

Nathalie Barr Lecture

October 13, 2017

Rebecca Neiduski, PhD, OTR/L, CHT

It is truly an honor to present the 2017 Nathalie Barr Lecture at this 40th Annual Meeting of the American Society of Hand Therapists. The theme of our meeting is “inspired by our past to imagine tomorrow” and this named lectureship is one of the ways that we, as members of ASHT and hand therapists, pay great tribute to one of the pioneers of our sub-specialty.

Nathalie Barr imagined the tomorrows of hand therapy in the early 1950’s when she had the privilege of building a specialized hand unit with Guy Pulvertaft, a gifted hand surgeon who radically altered approaches to flexor tendon repair and flexor tendon grafting in the 1940’s.

Nathalie Barr’s work with Dr. Pulvertaft, Norman Capener, and C.B. Wynn Parry provided the foundation for her contributions to the first edition of “Rehabilitation of the Hand” and her publication “The Use of Lively Splints in Upper Limb Paralysis”. Published under her maiden name, Nathalie Smythe, the article appeared in the November 1955 edition of the Journal of Bone and Joint Surgery. To put timing in perspective, this article was published 22 years prior to the founding of ASHT and 32 years before the first issue of the Journal of Hand Therapy was published. Certainly, Nathalie Barr imagined a tomorrow for all of us here today.

The opportunity to give a lecture such as this is a daunting one, and I spent a great deal of time reflecting on my journey as a hand therapist, thinking about what I could share that would be meaningful and relevant to each of you here today. I considered the 40th anniversary of our society and the countless hours that so many pioneers in our profession have devoted towards

the advancement of hand therapy. I thought about almost 20 years of teaching and at least a thousand students that I have encouraged, cajoled, affirmed and literally begged to be nothing less than amazing therapists and contribute to their profession. And I thought of every eager young therapist I have encountered in hand therapy review courses across the country, so emotionally charged by the possibility of adding “certified hand therapist” to their professional identity. With these groups in mind, I landed on the questions that fundamentally guided the theme of my talk today. As we are inspired by the past, by the work of pioneers such as Nathalie Barr and so many others, how will we work together to imagine tomorrow? How will we extend our reach to the next generations of hand therapists?

As I mulled over this question, I kept landing on the word generation and considering the rapid changes in our world over the last 40 years. About the common experiences and values of our founders, and how they compare to those of our newest and forthcoming generations of hand therapists. With this in mind, I set forth with three objectives. First to pursue an analysis of generational differences as they relate to our subspecialty, second, to consider how we should extend our reach to the future generations of hand therapists, and third, to assess what we can learn from them, hopefully sooner than later.

So, step 1: analyzing generational differences in the subspecialty of hand therapy. For all of us who aspire to high levels of evidence, it is important to understand that defining the characteristics, common experiences, values, and even the timeframes of a generation is an

imperfect science. There are, however, three basic tenets of generational science that are commonly agreed upon.

First, the length of a generation is approximately 20 years and is based on the timeframe from birth to the birth of one's first child. The traditionalist, or "builder", generation is commonly identified as occurring before 1946, including both the "greatest" or GI generation who fought in World War II and the "silent" generation who were raised during the Great Depression.

Generation Y, or the "millennials", were born after 1980 and started "adulthood" in the early 2000's. Most millennials in our hand therapy ranks are in their first 10 years of practice and comprise 15% of our membership. The suggested split for baby boomers and generation X within the intervening 34 years ranges greatly; averaging around 1963.

The second tenet of generational differences is that the common experiences of a generation have a substantial influence on their shared and core values. While we look back on the Great Depression, Vietnam War, and 9/11 as profound economic, social, and political events; the impact of horrific mass shootings and the renewed social focus on diversity and inclusion will, without question, shape the values of our current youth and rising adults.

Third, the study of generational differences should be separate from conversations regarding age. Carefully stated by Dr. Peter Stern in his 2001 ASSH presidential address, "the aging or maturational process is inevitable and reflects the natural life cycle, whereas involvement in

the military, for example, is a generational difference and is a reflection of social change and need". While it may be more difficult for a primarily female society to set age aside, it will be fundamentally difficult to "imagine tomorrow" if we are detracted by youth.

Using these tenets, it is interesting to consider the generational differences that exist within the subspecialty of hand therapy. The six founders of ASHT were late builders and early baby boomers, and baby boomers make up approximately 33% of the current, adult US population. This generation of hand therapists solidified the firm foundation on which ASHT now rests. Baby boomers have been described as hypercompetitive workaholics, and a review of the history of hand therapy convinces me that these traits were necessary, especially for women, in the late 1970's and 1980's as they bravely pursued the exclusive domain of hand surgery. According to employee research completed by the Midwest Business Group on Health, this generation is most engaged when they are being compared to others and visibly rewarded for their efforts. These preferences may provide historical context for the hierarchical nature of our society and many others like ASHT and ASSH. Baby boomers have been suggested to be less collaborative and adaptable than their future generational counterparts. As technology will be a point of reference later in this talk, it is important to note that the baby boomer generation was the first to have television for their entire lives.

My generation, also known as Generation X, are known as "latch-key kids". Women's liberation, birth control, and even that pesky TV turned on during dinner were identified as

disruptions to the family unit, leading to an increase in working and divorced parents for Gen X'ers. As I reviewed the literature on my generation, I thought, "wow, that sounds like me" and "boy, I must be a PAIN to work with". The hallmarks of Generation X: staunch independence with a longing for structure and feedback. Loyal to their professions, but not their employer. Willing to problem-solve, collaborate, and build relationships on their terms, but not necessarily willing to sacrifice their work-life balance to pursue leadership roles. It is interesting for me to reflect on the number of ASHT volunteers from my generation who have willingly accepted committee service but are careful to prioritize personal and family time and gracefully decline opportunities at higher levels of leadership. A decreasing pool of candidates for the ASHT board of directors could be linked to a generational lack of, or aversion towards, power and executive presence.

And then came the Millennials...generation Y. The digital natives, the smartphone generation, the newest additions to our professional ranks. This generation has been raised with the world at their fingertips, now thumbs, in times of great prosperity during the 1990s and in times of great tragedy during the 2000s. Connection and personal branding are hallmarks of this group; they prefer social media over email; are accustomed to having conversations with multiple people on their phones and in person, simultaneously; and create distinct identities through social media, selfies, and the defining mark for millennials: tattoos. This generation is radically changing the workplace as they challenge the status quo, fully aware that they know more about technology than many of their generational predecessors. Millennials comprise most of

the students I have worked with in my career as an educator and I am curious to see the future of ASHT through their unique lens.

And finally, Generation Z. My final two years at Concordia University in Wisconsin afforded me an opportunity to work with the early installments of this generation and, I have to tell you, I could feel the tides turning ever so slightly. Early research suggests that Generation Z is more practical, more money-conscious, and more entrepreneurial than their Millennial counterparts. This generation is being referred to as “mobile” natives and technoholics.

Robbie Kellman Baxter, in her recent book “The Membership Economy”, reported that the average 21-year-old has spent 5,000 hours playing video games; sent 250,000 emails, instant messages, and text messages; and has spent 10,000 hours on a mobile phone.

This is the “freemium” generation, the generation that wants faster, easier, and cheaper ways to connect, stay current, and impact the future. I recently had a conversation with a freshman at Elon about technology in her residence hall. She reported that only three people had actual televisions on her floor, and that if she wanted to watch “a show”, she would just use her laptop and Hulu or Netflix. When I asked her about cable, she said, “why would you pay for that?”. The television that defined the technology of the baby boom generation and may have negatively impacted Gen X may no longer be something our young generations gather around. Times are certainly changing.

So, returning to the question of how generations impact our subspecialty, I turned to our amazing and generous ASHT staff members to ask for some membership, volunteer, and annual meeting data. Many thanks to Gene Terry, Paula McQueen, and my annual meeting partner extraordinaire, Tori Converse for their time in gathering this information.

Let's start by looking at membership data. As of June 27, 2017, the American Society of Hand Therapists had a total of 3141 members. Using the average generational divides and the data sets provided, you will see that I have split the membership into our millennials, practicing 1-10 years, Generation X, practicing 11-25 years, and the baby boomers, who have been in practice over 25 years. The breakdown of this data creates an optimistic picture for our membership future, with a roughly equivalent number of experienced and new hand therapists in our ranks, and a solid contingent of mid-career participants.

Moving on to committee distribution, the data also breaks down into promising and potentially expected groupings. Of the 71 ASHT members who currently volunteer for committee work, 34% or 24 represent our newest generation of hand therapists and 46% are from Generation X. I have to stop here for a second to acknowledge Heidi Hermann Wright, past president of ASHT, who chairs the technology and communication committee and has a volunteer group completely comprised of millennials. Now that sounds like an exciting committee! The generational distribution of our current committees provides a unique opportunity for effective succession planning, described by Workforce Magazine as the way

organizations “align current talent development with future leadership needs”. The article encourages organizations to avoid a focus on “high potential individuals” and create a succession plan for everyone from the moment they are onboard.

Moving on to the distribution of the board of directors, the concept of succession planning is especially relevant. While we still see the majority of board positions being held by mid-career hand therapists, the balance of highly experienced to novice hand therapists is 5 to 1. The second edition of “The Will to Govern Well”, a book on association leadership by Tecker et al., discusses the dilemma of a board being built on constituency (mirroring the membership) or being built on competency (having the expertise and interest needed to address issues and move the association forward). On page 25, the authors suggest that “boards should be designed so that decisions can be informed by dialogue enriched by a variety of values and perspectives”. They go on to state that “younger members have redefined enfranchisement in a digital world...it means having the opportunity to participate personally in the dialogues from which decisions emerge.”

And finally, attendance data from the last five annual meetings. Please note that the distribution on this slide differs from the previous slides based on the way survey data were collected. Despite this difference, it is interesting to note that the majority of attendees at the last five annual meetings have been therapists with 21 or more years of experience. The percent of Generation Y attendees, at 25%, mirrors membership data almost exactly. As a

basis for comparison, it is important to note that between 25-30% of our members attend the annual meeting, ranging from 632 to 869 participants over the past 10 years.

So far, I have provided you with information about the characteristics and distribution of the generations that comprise our subspecialty, the things that potentially make us different and can cause misunderstandings in our sub-specialty and workplaces. But what do we have in common?

Literature analyzing the negative impact of generational differences in the workplace, including papers by DeMeuse and Mlodzik in 2010 and 2012, Lyons in 2011, White in 2011, and a meta-analysis by Costanza et al. in 2012 has been inconclusive. Instead, the articles suggest a focus on collaboration and consistently point to a common theory to guide our shared future: self-determination theory. The idea that human beings need three basic things in order to be content. They need to feel authentic in their lives (autonomy), they need to feel competent at what they do (competence), and they need to feel connected to others (community). Marion White, an executive development director in University of North Carolina's Kenan-Flagler Business School, suggests that we focus on these shared values, building organizations that value all generations and foster future leaders within the organization. With this theory in mind, and a focus on generational collaboration, I will move on to the second goal of this talk: to consider how we should extend our reach to the future generations of hand therapists.

I would like to begin with autonomy, which is also defined as freedom and independence of thought. Research in self-determination theory suggests that autonomy an essential element in building employee engagement, allowing individuals to chart their own course within defined expectations. Affording autonomy means, in simple terms, to empower others, to allow them an opportunity to be great.

As clearly stated in Jones' Law, "anyone who makes a significant contribution to any field of endeavor, and stays in the field long enough, becomes an obstruction to its progress". With this law in mind, there is a relatively simple way for us, ASHT and hand therapy practitioners, to extend our reach to future generations of hand therapists with regard to autonomy. We need to get out of the way. Step aside as not to impede their progress, but carefully support them, advocate for them, and protect them as they pursue the journey towards competence. Allow them to make mistakes and learn from them. Afford them grace by sharing our own struggles and vulnerability. And give our newest members, the students in our clinics, and our pre-CHT colleagues the opportunity to test ideas that are different than ours.

ASHT has demonstrated their commitment to autonomy through the initiation of the Leadership Development Program, including both a virtual book club and a board intern. The intent to "introduce" a member to board processes, finance, and activities is a great starting point for succession planning and mentoring. As a means to specifically afford autonomy to

our future generations, to hear their voices and their new ideas, and to put them on a level playing field with the rest of the board, I suggest that in addition to the board intern, we need to change at least one, if not both, the board member at large positions to junior board members at large. These could be positions that have grown out of committee work, nominated by committee chairs and division directors, and strategically oriented as part of a succession plan for future leadership. These future leaders could be partnered with a senior leader, such as Secretary/Treasurer Elect or Vice President, and specifically called upon to ask questions and contribute their unique, generational viewpoints to the conversation. They could change the way we look at the present and have a substantial impact on the future.

And what about competence? How can we extend our reach to help our future generations pursue competence? One of the most exciting moments of my preparation for this talk was when I was reviewing the 2016-17 ASHT Annual Report and came across the student and new therapist transition project. As part of membership engagement, the purpose of this project is to “grow membership in ASHT, attract students to the hand therapy specialty, and develop the necessary educational material to plan and prepare for a career in hand therapy.” My heart is full! A student membership in ASHT is only \$60 a year, that’s \$5 a month...certainly reasonable enough for our newest Generation Z counterparts. This gives students access to the Journal of Hand Therapy, journal clubs, webinars, and our e-community at the touch of their thumbs and on their multitude of screens and devices.

So, in terms of building competence, I turn to you, members and hand therapists from across the country. I need you, we need you, to take students and train students. The professions of occupational and physical therapy are expected to grow by 27 and 34%, respectively, over the next seven years to meet the needs of the baby boom generation as they advance in age. At Elon, we had 1145 inquiries and 881 applications for 48 spots in the 2018 physical therapy cohort. We are certainly in prosperous times for admissions, but with great prosperity comes great problems. As the number of students and programs continues to increase, the number of necessary clinical placements jumps right along with it. Unfortunately, therapists in practice are not always willing to add students to their already busy schedules and caseloads.

About four months ago I followed an interesting conversation on the ASHT e-community about Level II fieldwork expectations. Multiple posts were created, discussing the base level of anatomy, biomechanics, assessment, and intervention strategies that students will need to be successful. Concepts of analysis as opposed to memorization and pursuing the “why” behind our therapeutic approaches were appropriately suggested. But the comment I found to be most insightful, from an educator’s perspective, was offered by a therapist named Sarah who said the following: “I have had to check myself at times to make sure that my expectations are appropriate for their experience level, which is zero. There were times earlier in my career when I forgot that these students should not be at my level of expertise by the end of their fieldwork. My goal should be that the student is safe with every patient and precautions, with the use of every modality and intervention, while meeting standard entry level. To help me

and the school better understand one another, I have written site-specific objectives and include an interview process with students.”

Thank you, Sarah, and all the other practicing clinicians here today who take our students and meet them where they are: filled with classroom knowledge and moving in the clinical phase to continue their education with your help. Ready to apply what they’ve learned, but not always sure where to start. Our parent professions of OT and PT are implementing more educational time and advanced degrees, and both professions are considering and implementing residency programs intended to increase entry-level “readiness”. Despite these additions of time, money, and degrees, I still believe that the development of competence requires a solid foundation of academic content, hands-on clinical experience with role models who pursue excellence in their practice, and continued specialty education throughout one’s career. Believe me, I know that adding students to already busy schedules is difficult and requires additional commitments of time, energy, and patience. My hope is that we can all think back to the time when we were just beginning, when we were the new generation, and pay forward the time, energy, and patience that our first fieldwork educators and clinical instructors offered to us.

And the third, and final component of self-determination theory: community. How can we embrace and engage our future generations as part of the ASHT and hand therapy community? Well, let’s start by returning to the data. As I stated previously, our membership

count as of late June was 3141 members. The total count of our board of directors and committee members is 83, yielding a total of 2.6% engagement by membership in formal committee and board roles. Now, there are certainly many more people in this audience who contribute to our community in one way or another, helping us stay connected by teaching at review courses, posting helpful advice in the E-community, and even adding comments and content on social media. But how can we increase our collective contribution to the work of our organization while we appreciate our generational differences in terms of commitment and work-life balance?

Micro-volunteerism could be something worth consideration. "Help from Home", a nonprofit organization based in the UK, defined micro-volunteerism as easy, quick, low commitment actions that benefit a worthy cause. "Sparked", an analytics corporation, refers to micro-volunteerism as convenient, bite-sized, crowd-sourced, and network managed. Returning to the text "A Will to Govern Well", the authors suggest that organizational participation, at its best, should be fast and fun to help maintain engagement. As Generations X, Y, and Z have been suggested as increasingly concerned about work-life balance, maybe it's time to reconsider our strategies and divvy things up a bit more. The 2015-2018 ASHT Strategic Plan identifies 7 goals that are linked directly to the committees within our organization. As we move into the next phase of strategic planning, it might be interesting to identify projects within each committee that could be accomplished in fast and fun ways by members from all generations. "Many hands make light work" is still relevant in 2017.

As leaders and members of ASHT, we have seen how well this works. As reported by President Gary Solomon in the annual report, ASHT led a grassroots letter writing campaign that led to over 5,000 letters and protected our ability to be reimbursed for custom-fabricated orthoses. As of October 4th, CMS 6012-P was officially withdrawn. Now that's what I call community.

So then, to the final objective, and what we can learn from our next generation. While the future remains to be seen, and the verdict on the impact of Generation Z is still out, I offer you the following observations. Future hand therapists will help us extend our reach and challenge us to see opportunities for education and global connection. Our digital and mobile natives will help us plan the future of hand therapy, in these realms, through technology.

Technology. The year is 2035, and you put on your holographic goggles to interact with ASHT virtual education. The Nathalie Barr lecturer appears in your living room, office, or out in your yard, really wherever you are, she can be. Hologram technology...sort of like Princess Leia asking Obi-Wan for help in the first Star Wars, which is also celebrating its' 40th anniversary. Oops, sorry about that. My Gen X is showing.

How will our future generations teach us to think about and use technology differently? From an educational perspective, our mobile natives have been accessing their education through online learning management systems since grade school. Millennials have completed entire

college courses online and are accustomed to accessing education on their devices and at their convenience. Our own ASHT members are following this trend: 837 ASHT members logged in for live webinars in 2016-17; 88 more than the total attendance at the annual meeting. It would be interesting to drill down into this data to assess online utilization based on generational subtype. Are our newer members more likely to participate in online education?

Returning to the text “The Membership Economy”, Kellman Baxter tells the story of how Weight Watchers successfully transitioned from legacy services and in-person meetings, to a completely online model. On page 205, she reported, “by keeping an open mind about how it’s traditional approach could be reimagined, even replaced...Weight Watchers was able to dramatically extend its’ reach.” Our future generations will be able to help us begin the transition from an offline to an online organization and prepare us for the future, transforming our educational landscape and meeting our members where they are.

Global connection. Here are a few Facebook facts as of August 11th. Facebook has now passed the 2 billion user mark; 82% of 18-29 year olds, 79% of 30-49 year olds, and 56% of those 65 and older use Facebook. The like button has been pushed over a trillion times. Average users get sucked into Facebook for 20 minutes at a time, the same amount of time it takes for 1 million links to be shared, 20 million friend requests to be sent, and 3 million messages to be sent. 55 million status updates are made every day. Instagram, now owned by Facebook, has 700 million users, 80% of whom come from outside the US. Snapchat is at 300 million users,

71% of whom are 34 years or younger. Twitter comes in at 328 million users tweeting 500 million times a day, with some people using it far too much in recent months.

But I would like to suggest that the social media site that could help inform our understanding of member needs is one that is used less often, by only 150 million people, by Millennials as much as they use Instagram. Pinterest. While Pinterest may be viewed as a fun way to find recipes or inspirational quotes, Kellman Baxter reports that “Pinterest has accumulated so much data that observers are saying it could rival Google as a starting point to discover almost anything that matters to humans.” Our future generations could help us to unlock the power of social media sites, like Pinterest, to create community and identify the needs of our members. Orthoses, home programs, adaptations, interventions...the ideas of what I could pin to my hand therapy board are endless.

Social media can help us continue to connect with hand therapists all over the world, and research shows that Generations Y and Z are more globally connected and socially responsible due to 24-hour access to news and world events. Our future generations will help us extend our reach and create a more robust, global online ASHT community that defines and directs the strategic trajectory of our organization.

Extending our reach. Something that all of us do, in one way or another, every day. For clinicians in the audience, reaching is pursued in a literal sense as you help your patients

increase range of motion and participate in their daily activities. For the academics in the audience, reaching students means attending to their needs, experiences, and feelings to help them engage in the learning process. And for the researchers, the “reach” of your work now surpasses printed journals and books and can be accessed instantly around the world.

Clinicians, academics, and researchers. Together, we comprise this amazing subspecialty known as hand therapy and support the American Society of Hand Therapists as members, volunteers, contributors, leaders, and mentors. We can define ourselves as baby boomers, gen X’ers, or millennials, but our similar needs for autonomy, competence, and community will hopefully outweigh our differences. Together, we can support the next generations of hand therapists and afford them the opportunity to stand next to us and help us advance the subspecialty of hand therapy. Together, we can extend our reach.