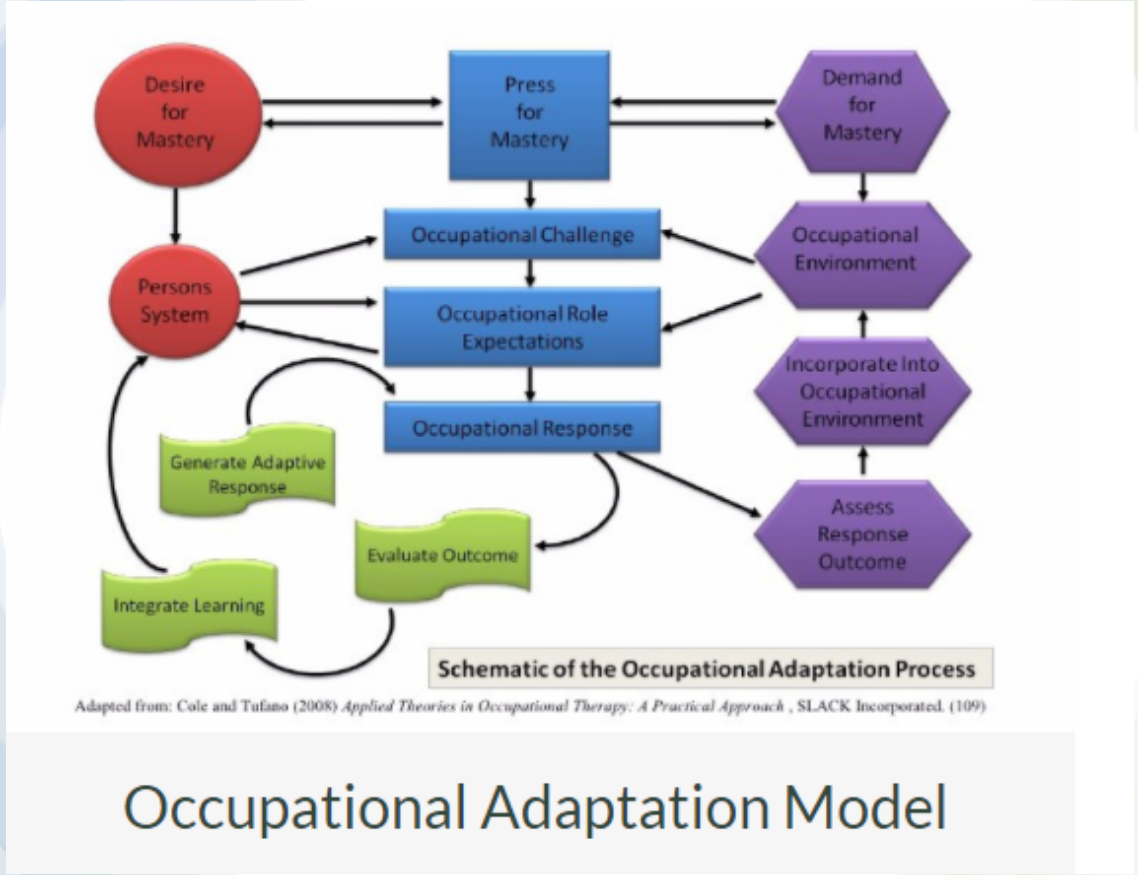
- Factors contributing to lack of confidence and competence?
  - Entry level
    - OT programs have difficulty keeping up with **ever changing technology**
    - Limited **access** to assistive technology
    - Lack of trained personnel to teach
  - In the field
    - Limited **access** to assistive technology
    - **Time constraints** to stay current with the lit.
    - Limited mentors
    - Lack of employer support
      - Lack of opportunities for continuing education
    - Lack of **funding** – payor source
  - There is a need to study **perspectives of practitioners successful in ATS**
  - How can we help OTs become **proficient** like the **2%** of therapists that are confident?

Research Question

- What is the underlying mechanism that helps OTs become successful in ATS?

Theoretical framework: Occupational Adaptation (OA)

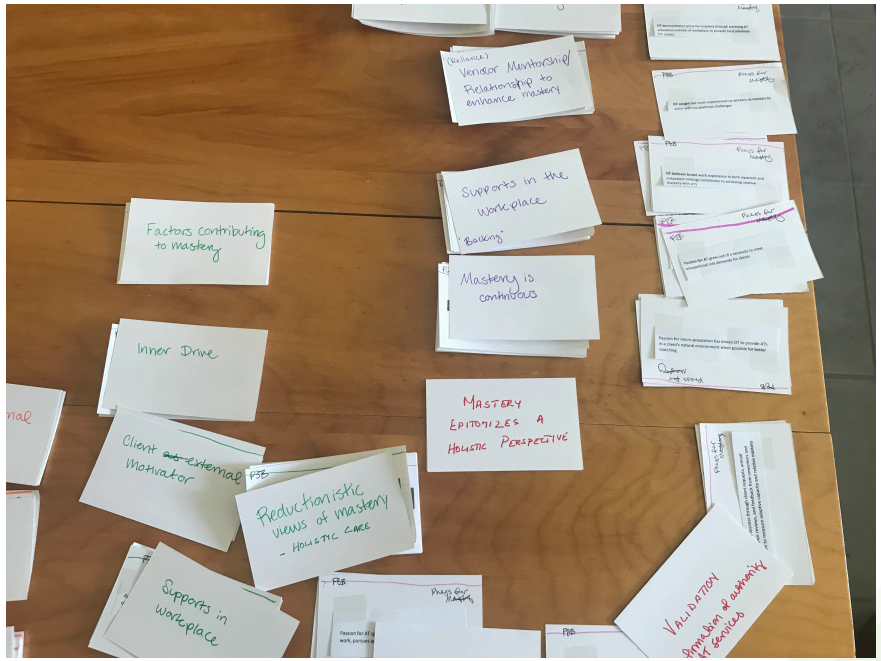
- Assumptions:
  - Views
    - persons as occupational beings who **seek to master** their environment
    - process as beginning with environmental demands for mastery
- Need to stay current with the research and development of high tech AT
- Selected for focus on **press for mastery** to reach competence with a specific occupation (ATS)
  - Individuals responded with adaptive response



Occupational Adaptation Model

Methodology: Phenomenological Study

- Assumptions:
  - Individuals are of the world
  - Individuals assign meaning to their experiences
- Interested in the **meaning assigned to experiences** in providing ATS & feelings of being successful
- Instrument used: Semi-structured Interviews via zoom

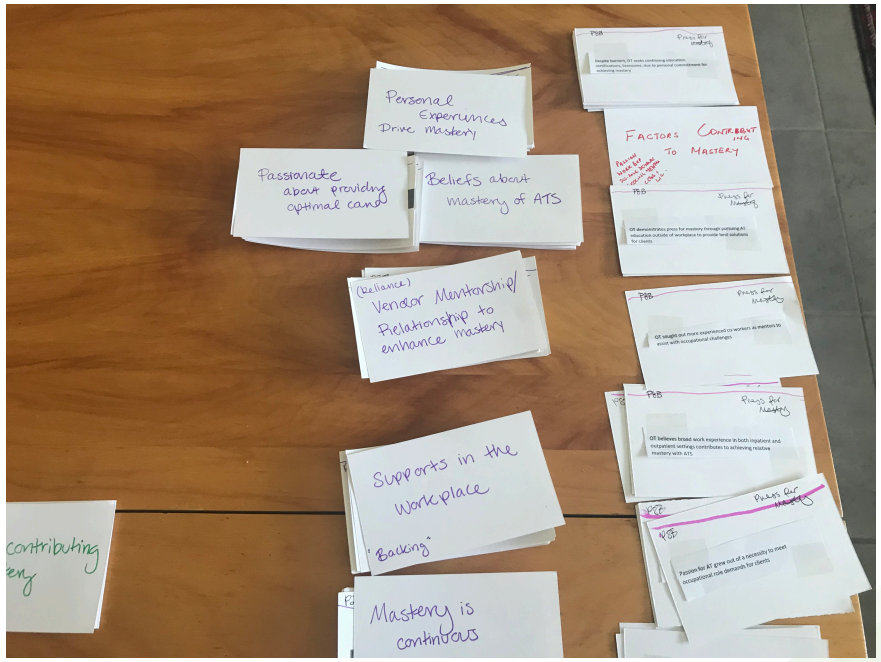


Methodology: Recruitment

- **IRB approval**
- Recruitment:
  - **Snowballing**
  - Facebook groups
    - Research4OT
    - AT Prescription Tool Discussion Group
    - OT International Research Network
    - Tech4OT
    - Ergo4OT
    - AT4OT
  - **TOTA advertising**
  - AOTA research forum

Methodology: Inclusion/Exclusion Criteria

- Project included **N=8** OT practitioners (OTR or COTA) who:
  - Licensed in the state of Texas
  - Possessed a minimum 2 years work experience
  - **Provided high tech assistive technology services (ATS)**
  - Maintained at least 40%-75% of caseload that required ATS

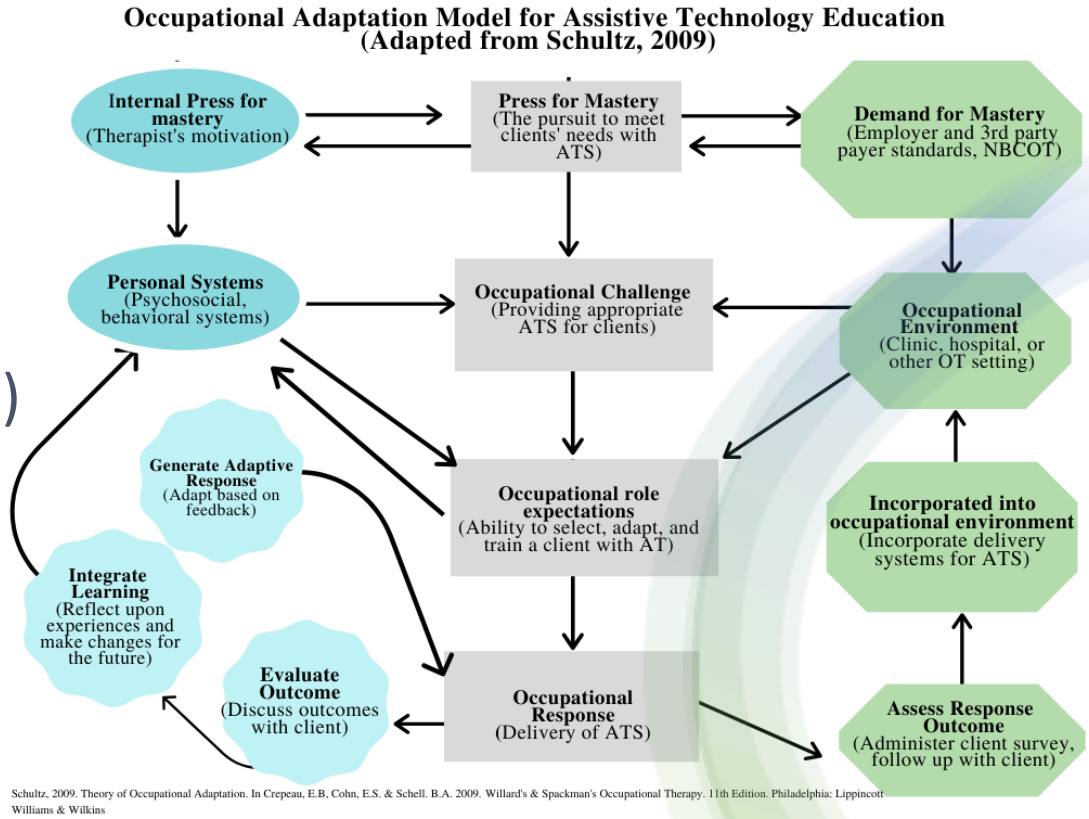


Data Analysis

- Audio recorded, transcribed, and de-identified interview data
- Open line coding, memoing, fractured the data and looked for **emerging and superordinate themes**
- Examined themes using the **OA framework**
- Ensured **methodological congruency** and transparency
  - Utilized superordinate themes for member checking
  - Timely team debriefing

Findings: Emergent Themes Using OA Lens

- **Personal** press for mastery (saturation-yes)
  - Seeker –support from embedded environment
  - Seeker –altruistic
  - Seeker— seeking expertise
  - Seeker –keeping up with new literature
- **Environmenta**l press for mastery (saturation-yes)
  - Occupational challenges
  - Environmental demand for mastery
  - Supportive work environment supports success
- Press for mastery—**correlated with experience**
  - Feelings of success and confidence



Findings: Seeker –Support from Embedded Environment

- "I'll **turn to my therapy team** [working with the client]..they're always able to think of new ideas I haven't thought of“
- " I stay in touch with other members of my team or members of the OT team [who] sometimes **tell me about things that I don't know about**."

Findings: Seeker –Altruistic

- “And so really it is just like up to the individual to kind of **dive in** there. Yeah. Okay. So you have to kind of **take initiative**. Yeah. Somebody has to take initiative and just be like, **okay, my patient needs this.**”
- “So you have to be very **sensitive and realize people's needs**, but mine is always looking at, you know, outcome measures of **quality of life,** their **independence**.”

Findings: Seeker –Seeking Expertise

- "So you normally **have to have a third party involved**... and to be honest It's really great because they have way more knowledge of all the high-tech equipment"
- "all the **vendors are so knowledgeable** which really makes the transition smooth"
- "A lot of times I would call them [vendors] and they would get on tech support with the manufacturer anyway...so I'm like, **I'll just call them myself"**
- "…try and go to conferences…"
- "I always want to know what's the next best thing...[so I] pursue **continuing education**"

Findings: Seeker- Keeping up with New Literature

- "I think taking **CEUs...doing your own research... and [contacting vendors]** to go out and see their facilities and see how they run"
- "if people aren't staying up to date with that stuff [assistive technology], it's **always changing**, and so how do they learn to keep up if they're not on top of it?"
- "The only problem as a clinician I have is **not knowing** what is out there..."
- I had to do a lot of **additional research** [on assistive technology]...as OTs we have such a large scope of practice. We have a lot we learn so we don't always go into detail under certain things...but we learn how to research"
- "I had to learn things [assistive technology] I **didn't necessarily understand** very well."
- "A lot of times when vendors come in I [ask] them if they know of anything new"

Findings: Environmental Press for Mastery—Occupational Challenges

- "[Some challenges are] **not being able to learn everything fast enough** to be able to use it...[also] getting access to some things"
- "One of the biggest challenges I've honestly are **finding a piece of equipment** that's going to work for them [the client]"
- "I start with **things we have onsite** [if this doesn't work]...the next step is to [try out] anything I know of or have learned about...third is to do some research, then ask peers, then go online and see what's available."
- Challenges exist due to a range of clientele and ever-changing available technology

Findings: Environmental Press for Mastery—Demands for Mastery

- "…[for] a new grad I really think they should implement **[mentoring]** without it would be challenging...and **teaching therapists how to seek out those resources**"
- "It was very challenging [in the beginning] assistive technology was **not in my 'bag' at all"**
- "I think that an assistive technology course is **definitely needed for OTs**“
- "The [current] courses **expose us** to what's out there, and not just what has been, but what is now, which means it's a course that [needs to be] constantly evolving."
- Therapists feel a demand for mastery and believe OT programs need to support this demand for mastery

Findings: Environmental press for Mastery- Supportive Work Environment

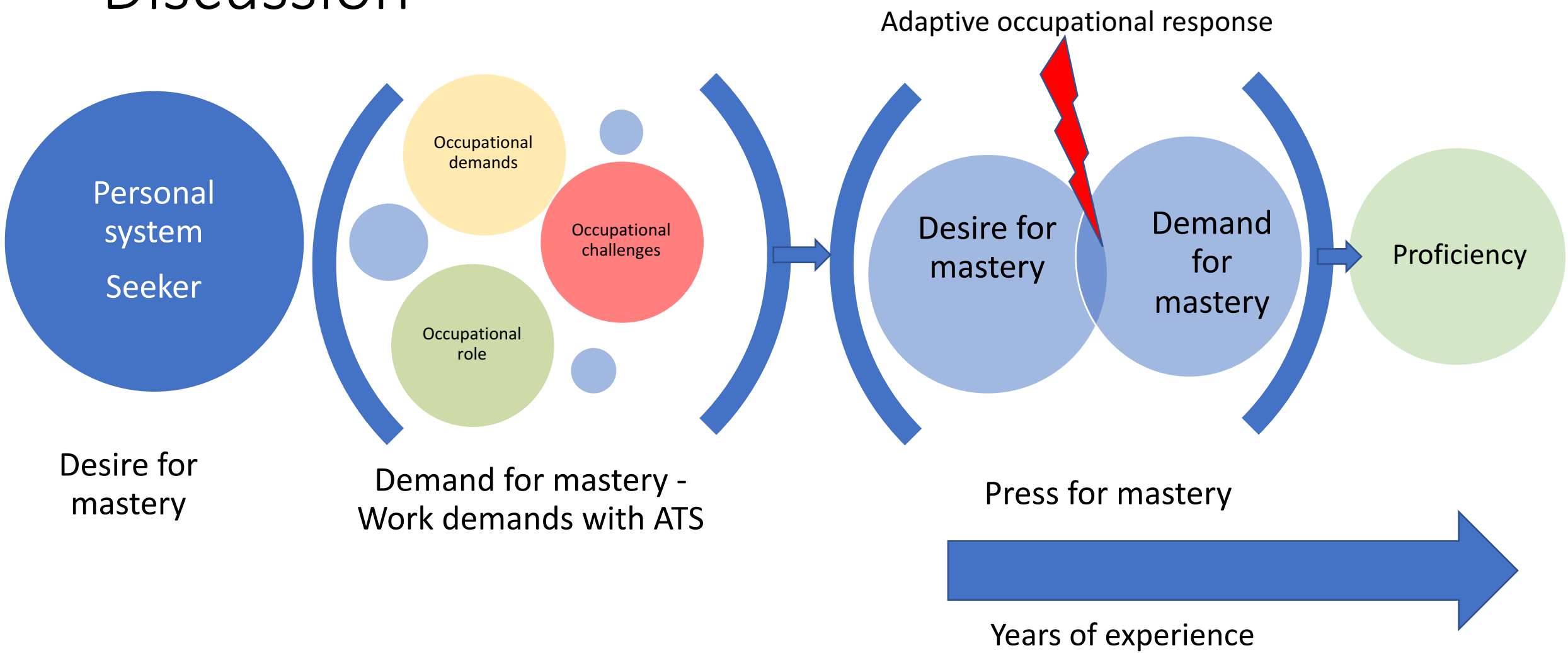
- "We had a **mentorship** [program] for the first two and a half years"
- "...So I learned a ton from [my employer]. He was very generous [and] very very nice"
- "It was a **good environment**...to get in there, figure it out... and learn it with new patients."
- "There's a whole **[assistive technology] lab** and access to an individual who knows how to operate everything in there“
- Supportive work environment helps OTs become successful

Findings: Press for Mastery—Feeling Successful

- "The way I treated [provided ATS] then [as a new graduate] would be so **different than the way I would treat now**."
- "...you can be as educated as you want in school about all the assistive technology, but **until you actually...use it with a client...that's when you actually feel prepared using it.“**
- "I'm usually the **support system** for all the other [therapists]"

- Feelings of success are correlated with years of experience

Discussion

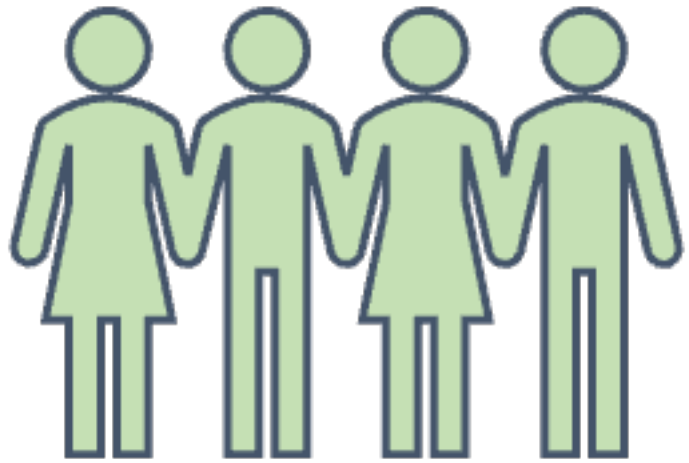

Adaptive occupational response
Personal system
Seeker
Occupational demands
Occupational challenges
Occupational role
Desire for mastery
Demand for mastery
Proficiency
Desire for mastery
Demand for mastery - Work demands with ATS
Press for mastery
Years of experience

Implications

- Findings **affirm** the literature
  - Therapists do not feel prepared to provide ATS
  - Challenge to keep up with ever changing technology
  - Environmental barriers (funding, access, time constraints) impede ATS
- Continue to study this process using a **mixed methods study**
- Study process using a **larger sample size** and grounded theory methodology to better understand underlying mechanisms and constructs that lead to proficiency
- Schools need to support interest in ATS
  - Train students to research available technology and/or partner with companies to expose students to new innovations
  - Invest in **faculty development** to kindle students' interest and competency in ATS

Limitations

- Limited to OT practitioners in **Texas**
- **Small** sample size
- Lack of diversity of practice settings (mostly neuro based)
- Limited time due to being a capstone project
- **Unable to generalize** across settings or other rehabilitation professions



Questions?

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