



Harris College  
of Nursing & Health Sciences

*14<sup>th</sup> Annual*  
*Student Research Symposium Program*  
*Thursday, April 20, 2017*  
*Special Events Gym*

*Schedule of Events*

Research display viewing/judging	1:00-3:00 p.m.
3-MT Winners –	3:00-3:20 p.m.
Matt Beene SOWO	
Emily Cowan SOWO	
Dave Farbo KINE	
Award Ceremony	3:20-4:00 p.m.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
<i><u>Physiological Issues</u></i>						
1	Ciulla	Gabriella	KINE	U	The comparison of fire cupping and plastic cupping therapy for treating an adductor strain	The purpose of this evidence-based inquiry was to examine whether glass fire cupping or controlled pressure plastic cup myofascial decompression is the appropriate treatment for a 20-year-old female track athlete with a grade II adductor strain. Cupping therapy is beneficial for the increase and restoration of range of motion and decrease of fluid buildup that may be inhibiting the athlete. While there was not a study that examined an adductor injury and the various cupping treatments, many other studies discussing cupping as a treatment for hamstring, low back, and knee pathologies did result in an increase of range of motion and a general feeling of well-being. It allows fascia to realign in a more efficient manner and breaks up any muscular or fascial adhesions. Through systematic reviews and interviews with clinical experts, it has been determined that both therapies are beneficial and effective in the treatment of a grade II adductor strain.
2	Nelson	Alexa	KINE	U	Platelet-enriched plasma injections vs. corticosteroid injections: Comparing effectiveness in treating tendonopathies	The purpose of this evidence-based inquiry was to compare the effectiveness of platelet enriched plasma injections (PRP) versus corticosteroid injections when treating tendonopathies. PRP injections are defined as blood with a concentration of platelets above baseline values. The increased platelet count will release growth factors that expedite soft-tissue repair. Corticosteroids are anti-inflammatory medications that are injected into the tendon to reduce inflammation and pain. These injections are able to reduce inflammation by limiting capillary dilation and the permeability of the vascular structures surrounding the site of injury. Sources were found through the TCU library databases including EBSCOhost and FrogScholar, Pubmed and Medline. Articles published since 2007 were used based on relevance to this inquiry. An interview with a certified athletic trainer was conducted for further information regarding clinical relevance and efficacy. The findings from this evidence-based inquiry indicate that PRP injections are more effective at increasing range of motion, decreasing pain, and decreasing return to play time. The findings prove that PRP injections are more effective in short-term and long-term rehabilitation. After reviewing the literature and the information from the interview, I have concluded that PRP injections may be more effective for treating acute and chronic tendonopathies than corticosteroid injections.
3	Detwiler	Sam	KINE	U	Myofascial decompression: Treatment outcomes in musculoskeletal pathology	The purpose of this research was to determine the effectiveness of myofascial decompression (MFD) in accomplishing the clinical outcomes of increasing range of motion (ROM) and reducing pain associated with musculoskeletal pathology. To answer my clinical inquiry, peer-reviewed research was gathered using the EBSCOhost Search Engine, Google Scholar and an interview with a certified Athletic Trainer. Randomized clinical studies, peer reviewed articles and the experience of clinicians working with elite athletes were all used to evaluate the effectiveness of MFD. Since MFD is a very new adaptation of the ancient practice of cupping, research involving both traditional cupping and MFD were used. MFD differs from cupping in that the cups are arranged in a way to reduce the muscular

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						pain and tightness, whereas in traditional Chinese medicine the cups target spiritual energy known as Qi and placed along meridian points. All references included provide evidence of MFD and its principles' effectiveness in accomplishing the therapeutic goals of pain relief, increased ROM and the physiologic responses that are created. It is clear from the research I have compiled that MFD is effective and should be used as a treatment modality to increase ROM and decrease pain associated with musculoskeletal pathology.
4	Workman	Juliana	KINE	U	Platelet-rich plasma injections for the treatment of acute hamstring injuries	The purpose of this evidence based inquiry was to determine whether a platelet-rich plasma (PRP) injection followed by a standard rehabilitation protocol in athletes with acute hamstring injuries could lead to a faster return-to-play than implementation of a standard rehabilitation protocol alone. This inquiry examined databases such as MEDLINE and Google Scholar to find peer-reviewed scholarly journals with evidence on PRP injections for the treatment of hamstring injuries in athletes. The increased usage of PRP in sports medicine and evidence from some research studies suggests that PRP injections may help promote the healing of injured muscle tissue and decrease the amount of time lost after injury. However, much of the evidence on the effectiveness of PRP for hamstring injuries is inconclusive, as many studies show no statistically significant differences in return-to-play time. There is not enough evidence on this pathology, population, or treatment modality, and until we have more extensive and higher quality research studies on the effectiveness of PRP for acute hamstring strains, it cannot be determined that it is a useful treatment option.
5	Robidoux	Aidan	KINE	U	Instrument assisted soft-tissue mobilization	The purpose of this evidence based inquiry is to determine the efficacy of Instrument Assisted Soft-Tissue Mobilization (IASTM) in treating patients with soft-tissue restrictions, such as fibrosis (i.e. scar tissue) and myofascial adhesions, that result in pain and deficits in the associated joint's range of motion (ROM). I used a combination of databases including Medline, PubMed, SportDiscus, and Google Scholar and research included randomized clinical trials (RCTs), systematic reviews, and case studies. Based on the presently available literature, IASTM has been shown to increase ROM and decrease the associated pain caused by myofascial adhesions and fibrosis. IASTM may be an effective intervention for clinicians who wish to mitigate the adverse effects of soft tissue restrictions. Further research should be conducted to determine the optimal treatment parameters and techniques for IASTM.
6	Stauch	Myranda	KINE	U	The use of dry needling for treating myofascial trigger points	The purpose of this evidence-based inquiry was to examine the effectiveness of dry needling for treating myofascial trigger point (MTrP) pain. Medline and SPORTSDiscus were searched through the TCU library collection of databases for "myofascial trigger points" and "dry needling". Articles were considered if they referenced both dry needling and MTrPs, and included findings about the effectiveness of dry needling as an intervention for MTrPs symptoms. After reviewing the literature, it was determined that dry needling is a good intervention for the treatment of MTrPs. Results of the studies examined indicated the symptoms of MTrPs were reduced or alleviated with the use of dry needling. Dry needling has

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7	Jones	Jeremy	KINE	U	The effect of bone stimulation modalities on tibial fracture healing	grown increasingly more popular in the clinical setting, with more clinicians becoming certified in the technique. The purpose of this evidence-based inquiry was to investigate the effectiveness of bone-stimulation on accelerating or enhancing the healing process of acute tibial fractures by increasing osteogenic cell activity. Scholarly, peer reviewed articles focusing on ossification, bone-stimulation, or fracture healing were examined in order to consider the current research. Bone stimulation has shown to decrease the time in days until healing approved by radiological examination is complete in physiologically disadvantaged populations (including the malnourished, diabetics, those with rheumatoid arthritis, osteoporosis, and tobacco users. Research indicates 24 – 27% reduction in time for fractures to reach complete healing post-acute injury. These findings suggest that the benefits of using these modalities as an adjunct for fractures outweigh the use of standard treatment programs alone.
8	Cullen	George	KINE	U	The effect of ACTN3 genotype on power output during repeated Wingate anaerobic tests	Alpha-actinin-3 forms a crosslink between actin filaments of adjacent sarcomeres in Type IIx fast twitch muscle fibers, and plays a role in signaling and energy metabolism. Homozygosity for the 577X allele (XX) of its encoding gene, ACTN3, results in complete deficiency of $\alpha$ -actinin-3 and a compensatory upregulation of $\alpha$ -actinin-2. Research has suggested that $\alpha$ -actinin-3 deficient Type II fibers transition toward the characteristics of slow twitch fibers, i.e. greater reliance on aerobic energy production, decreased force production, and increased fatigue resistance. The purpose of this study was to investigate the effects of ACTN3 genotype on power output across multiple bouts of the Wingate anaerobic test (WAnT). Seven recreationally active participants (RR: n=2, age: 20.0±1.4, BMI: 24.0±0.3; XX: n=5, age: 25.6±4.4, BMI: 24.6±3.3) completed six WAnT at a resistance of 7.5% body mass with four minutes of rest between efforts. Average power was greater (p<0.05) in Sprint 1 when compared to all other sprints. Peak power was found greater (p<0.05) in Sprint 1 when compared to Sprints 2, 3, 5, and 6. Fatigue Index increased, while Total Work decreased in all subjects (p<0.05). No difference between genotypes in measures of power output, anaerobic fatigue, and anaerobic capacity were found.
9	Cardenas	Maria	KINE	G	Intensive training, regardless of training type, increases resting serum IL-6 and CK, but reduces the normal myokine response to an acute exercise bout	High intensity training (HIT) induces comparable endurance performance adaptations to those of continuous long slow distance training (LSD), however, high training volume may be immunosuppressive. Examine salivary lactoferrin and cortisol, and plasma cytokine (IL-6, IL-8) and creatine kinase (CK) response to HIT and LSD during 4 days of intensified training (IT). Eight endurance-trained males performed two, 4-day IT protocols: HIT and LSD ( <sup>3</sup> 21 days apart). LSD included 50-min cycle ergometry in the AM and 90-min running in the PM. The AM HIT session included 8 all-out, 30-sec cycling sprints with ±8.5-mins active recovery. The PM HIT session was the same as LSD. Blood and saliva samples were stored for analysis. Both LSD and HIT resulted in expected acute exercise-induced increases in plasma IL-6 and IL-8 before IT. After HIT IT we observed a post-exercise increase in IL-6, but not after LSD IT, where IL-6 concentration was significantly downregulated. Resting IL-6 was elevated after IT in both conditions.

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						Additionally, a significant time x day interaction occurred for lactoferrin secretion rate ( $p=0.047$ ). Intensive training, regardless of training type, increases resting serum IL-6 and CK, and reduces the normal cytokine response to an acute exercise bout.
10	Pond	Michelle	KINE	U	An examination of the role of vitamin D, bone mineral density, and perceived exertion on the prevalence of stress fractures in division I cross country athlete	Stress fractures of the lower extremity are a common injury among collegiate athletes, especially distance runners. While the prevalence of stress fractures is significant, the etiology of stress fractures is widely contested in the literature. This study examined the effects of vitamin D levels, bone mineral density (BMD), training load, and previous injury on the risk for stress fractures in Division I Cross Country athletes. In the group of runners, the objective and subjective data collected was used to 1) evaluate vitamin D and BMD levels, 2) examine the relation between perceived exertion and training load and the prevalence of stress fractures, and 3) examine the relationship between the biological factors, training, and previous injury on risk for stress fracture. There was not a relation between vitamin D, BMD and stress fractures in this population. Further studies are needed to examine stress fractures in the collegiate middle-distance athlete and include other predisposing factors such as recovery, structural anomalies and biomechanical contributions.
11	Levitt	Mike	KINE	U	The influence of an acute exercise bout on monocyte phenotype and circulating platelet-monocyte complexes in healthy young individuals	The purpose of this study was to determine the distribution of three monocyte phenotypes and the formation of platelet-monocyte complexes (PMC) following an aerobic bout of exercise. Additionally, the monocyte phenotype most likely to form platelet-monocyte complexes was examined. Apparently healthy men ( $n=3$ , age $23.5\pm 7.7$ ) performed a 20min treadmill run at 85% heart rate maximum followed by 5min rest and a maximal graded treadmill test ( $VO_2\text{max}=58.5 \text{ ml}\times\text{kg}^{-1}\times\text{min}^{-1}$ ). PMCs and monocyte phenotype were identified by flow cytometry. Monocyte phenotypes were categorized by the following cell surface receptors: Classical ( $CD14+CD16-CCR2+$ ), Intermediate ( $CD14+CD16+CCR2+$ ), Non-classical ( $CD14^loCD16++CCR2-$ ). Blood was taken before the exercise (PRE), immediately post-exercise (PO) and at 1hr and 2hr post-exercise (1HR and 2HR respectively). As anticipated, exercise induced leukocytosis, showing an initial large increase PO, and smaller increases above baseline at 1HR and 2HR (Pre= $6.61 \text{ cells}10^3/\text{ul}$ , PO= $8.54$ , 1HR= $7.38$ , 2HR= $8.19$ , $p=0.049$ ). There were no significant changes in percentage of circulating PMCs or changes in the distributions of the monocyte phenotypes at any time point. It is likely that no significant results were observed because only three subject have enrolled in the study. As more subjects participate, it is plausible that changes in monocyte phenotype and PMCs will be observed.
12	Burgess	Brooke	KINE	U	The influence of an acute bout of aerobic exercise on flow-mediated dilation in healthy young individuals	Endothelial dysfunction is the earliest detectable preclinical stage of atherosclerosis, and can be functionally and noninvasively measured through flow-mediated dilation (FMD). Percent FMD represents the degree of arterial dilation from baseline as a result of endothelium-dependent vasodilation, or reactive hyperemia. Brachial artery FMD was measured using an Acuson Aspen Ultrasound System, and both blood flow velocity and arterial diameter were measured before and after a 5-minute flow occlusion by a blood pressure cuff placed distal to the ultrasound imagery site. Three physically fit men aged $25.3\pm 7.77$ years underwent a pre-exercise FMD

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						measurement, followed by a single bout of aerobic exercise. FMD was again obtained 1 hour and 2 hours post-exercise. There were no significant changes in % dilation (PercDil) ( $p=0.178$ ) or shear rate (ShearRate) ( $p=0.540$ ). Each subject exhibited a different trend in percent dilation at each time point, and shear rate trend was also not consistent between subjects. Inconsistencies could be attributed to individual variability, or the fact that only 3 individuals participated. As we gather more data, we may see significant relationships emerge.
13	Burk	Brittany	COSD	G	The effect of Parkinson's disease tremor phenotype on phonation periodicity	The overall purpose of this study was to investigate the effect of Parkinson's disease (PD) motor phenotype (tremor dominant (TD) vs. non-tremor dominant (NTD) forms) on acoustic measurements of voice production. Forty-five participants participated in this study. A total of 34 individuals with PD (22 males, 12 females) and 11 healthy older adult (HOA) controls (4 males, 7 females) were included in the data. The investigator recorded the participants sustaining a vowel using Computerized Speech Lab technology. Measures of cepstral peak prominence (which looks at vocal fold periodicity) were collected. Statistical analysis for the ANOVA revealed a significant main effect for group ( $F[2,34] = 3.28$ ; $p < 0.05$ ). Post-hoc pairwise comparisons indicated a significant difference in the CPP measures between the TD and NTD speakers with PD. Specifically, the NTD speakers manifested reduced CPP, suggesting the acoustic signals produced during phonation were inherently less periodic than those produced by the TD speakers. This study suggests that holding other disease-specific factors constant, those who had a NTD phenotype exhibit greater motor impairment or faster progression of motor impairment of phonation than those with TD phenotype.
14	Lindley	Hadley	KINE	G	Neuroplasticity in ACL injuries	Anterior cruciate ligament (ACL) injuries alter both motor and sensory components of the nervous system. Previous studies have shown increased activation in select brain areas associated with motor-planning, sensory-processing, and visual-motor information to highlight neuroplasticity of ACL injured individuals. The purpose of this project is to examine the existing evidence of neuroplasticity in ACL injuries. Several approaches have addressed neuroplasticity including functional magnetic resonance imaging (fMRI), transcranial magnetic stimulation (TMS), electromyography (EMG) and visual modifications. Evidence from fMRI has shown greater activation in sensory and motor-planning areas of the brain in ACL subjects during simple knee flexion-extension tasks. Altered cortical excitability has been found in post-ACL subjects after using TMS to magnetically stimulate the motor cortex tissue. ACL patients have shown diminished neural control during dynamic activity when visual feedback is removed due to increased neurocognitive demands. These findings suggest that ACL injuries differentially challenge the activation of motor pathways in the brain, visual processing and motor planning compared to healthy individuals. Understanding the effects of neuroplasticity post-ACL injury could enhance rehabilitation by targeting sensorimotor function during training to better prepare injured individuals for dynamic environments that are constantly changing in sports.

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15	Collins	Kyla	KINE	G	Validation of special olympics balance assessment	<p>Studies suggest an increased fall risk within individuals with intellectual disabilities (ID). FUNfitness is the comprehensive physical therapy component of the Special Olympics Healthy Athletes initiative. One of its goals is to assess balance using a two condition-single leg stance. This measure is limited by issues of subjectivity, ceiling effects, and low sensitivity to change. Balance Tracking System (BTrackS) provides an objective measure of balance using a portable force plate. The purpose of this study is to examine concurrent validity of the FUNfitness screening tool. Data was collected during a Special Olympics competition and 43 athletes with ID were screened according to both FUNfitness and BTrackS protocol to obtain measures of balance. Results found a significant difference (<math>p &lt; 0.01</math>) between the FUNfitness protocol and BTrackS assessment of participant balance deficits. Overall, the FUNfitness protocol offered low sensitivity (42.3%) and specificity (76.5%) values for evaluating deficits. Future research should look into modifying cutoff points for identifying balance impairments in the FUNfitness protocol. Altering cutoff points can potentially make the FUNfitness protocol more sensitive to balance impairments in this population.</p>
<i><u>Psychosocial</u></i>						
16	Wilkinson	Dylann	SOWO	G	Divert or criminalize: Literature review on benefits of diversion programs for juvenile offenders	<p>Incarceration and detention of juvenile offenders result in poor mental health outcomes and do little to curb recidivism. Therefore, community based diversion programs are viewed as an increasingly viable alternative, due to the psychosocial benefits for the offenders as well as financial savings to the community. The proposed presentation will share findings from a literature review aimed to synthesize research on effectiveness of diversion programs for youth in the juvenile justice system. Using search terms “diversion programs” and “restorative justice programs” 13 studies were identified and reviewed. Findings from these studies were synthesized in terms of costs and benefits to various stakeholders such as the youth, their families, as well as the broader community. Strengths and limitations of the studies were also noted. Our review indicates the average daily cost of diversion program is a fraction of the cost of incarceration in a juvenile justice facility. Youth that go through diversion programs are less likely to reoffend relative to those that had go through the traditional justice system (i.e. probation and incarceration), and this difference is even greater for low-risk youth. These findings will be presented in the context of practical and research implications.</p>
17	Jupina	Lauren	NURS	U	Successful transitions or opportunities for improved care	<p>The purpose of this study was to identify what a successful transition of care looks like from the young adult (YA) cancer survivors’ perspective and to identify strengths and weaknesses in the transition process from the YA survivors’ view. Inclusion criteria mandated that participants were diagnosed and treated for ALL, were at least eighteen years old, and were no longer receiving any pediatric oncology services. Fifty participants responded to a survey of investigator-developed questions via postal mail or were telephoned no more than three times over the course of four months. The survey collected demographic information and data concerning the YA survivor’s perception of their transition and the quality of their long-term follow-up care in the adult health care setting. Participants addressed</p>

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						the grief of transition, the complexity of transition, and the quality of communication with pediatric and adult health care providers. Effective education about risk factors secondary to childhood cancer treatment was an area of strength in their transition process. However, YA survivors' knowledge about risk factors did not translate to readiness to transition from the pediatric to adult setting. Transition in this population warrants a tailored approach that focuses on the emotional aspect of moving forward.
18	Reeves	Eden	COSD	U	Maternal responsiveness to children with hearing loss during playtime versus mealtime	The purpose of this investigation was to explore whether or not environment affected how mothers of children with hearing loss respond to their child. Specifically, the researchers analyzed extant data from two studies (Lund 2014 and Lund & Schuele 2016) for four specific behaviors: unrelated responses, directing responses, ambiguous responses, and nonobligatory responses. Each video was coded according to a pre-written manual (Lund, unpublished) and codes were averaged out of the total maternal utterances found. After the videos were coded, a univariate analysis of variance was conducted and of the four criterion that were investigated, three were found to be significant between the two populations. The main effect of directing responses was not significant. The main effect of unrelated responses was significant, higher for mealtime. The main effect of ambiguous and nonobligatory responses was significant, higher for playtime. We also ran a post-hoc analysis to determine if maternal MLU was significant (it was, higher for playtime). The implication for these findings is that there are missed opportunities for intervention during both playtime and mealtime, which is an oversight of the ultimate goal of generalizing behaviors across conditions so that intervention is maximally effective. It is important to consider these implications in further discovery so as to better use intervention time during a child's normal routine.
19	Howarth	Sara	NURS	U	Recruitment challenges in adolescent and young adult cancer survivors	The adolescent and young adult cancer population is uniquely difficult to recruit for research studies, leading to a lack of information and clinical trial participation. The purpose of this integrative review is to identify specific limitations to and successful strategies for recruiting this population. These strategies could be implemented in an ongoing study on the effects of physical activity in adolescent and young adult cancer survivors and to help general recruiting efforts in the future. Various databases were searched and reviewed for applicable evidence and current research on the topic of adolescent and young adult recruitment. Barriers identified include the population's developmental stage and their increased mobility. Their stage of life and development also leads to insurance and time commitment barriers. Successful strategies for recruitment include face-to-face contact by healthcare providers, social media outreach, successful first contact, and continued additional contact. While multiple barriers to recruitment and successful recruitment strategies were identified, ultimately more research is needed on the subject. The data collected creates a solid base for continued research in this population. The findings in this review are satisfactory to create a plan of action for recruiting the AYA cancer population in the current ongoing study on physical activity. A multifaceted approach initiated by the patients' healthcare providers combined with social media



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20	Swenson	Stephanie	SOWO	G	Beyond bullying	<p>outreach and frequent contact will be most effective for this population, based on integrated review findings.</p> <p>The purpose of this literature review is to determine the most effective techniques to reduce bullying and peer victimization among elementary and middle school aged children. Specific inclusion criteria were used to select studies to be included in this review. The studies included in this review were all peer-reviewed articles published from 2011 to 2016. The studies evaluated programs in each of the schools that were implemented with the goal of reducing bullying and peer victimization in each school. Each program evaluation included in this literature review found a reduction in peer victimization and bullying behavior, but overall the most effective program at reducing bullying and peer victimization in schools was the “Bully-Proofing Your School” Program. This program was the most effective at reducing these behaviors because it was a school-based program that implemented a combination of specific techniques such as small groups for the students, staff training, and parent involvement. Recommendations based on the results of this review include implementation of the “Bully Proofing Your School” program at all elementary and middle schools in order to reduce bullying and victimization among students. Another recommendation would be to institute mandatory parent trainings on bullying behavior and victimization.</p>
21	Robinson	Sarah	SOWO	G	Is it my responsibility? Students’ perspectives on bystander intervention	<p>Research has demonstrated that sexual violence on college campuses is a prevalent problem. In recent years, bystander interventions have been developed to help prevent sexual violence on campus. The bystander model focuses both on increasing community members’ receptivity to prevention messages and training and supporting bystander behaviors. The purpose of this study was to explore university students’ perspectives on bystander interventions. Five student focus groups were facilitated to gather student perceptions and feedback regarding the implementation of bystander interventions to prevent sexual violence at a university in the Southwestern part of the U.S. Students participated in one 60- to 90-minute focus group that included a maximum of eight participants. The focus group sessions were audiotaped, transcribed, and analyzed using Dedoose. A thematic analysis was used to identify students’ perceptions regarding best practices for bystander intervention programming on campus. Results of the focus groups revealed students’ perspectives on facilitators and barriers to being an active bystander as well as suggestions for facilitating and implementing a bystander intervention program on campus. The results of this study will help guide the continued development and implementation of a student-focused, campus-wide, bystander sexual violence prevention initiative on campus.</p>
22	King	Chelsea	SOWO	G	Saving them from scars	<p>Nonsuicidal self-injury (NSSI) is the purposeful harming/injuring of one’s own body without lethal intent. Cutting is the most common form of self-injury. The purpose of this review is to determine, based on previous research, the most effective therapy method for treating adolescents who participate in NSSI. This literature review focused on eight quantitative studies that focused on effective therapy methods for treating adolescents who participate in self-harm. Participants</p>

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						in these studies were between the ages of 12 and 25. All participants have a history of NSSI behaviors. The studies focused on four different treatment methods: dialectical behavioral therapy (DBT), attachment-based family therapy (ABFT), cognitive behavioral therapy (CBT), and mindfulness-based cognitive therapy (MBCT). In this review, the treatment methods were compared on their ability to reduce depressive symptoms, suicidal ideation, and self-harm episodes. DBT was found to be the most effective treatment method because of its ability to reduce depressive symptoms, suicidal ideation, and self-harm episodes. This literature review should be used to influence the policy within agencies who treat adolescents who participate in NSSI. The literature review can create platforms to discuss how to recognize the signs of self-harming behavior and encourage education in DBT as a treatment method.
23	Miller	Carly	COSD	G	An intervention for concept knowledge for children with hearing loss	This study employed a single-subject design across behaviors and participants to measure the effects of classroom-based intervention on temporal and spatial concept word knowledge outcomes of children with hearing loss. This study aimed to 1) determine the functional relation between classroom-based intervention and concept vocabulary knowledge in preschool children with hearing loss as well as 2) identify both child-level and 3) intervention-level factors that improve or decrease their rate of concept vocabulary learning. The intervention used in this comparative single-subject design study followed a protocol based on Nelson, Pwell, Bloom and Kraft (2014). Significant results were obtained for use of this intervention with spatial and temporal-spatial concepts, as one at least demonstration and two replications of a functional relation were demonstrated for these concepts. Results indicate the intervention increases in child concept knowledge immediately following instruction and with some maintenance; however, it is not intuitive to administer.
24	Taylor	Kim	KINE	U	Personality types and exercise preferences and behaviors	The purpose of this study was to determine the relationships between personality types, according to the dichotomies of the Myers-Briggs Type Indicator (MBTI), and exercise preferences and behaviors. College students (n= 80, age 18-23 yrs) enrolled in Physical Activity classes at TCU completed a demographics questionnaire that analyzed preferences for exercise characteristics, the Keirsey Temperament Sorter (KTS) that classified participants' personality types, and the Godin Leisure-Time Exercise Questionnaire that assessed current exercise frequency and intensity. One-way ANOVAs indicated significant differences between only two of the dichotomies and three of the exercise preferences. The main effect differences were for the thinking vs. feeling subscale and preference for company, $F(1,76) = 7.20, p = 0.009$ , and preference for aerobic exercise, $F(1,79) = 4.25, p = 0.043$ , and for the judging vs. perceiving subscale and preference for location, $F(1,75) = 5.59, p = 0.021$ . These results indicate that feeling was associated with a preference for aerobic exercise and exercise with a few others, and judging was associated with a preference for exercise at the gym. While limited, the results do indicate relationships between personality types and exercise preferences and behaviors.

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25	Bunde	Marcus	KINE	U	Mental toughness and competition anxiety among NCAA D1 baseball players	Researchers are continuing to study athletes and their levels of physical and mental toughness. Mental toughness is considered an abstract concept, as several models and definitions are used throughout research. Knowing how mental toughness affects performances in pressure situations can help improve an athlete's performance in the future, as well as determine the importance of mental training. Mental toughness is identified as a major predictor of success in individual and dual sports. This study will look at competition anxiety and its relationship with mental toughness in baseball players. The researchers asked only participants of teams that are division 1 and NCAA eligible to participate in the study. Emails were sent to NCAA D1 baseball coaches in five different conferences across the country. Through research the investigators learned that there is a connection between high levels of mental toughness and low levels of competition anxiety. Coaches need to recognize the significance of mental skills training and how it can predict their reaction to the stress of sport. Developing a mental training program will help train the athletes separately from skills practice.
26	Chatila	Jad	KINE	U	The influence of level of competition and injury status on mental toughness among varsity and junior varsity baseball players: A case study	Mental toughness, along with several other psychological characteristics, can lead to positive performance throughout sport and exercise. This construct has been observed in other situations; however, not in the context of competition level and injury status. The purpose of the present study is to assess the influence of injury status and level of competition on mental toughness among collegiate athletes. Researchers polled from a local high school's varsity and junior varsity baseball teams, which consisted of 39 players. The participants were issued a demographic questionnaire, and the Mental Toughness Questionnaire-48 (Clough et al., 2002). Results conveyed that competition level was negatively associated with mental toughness, indicating that the junior varsity team had higher levels of mental toughness than the varsity team. Injury status was not related to levels of mental toughness. Since the researchers observed only one school's teams, the results cannot be applied to a more generalized population. But these results have various practical implications for these baseball teams.
27	Welin	Troy	KINE	U	Mental toughness as a predictor of golf performance in pressure situations	A new topic in the growing field of sport psychology is that of mental toughness, defined as having the natural or developed psychological edge that enables individuals to cope better than their opponents with the myriad of demands that sport places on its performers. Early evidence has shown support for the relationship between mental toughness and performance in high-pressure situations. This case study attempts to predict the performance of a golfer during a pressure situation using the MTQ48 (taken twice, one for a time the individual had a good performance and one for a time the individual had a poor performance) and Interview questions created by the researchers. An analysis of the interview and MTQ48 revealed that the constructs of the MTQ48 differed dependent upon performance. The Interview questions further reinforced these differences between the two performances. These results validated the relationship between mental toughness and performance in high-pressure situations, as during the "good" performance, the individual's scores on the MTQ48 were much higher than during

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						the “poor” performance. This study is part of a growing body of research on mental toughness and the sport of golf and will contribute to future research on similar topics.
28	Fant	Kelly	SOWO	G	Assessing victims' services programming: Evaluation of the Tarrant County criminal district attorney's office victims' services	The purpose of this study was to evaluate whether the change in process in the Victims' Service program at the Tarrant County Criminal District Attorney's Office lead to improved victim and advocate relationships, increased service referral and utilization, and overall satisfaction of the Victims' Services Program. The study included 325 disposed or closed cases chosen through random sampling out a total of 1,067. Researchers completed 80 phone surveys consisting of qualitative and quantitative questions. Results indicated that the majority of participants were satisfied with their relationship with their advocate. However, while the majority of participants responded that they received a call from an advocate, case notes indicate that for some of these participants, no contact was ever made. Therefore the level of satisfaction cannot accurately be attributed specially to advocates in the Victim Services program. This study also indicated that the majority of participants were satisfied with services and the overall Victims' Services program. While this study cannot conclusively determine the effectiveness of the Victims Services Program, it does demonstrate overall satisfaction with the services provided at the Criminal District Attorney's Office.
29	Threatt	China	SOWO	G	From the frontline: Examining treatment completion for veterans seeking mental health counseling	This poster presents findings from an evaluative study on an individual counseling program for combat veterans provided at the Vet Center of Arlington examining outcomes of treatment effectiveness for veterans served during Fiscal Year 2016. The analysis used de-identified data provided by the Vet Center that included participant demographic information, opening GAF score, and closing GAF score. We focused on coding the GAF scores then comparing them on a scale to the demographic trends found in the data. We used inferential statistics of the data collected to demonstrate a correlation between veteran's characteristics and their likelihood of completing counseling. Key findings were (a) males were more likely to seek treatment than females (b) majority of the participants identified as white, 47.07% (c) veterans who served in Global War on Terrorism OIF were the highest population of service era to seek treatment, (d) a higher number of army veterans sought readjustment counseling, representing 57.23% of the population. By evaluating demographic information and identifying trends, a clearer understanding of why certain veteran's overall level of functioning increased and other's decreased or stayed the same will be revealed.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
<u><i>Public Health/Health Promotion//Education</i></u>						
30	Row	Jordan	SOWO	U	Is it effective? Current trends in treatment for older adults with depression	The purpose of this research was to determine what current scholarly research reports in regards to effective treatment for older adults struggling with depression as well as the causal factors relevant to the gaps in meeting, adequately, the needs of these individuals. A selection of five articles were chosen from EBSCO databases between the years of 2000 and 2016 based upon three keywords (elderly, depression, treatment) which ranged in setting from Japan to the United Kingdom and from individuals in institutional settings to those still in their own neighborhoods. Findings showed that both goal-oriented and meaningful activities alongside community involvement helped to combat social isolation and improve coherence, two main causal factors for depression, among older adults but that the first choice of treatment, despite individual preference, was medication. The results also seemed to find that primary care physicians were reluctant when it came to working with and treating older adults and that mental health is typically overlooked in favor of treating physical ailments. As the global population continues to age and rise in number, mental health and its lack of effective treatment in regards to the geriatric population will need to be addressed in order to ensure continued well-being.
31	Blanck	Caitlin	NURS	U	Creating an education program to promote sexual health literacy at a collegiate level	The purpose of this project was to examine the need for a sex education program for students at the collegiate level, and to outline a prospective education program to meet this need. Only 24 states and the District of Columbia mandate sex education, and there's variability among the extent of the sex education. (Kost & Henshaw, 2014). This wide disparity of education, in addition to other demographic factors, leaves many adolescents with stunted sexual health literacy. Because many students receive inadequate or no education, during adolescence, Colleges and Universities are appropriate venues to provide students with necessary education to best prepare them for a healthy and safe collegiate experience. A Quality Improvement Project was designed that explores the possibility of implementing a sex education program at the collegiate level to educate students about the importance of safe sex practices. Programs include but are not limited to: contraceptive methods, STI's, campus resources, and personal advocacy. The researcher hopes that program implementation will increase sexual health literacy on TCU's campus and will encourage students to make safer sexual health decisions. Long term, the researcher hopes to see a decrease in sexually transmitted infections and an increase in reported contraceptive use on campus.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
32	Fradejas	Caribelle	NURS	G	Commit to sit and teach back in progressive care unit	This project involves educating patients about their symptoms, what to monitor on discharge using the Expectation Management and Medical Information (EMMI) videos or printing online education materials from Lexicomp available in Epic (online computer access for the entity), and validate understanding through teach back. The goal is to improve nurse-patient communication and discharge information through teach back, thereby increasing patient satisfaction. This has been done by teaching the patient their health condition from admission and not wait until day of discharge to increase their understanding. The clinical nurse leader (CNL) followed up during rounding what the patient or family have learned in their interaction about their disease process. Through the implementation of this project, it showed an improvement on the patient satisfaction in nurse communication and discharge evaluation especially their knowledge on the information of their symptoms as reflected on the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey scores. Employment of this project affects the entity financially, increases patient safety by decreasing readmissions, and promotes positive patient outcomes.
33	Dohnalek	Sophie	NURS	U	Environmental health literacy promotion within the TCU campus community	This study aimed to determine whether environmental health (EH) education impacts student, faculty, and staff's likelihood to reduce or stop the use of products that are known to negatively impact health. Education sessions to promote EHL took place on an urban private university campus among students, faculty, and staff. Students, faculty, and staff on the TCU campus participated in an EH education session. Each session consisted of a presentation, hands-on demonstration, and group discussion. Participants completed baseline surveys, and discussion questions were recorded and transcribed. The investigator used descriptive and content analysis methods to evaluate these data. 27 participants (17 students, 10 faculty/staff) attended one of 5 group sessions. 81.5% reported no prior EH education; however, 77.8% indicated awareness of natural alternatives. An estimated 95% of participants felt the lesson motivated them to make informed choices and educate others. Key barriers to applying EHL in daily life included lack of understanding and education on the topic (37%), cost (33.3%), and brand familiarity (26%). Education sessions promoted EHL among students, faculty, and staff. These sessions have the potential to improve understanding of EH, and the overall health of the community by empowering individuals to make informed choices.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
34	Farbo	Dave	KINE	G	Creating healthier kids one step at a time: An exploratory study through LiiNK	The purpose of this study was to explore the physical activity patterns and emotional state differences among elementary school students at two public schools with differently structured school days. Eighty-one first grade students and 84 second grade students were selected from two public schools in North Texas affiliated with the LiiNK Project (Let's inspire innovation 'N Kids). Participants had to wear an accelerometer for a minimum of four 24-hour days in order to be included in the data collection. The intervention school students (N=98, grade 1=46, grade 2=52) received four unstructured, outdoor play breaks daily as well as four 15-minute character lessons weekly, whereas the matching comparison school (N=67, grade 1=35, grade 2=32) received two 15-minute recess periods daily with no character lessons weekly. The results showed the total minutes in moderate to vigorous physical activity and total steps in intervention schools were significantly greater in the intervention school than the control school in both grades. In addition, the intervention school students displayed significantly more positive emotions and significantly less not positive emotions during recess than the control school. Preliminary data supports the intervention position that multiple unstructured, outdoor play breaks may be more beneficial for the whole child as shown through improved physical activity levels and overall happiness.
35	Schwene	Diana	KINE	U	LiiNK: The role gender plays in recess activity levels throughout the school day	The purpose of this research study is to compare activity levels by gender in the first grade during each of four unstructured recess times and determine overall activity patterns of children throughout a school day. Twenty-three females and 22 males from a North Texas LiiNK intervention school wore accelerometers for two separate weeks to record their activity levels throughout the school day. The children participated in a regular LiiNK intervention schedule with four 15-minute unstructured recesses every day. There were no significant differences found for number of steps by recess or for steps by gender by recess. The lack of significant differences in this study provides support for unstructured play over structured play. It shows that female children are likely to show similar active patterns to males and that both genders are similarly active across all four recesses throughout the day in the unstructured, outdoor play environment.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
36	Giovinazzo	Brianna	KINE	U	Reaction time and fine motor dexterity in adults with intellectual disabilities	The purpose of this study was to examine the relationship between reaction time and fine motor dexterity in adults with intellectual disabilities compared to a typically developing population. We recruited adults with Intellectual Disabilities from a statewide Special Olympics event. Typically developing peers were recruited from a local university. The Purdue Pegboard was used to test fine motor dexterity and Reaction Test Pro for iPad was used to test reaction time. There was a statistically significant difference between groups as determined by one-way ANOVA ( $F(2,27) = 36.42, p < 0.01$ ). A Bonferroni post hoc test revealed that the number of pegs placed was statistically significantly greater in the typical development group ( $16.12 \pm 1.42$ ) compared to those with intellectual disability ( $9.58 \pm 4.62$ ) and Down syndrome ( $7.77 \pm 1.75$ ). There was no difference between participants with Down syndrome and intellectual disability. There was also a significant difference between groups ( $F(2, 27) = 21.38, p < 0.01$ ) regarding reaction time. Typically developing peers ( $0.34 \pm 0.07$ ) had significantly better reaction time compared their peers with Down syndrome ( $1.60 \pm 0.60$ ) and intellectual disability ( $1.08 \pm 0.49$ ). There was no difference between participants with Down syndrome and intellectual disability.
37	Bennett	Arianna	KINE	U	Balance in individuals with Down syndrome and intellectual disabilities	The primary purpose of this study was to compare balance and ankle stability among individuals with Down syndrome and other intellectual disabilities. Thirty-nine individuals (ages 17-50, 11 with Down syndrome (DS) and 28 intellectual disabilities (ID)) voluntarily participated. Prior to balance testing, subjects' ankle range of motion (ROM) was measured using a goniometer. Participants then voluntarily took part in two balance testing trials quantified by the BTrackS Balance System, a portable force plate containing internal center of pressure tracking software. Balance ability, measured by center of pressure (COP), was tested under quiet room conditions with eyes closed. All collected data was recorded and analyzed by the internal BTrackS software. Results showed a significant difference for mean frequency of COP data between the two populations ( $p < 0.01$ ). In addition, the unpredictability of COP deviations in the medial-lateral and anterior-posterior directions varied significantly between the populations ( $p < 0.05$ ). The results of the study indicate that individuals with Down syndrome have impaired balance ability compared to individuals with other intellectual disabilities. Based on our results, individuals with Down syndrome have decreased balance performance due to their higher average unpredictability in their standing balance, increased instability, and greater average ankle range of motion.



Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
38	von Richter	Kylie	KINE	U	The relationship between physical activity and sleep and health related quality of life in breast cancer patients	Not much is known about the role of exercise in sleep and health related quality of life (HRQOL) in breast cancer survivors. Information on sleep and physical activity was collected from 10 female breast cancer survivors. Physical activity was assessed by the 7 Day Physical Activity Recall (PAR) and the Short Questionnaire to Assess Health Enhancing Physical Activity (SQUASH). Sleep (quality and duration) were assessed using a cell phone app, the Sleep Cycle Alarm Clock. HRQOL was assessed by the Functional Assessment of Cancer Therapy questionnaire. Pearson's Correlation Coefficients showed a significant negative relationship between physical activity expenditure, assessed by PAR, and sleep quality ( $r=0.76$ ; $p<0.01$ ) and sleep duration ( $r=0.68$ ; $p<0.03$ ), but there was no relationship between time spent in light, moderate, and intense physical activity, assessed by SQUASH, and sleep quality and duration. There was also no relationship between physical activity and HRQOL or between HRQOL and sleep quality and duration. In conclusion, physical activity was not associated with improved sleep quality and duration or HRQOL in breast cancer survivors. Future studies with a larger sample and using more objective measurement of physical activity are needed.
39	Holcomb	Sarah	KINE	U	Comparison of dietary intake of U.S. South Asians with type II diabetic mellitus (T2DM) and normal blood glucose	The prevalence of type 2 diabetes mellitus (T2DM) is nearly 4 times higher in South Asians (SA) living in the U.S. compared to Caucasians. There are little data on the diets of these migrants. The purpose of this study was to compare the diets of SA with and without T2DM living in the U.S. Sixteen SA with T2DM and 14 SA controls were studied. Dietary data were collected using 3-day image-assisted dietary recalls (subjects took digital pictures of their diet, followed by investigator recall) and analyzed for nutrient content. A one-way ANOVA showed that energy intake ( $p<0.0001$ ) and dietary fiber ( $p<0.0001$ ) intake were significantly lower in T2DM compared to controls. There was no difference in the percent energy intake from macronutrients between the groups. In conclusion, SA with T2DM consumed less energy and dietary fiber than controls but there was no difference in macronutrient intake. Future studies need to investigate the diets of SA with undiagnosed T2DM and pre-diabetes.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
40	Curran	Maddie	KINE	U	Effect of balance intervention on postural control and gait efficiency in preschoolers with Down syndrome	The purpose of this study was to evaluate the effect that balance training can have on children with Down syndrome, specifically on their levels of postural control and gait efficiency. Eleven children with Down syndrome, ages 4-6, were recruited for this study. Before the intervention program began, baseline testing was performed for each participant using a force plate (BTrackS) and a timed up-and-go test. The intervention consisted of 30 minutes of balance activities per day, which took place four days a week for four weeks. Post-testing was performed after the last session. Our results did not show statistical significance for any of our measured values. However, we did see changes in the effect size which we calculated in order to determine if there was any change between baseline and post-testing for our small sample size. Some of the greatest differences we saw were decreased mean frequency and average time for TUG test. These results indicate that a short-term training intervention can be beneficial for both postural control and gait efficiency in children with Down syndrome.
41	Long	April	KINE	G	Creating healthier children one step at a time: An exploratory study	The purpose of this study was to examine if physical activity levels and emotional state differed in elementary school children after school. A total of eighty-one first grade students and eighty four second grade students from two North Texas public elementary schools that were affiliated with The LiiNK Project (Let's inspire innovation 'N Kids) were selected. Participants wore accelerometers for a minimum of four 24-hour days in order to be included. The intervention school students (N=98, 1=46, 2=52) who received four unstructured, outdoor play breaks daily and four 15-min character development lessons weekly, whereas the matching comparison school (N=67, 1=35, 3=32) had two 15-min recess periods and no character development program. The results showed no significant differences in the happiness scale and all but the subscales of the Temperament Survey, except for the activity subscale which was significant between genders. The physical activity recall showed that the intervention students spent more time after school in active pursuits. A MANOVA revealed significant differences in after school in activity between schools, gender, and grades. Step counts were significant between grades and genders.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
42	Hanrahan	Clare	KINE	U	The validity of BTrackS (Balance Tracking System) in children with Down syndrome	The purpose of this study was to determine the level of predictive validity and concurrent validity of BTrackS (Balance Tracking System) in children with Down syndrome (DS). Eleven children with DS, ages 4-6 were recruited from Kinderfrogs School on TCU campus. Participants included 5 females and 6 males. Postural sway measures were obtained using BTracks Balance Tracking system to determine fall risk. Subjects were then assessed using the PBS to determine fall risk. It was found that mean frequency explains 46.4% of variance on the PBS and that variables measured by the BTracks system correctly predicted fall risk 81.8% of the time. Based on these findings, the PBS may be a more valid measure of fall risk than the BTracks system in this population. The attentional demands and time requirements, as well as the cost of the BTracks system may not make it a useful measure in young children with DS, although it may be useful in older populations with DS. Additionally, decreasing time requirements, increasing clarity of instructions, and including the use of visual aids in both measures may increase the validity of both the PBS and BTracks system.
43	Schrandt	Kori	SOWO	G	Perspectives of first-generation Indian immigrant parents on changes that would help them cope more effectively with their child's developmental disability	The poster presents finding from an ongoing study on stress and coping among first generation immigrant Indian families caring for a child with a developmental disability in the United States. This analysis is based on a sample consisting of nine participant interviews. I focused on participants' interview responses to the question on "What changes would you like to see to make this experience (i.e. caring for a child with a developmental disability) easier for you?" I used grounded theory approach to analyze parents' response to the question on change they would like to see when dealing with their child's developmental disability. The key themes were (a) access to better resources, (b) wishing things were cheaper, (c) better support system, (d) more cooperation from school system, (e) dealing with child's diagnosis, (f) helping with daily hardships, and (g) cultural hardships. The presentation will include illustrative vignettes for each theme and implications of these findings for parental health and wellbeing. I believe these finding could help to lower parental stress, and promote their health and wellbeing.
44	Pena	Tirza	COSD	G	The effects of parent training on the use of language-stimulation techniques with Spanish-speaking parents of children with hearing loss	The overall purpose of this study was to evaluate the effectiveness of language stimulation strategy training with Spanish-speaking parents of children with hearing loss. One mother-child dyad participated in multiple-baseline study. During baseline and maintenance, weekly play samples were gathered to measure the mother's spontaneous use of language stimulation strategies pre- and post- intervention. During intervention, the dyad participated in parent training focused on transparent labeling, linguistic mapping, open-ended question, and narration strategies. Parent strategy use was measured via weekly play samples, and child vocabulary growth was measured via play sample and parent report. Results indicate that short-term parent training can change parent behavior on the use of transparent labeling, and open-ended questions. Results also indicate that intervention focused on parent training is generally associated with changes in child learning. Further research is needed to characterize the extent to which short-term training can make long-term changes in parent and child outcomes.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
45	Nucum	Aimee	SOWO	U	Risk factors associated with teen pregnancy and implementation of effective prevention programs	The purpose of this literature review was to develop a better understanding of risk factors and life processes associated with teen pregnancy for implementation of effective and proper prevention programs. Five empirical articles were reviewed and each had in common: the issue of teen pregnancy and discussed factors associated with pregnancy prevention; explored the issue through social work, psychology or sociology perspectives: used qualitative, quantitative or mixed methods: programs discussed were located in the United States or Canada: and they were published within the past 15 years. Findings revealed that family dynamics within the household, interference in healthy family functioning, and the quality of communication about sex between an adolescent and her father affect teens' at-risk behaviors that may lead to teen pregnancy. Results also showed that social media plays a significant role in shaping teens' perspective of this issue. Though teen pregnancy is associated with detrimental outcomes in young adulthood, it is also a target for preventative interventions that could improve life trajectories. With appropriate strategies and use of effective outlets, society's depiction of teen pregnancy as a social problem can be reshaped resulting in teen parents recognizing self-worth and optimism in their ability to be successful.
46	Sweeney	Taylor	SOWO	U	The efficacy of applied behavior analysis in children diagnosed with autism	This literature review examines the efficacy of applied behavior analysis (ABA) therapy for children diagnosed with autism. This review examines qualitative and quantitative articles representing ABA therapeutic interventions. In these studies, child participants met criteria for autistic disorder outlined in the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV) and the Autism Diagnostic Interview-Revised (ADI-R). The average age of study participants was 1-11 years. The average sample size was 24.75 participants per study with respective sample sizes at 20, 24, 25 and 30. The articles found applied behavior analysis therapy to yield higher results compared to children who are not receiving any intervention or any scientifically proven intervention. However, applied behavior analysis does not appear to have a significantly higher effectiveness when compared to other scientifically proven, behavioral interventions as shown by the quantitative findings. Overall, the literature supports applied behavior analysis therapy as a beneficial, scientifically proven and evidence based practice that health professionals can feel confident recommending to families as a therapy for children with autism.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
47	Tilley	Ashley	SOWO	U	Gender differences in sexual assault victimization among college students	Sexual assault victimization among college students is a widely researched topic in literature however, studies rarely focus on male's experience with this issue. The National Crime Victimization Survey revealed that male college students typically experience sexual assault at a rate of 3.7%-11.8% in comparison to 12%-38% for female students. Although sexual assault affects both males and females at a significant rate, females are typically viewed as victims and males as predators due to societal attitudes and stereotypes about men and masculinity. The reviewed literature reveals that males, in comparison to females, are perceived by their peers to be likely to underreport and less likely to be considered a victim of sexual assault. Limitations were that all of the articles did not include actual victims and samples lacked diversity in race and gender. The information in this literature review could provide information to social workers on how to be more empathetic to the male experience with sexual assault victimization, as well as promote policy changes on college campuses.
48	Beene	Matt	SOWO	G	Assessment of patient safety at Mesa Springs Behavioral Health Hospital	This study proposes to fill a gap in the literature regarding patient perceptions of safety while receiving treatment at Mesa Springs Behavioral Health Hospital in Fort Worth, Texas. The researchers compiled satisfaction survey results from patients receiving treatment in three Mesa Springs treatment units (adult mental wellness, adolescent mental wellness, and adult substance abuse) between January 2016 and July 2016: Average scores for the satisfaction survey item examining patient perceptions of safety were compared to data collected by Mesa Spring's parent corporate company, Springstone. Findings suggested Mesa Springs provides a therapeutic environment perceived to be higher than average in terms of patient safety. The researchers analyzed these findings further to determine discrepancies between demographic characteristics and scores of safety. Study limitations are that only one question in the survey was dedicated to measuring a patient's sense of safety while receiving treatment and no clear operational definition of safety was provided to the patient, leaving them to define the concept of safety for themselves. Therefore, concerns regarding the construct validity of the study exist. Despite this limitation, however, this study provides an important perspective on the experiences of individual seeking care for serious mental health concerns.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
49	Baleztena	Angela	KINE	G	Vestibular and/or ocular motor dysfunction in Athletes with ADHD	<p>Vestibular and/or ocular-motor dysfunction (VOD) is common following sports-related concussion (SRC). Young athletes with ADHD exhibit VOD in the absence of SRC. The Vestibular/Ocular-Motor Screening (VOMS) is a useful tool for detecting and monitoring VOD. However, research utilizing the VOMS has lacked inclusion of those athletes with ADHD. Therefore, an understanding of pre-injury VOMS abnormalities in athletes with ADHD could enhance the clinical utility of the VOMS. PURPOSE: To examine VOMS differences in young athletes with and without ADHD. METHODS: Young athletes with no concussion history completed the VOMS. Symptom provocation within each domain was scored and compared between groups using independent samples t-tests. RESULTS: Significant differences (<math>p &lt; .05</math>) were found in all VOMS domains such that athletes with ADHD consistently experienced greater symptom provocation. CONCLUSION: These data suggest that athletes with ADHD experience VOD detectable by the VOMS in the absence of a concussion. Thus, if concussed athletes with ADHD exhibit an abnormal VOMS those symptoms may not be a result of a concussion. Therefore, it is recommended that the VOMS only be used on those athletes with ADHD if a baseline VOMS is available to measure the magnitude of change following injury.</p>
50	Wackler	Kamree	COSD	U	Examiner and context effects on Preschool children's Language complexity	<p>The purpose of this study was to examine the language complexity of twenty preschool children (mean age 3 years, 4 months) during a free-play and a storybook context with a familiar and unfamiliar examiner. For this study, two language sample protocols were developed. For the free-play protocol, the child and the examiner played with three different types of toys: familiar objects, unfamiliar objects, and other agents (e.g., doll or teddy bear). The storybook protocol consisted of the child and examiner reading the storybook provided. Each child participated in one 30-minute session with a familiar examiner, and one 30-minute session with an unfamiliar examiner. Findings reveal that the familiarity of the examiner did not have a significant effect on child language output, and that the free-play context resulted in a greater number of different words used by the children. These results are beneficial to the field of speech language pathology as professionals move closer to implementing a set protocol for the collection of language samples.</p>

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
51	Freed	Emily	SOWO	G	Gender dysphoria in children and adolescence: Parental perspectives	The prevalence of gender dysphoria has increased in recent years due to increased attention by researchers, the media, and increased advocacy efforts. Children experiencing gender dysphoria or those who identify as lesbian, gay, bisexual, or transgender (LGBT) population are at a significantly higher risk for developing a mental health disorder than those who are not gender dysphoric or LGBT. The purpose of this qualitative study was to qualitatively assess the needs of parents and families with a child diagnosed with gender dysphoria, identify gains and losses, coping strategies, and how the spiritual life of the parent informed their acceptance of their child's gender dysphoria. The study included a convenience sample of 13 parents of children participating in the GENECIS program at children's medical center between January 2017 and May 2017. Participants included fathers, mothers or legal guardians and caregivers. The findings of this study will help the GENECIS program better understand the needs of this emerging population, providing critical support that can help facilitate a successful adaptation process for children experiencing gender dysphoria and their families.
52	Huynh	Viviane	COSD	U	Implicit grammar intervention on school-age children with primary language disorder's grammatical knowledge	The purpose of this study was to determine if implicit grammar intervention, specifically conversational recast, is effective on increasing the grammatical knowledge of school-age children with primary language disorder. School-age children between the ages of 6 and 11 received intervention that utilized conversational recast to teach complex syntax tasks and a grammatical knowledge probe was used to determine the results. There was an improvement on one grammatical target for participant one, but the rest of the results were inconsistent throughout all three participants. The inconsistent results make it difficult to conclude that implicit grammar intervention was beneficial for increasing the grammatical knowledge of school-age children with primary language disorder.
53	Malvey	Hannah	COSD	U	Persuasive language in High School students: Differences in syntactic complexity in written and spoken language	The purpose of this study is to determine the difference in syntactic complexity in written and spoken persuasive language tasks for adolescents. The students who participated in this study were ninth grade English students ( <i>M</i> age = 14; 10), all with typical language development. For each language task, participants were asked to write a persuasive composition and speak about their opinion of high-school students having part-time jobs. The language samples were transcribed using the standard transcriptions of the Systematic Analysis of Language Transcripts software, also known as SALT. To analyze the errors in each sample, I coded for errors at the word level and errors at the utterance level. I found that adolescent students use more complex syntax in written persuasive language samples than in spoken language samples. On average, the participants made more utterance-level errors in the written language samples. I found a significant negative relationship between errors at the word level and scores on writing tests. This means that the higher the student's writing score was, the lower number of word-level errors that student made in the written persuasive task. This finding suggests that SLPs and educators should look to identify grammatical errors in written persuasive language and work to correct them because persuasive language may be an important indicator of academic success and writing abilities.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
<i>Professional Practice</i>						
54	Higgins	Megan	CNL	G	Implementing bedside shift report and the effect on nurse communication with patients and families	The purpose of this microsystem-based, continuous improvement project is to increase nurse compliance with bedside shift report (BSR), increase patient involvement in care, and increase nurse communication HCAHPS scores. The Clinical Nurse Leader (CNL) student and an interdisciplinary team used the Dartmouth assessment tool to complete a microsystem assessment and identified HCAHPS that had decreased from previous quarters. A literature review completed by the CNL student identified that implementing consistent BSR would increase patient satisfaction, increase perception of better care, and increase patient involvement in care. Utilizing a Plan, Do, Study, Act (PDSA) cycle and Lewin's change theory, interventions included an educational in-service, a survey to identify barriers to BSR, leadership audits with real-time coaching, and laminated reminders on staff computers. Compliance with BSR was measured by leadership audits and HCAHPS scores were collected pre-implementation and post-implementation. Two months post-implementation, there is an increased trend in "nurses explain in a way you understand," "overall," and "staff include you in decisions regarding treatment." Currently, there is no change in nurse communication scores. However, other unidentified factors may influence the HCAHPS scores.
55	Skaggs	Libby	NURS	G	Hardwiring intentional rounding in progressive care	The Progressive Care Unit (PCU) needed to improve patient satisfaction. The Clinical Nurse Leader (CNL) student and multidisciplinary team aimed to improve scores in the following areas: Nurse Communication, Pain Management, and Responsiveness of Staff. Baseline scores for the fourth quarter of 2016 were Nurse Communication (73 <sup>rd</sup> percentile), Staff Responsiveness (80 <sup>th</sup> percentile), and Pain Management (1 <sup>st</sup> percentile). Literature review revealed intentional hourly rounding as an evidence-based nursing intervention that positively impacts patient satisfaction. Hardwiring intentional hourly rounding implemented the first week of February in the PCU. The CNL student taught nursing staff strategies for intentional hourly rounding, such as using the "5 P's" and using cue cards placed on each computer screen in patient's rooms. By the last week of March, Nurse Communication scores were above 95 <sup>th</sup> percentile, Staff Responsive held steady at the 80 <sup>th</sup> percentile, and Pain Management scored at 99 <sup>th</sup> percentile. Implementation of daily bedside rounds may have skewed data in this project.



Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
56	Adams	Cassandra	CNL	G	Improving nurse communication scores with structured bedside shift report	The purpose of this project was to effectively implement bedside shift report to improve patient outcomes, nurse communication, staff and patient satisfaction scores. Bedside report is an evidence-based practice that increases patient involvement in their care that enhances patient satisfaction. A literature review supports bedside reporting as a patient safety goal that improves the effectiveness of communication. Data collection was over a three-month period following completion of staff education, a formal microsystem assessment, and literature review on a 29-bed orthopedic trauma unit. Pre-implementation and post-implementation project data compare nurse communication scores from patient survey results. Post-implementation data found that the use of consistent bedside shift report improves nurse communication scores. The process change from centralized shift report to bedside shift report was a challenge for nurses in the beginning of project implementation. However, consistent bedside shift report shows positive outcomes such as a decrease in patient falls and nursing errors at shift change due to an increase in nurse communication. Including patients in the discussion of their care improves patient satisfaction and nurse communication. The consistent use of bedside shift report proves to be effective by improving overall communication and patient outcomes.
57	Brown	Barbara	NURS	G	Discharge planning in the cardiac care unit utilizing a discharge toolkit	Advances in medical care are improving patient survival from critical illness. Patients in the intensive care unit (ICU) may go through multiple care transitions on their journey to discharge. There is evidence that survivors of ICU care suffer from emotional distress and report lower hospital satisfaction. The aim of the clinical project was to prepare patients for discharge planning and alleviate stress by improving communication in a Cardiac Care Unit (CCU). The clinical nurse leader student developed a discharge toolkit including a significant event summary to bridge memory gaps of their ICU stay. Components of the toolkit included the patient's designated decision maker, diagnosis, educational materials, new medications, and treatment goals. The event summary was a narrative of the patient's illness trajectory to promote emotional recovery. Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores for discharge information increased from 91.7% (n=6) to 100% (n=3) over one quarter. There is no data to evaluate the effectiveness of the tool once patients left the CCU nor was it clear if the event summary provided any emotional benefits. There is promise that using a communication tool is feasible to improve hospital discharge communication.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
58	Frazier	Erin	CNL	G	Purposeful hourly rounding to improve a process within a microsystem	The goal of the project is decreasing call light usage and increasing patient satisfaction by improving the current hourly rounding process. Patient satisfaction and quality patient outcomes are two of the drivers for monetary reimbursement for acute care facilities by the Centers for Medicare and Medicaid Services (CMS). A patient's level of satisfaction with their hospital experience is largely based on perceptions of quality care and how the staff met their basic care needs (Blakley, Kroth, & Gregson, 2011). Objectives include educating staff on what is addressed during purposeful hourly rounding, pain, position, potty, possessions, and pumps (5Ps). Current Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores for staff communication and overall patient satisfaction average in the 56 <sup>th</sup> percentile; the goal is to improve scores into the 75 <sup>th</sup> percentile, with scores being measured 60 days before and after project implementation. Blakley, D., Kroth, M., & Gregson, J. (2011). The impact of nurse rounding on patient satisfaction in a medical-surgical hospital unit. <i>MEDSURG Nursing</i> , 20(6), 327-332.
59	Chiarello	Andrea	NURS	G	Implementing structured physician-nurse rounding to improve nurse communication and physician communication scores	Communication is the backbone of patient care and outcomes. The interdisciplinary communication between the physician, nurse, and patient is of paramount importance. Poor interdisciplinary communication is associated with undesirable patient outcomes, medical errors, and patient dissatisfaction (Johnson & Conner, 2014). Clinical Nurse Leaders (CNLs) strive on a daily basis to ensure the patients, families, and nurses within their microsystem have a clear understanding of their plan of care. On a 24-bed medical-surgical unit, the CNL implemented a structured physician-nurse rounding initiative to improve physician communication, nurse communication, patient satisfaction, readmission rates, and length of stay. The project was implemented from February 2017 to April 2017. Preliminary results show an improvement in physician communication scores from the 59 <sup>th</sup> percentile to the 91 <sup>st</sup> percentile, and nurse communication scores improved from the 1 <sup>st</sup> percentile to the 3 <sup>rd</sup> percentile; remaining data is pending at this time (Press Ganey, 2017). The recommendation is to continue physician-nurse rounding and improve participation with the bedside nurses.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
60	Carroll	Jillian	NURS	G	Effects of a discharge folder on patient satisfaction	The purpose of this research was to improve patient satisfaction scores by educating patients and families about discharge medication and their disease/diagnosis information. A green discharge folder was designed to focus on discharge medication and diagnosis information. The folder includes a medication side effect information sheet, the 5 D's of Discharge to be provided at time of discharge, area for newly prescribed medications, and an area for patient follow-up appointment date and times. The folders are provided on day of admission and addressed throughout the hospital stay. When a new medication is prescribed or diagnosis is made, nursing staff print education through Texas Health Resources provided resources and reviewed with the patient. The education is addressed again at discharge. The results of this study showed improvement in education about medication side effects and understanding signs and symptoms to monitor when discharged from the hospital. There were many barriers to education of staff regarding the discharge folder prior to and during implementation due to a large amount of float staff. With improvement in two patient satisfaction areas, it is anticipated that continued use of the discharge folder would improve patient satisfaction scores on our unit.
61	Mauch	Paige	SOWO	G	Triumph over trauma: Evaluating the intro to trauma group at the women's center of Tarrant County	The purpose of this study was to evaluate the Intro to Trauma Group at the Women's Center of Tarrant County in order to examine participants' understanding of trauma and their awareness of the effects of trauma prior to and after attending the group. Researchers created pre and post surveys that included knowledge-based multiple choice questions designed to elicit specific information originally provided during group sessions. Scores from pre-tests and post-tests were analyzed to test researcher's hypothesis that there would be an average increase of at least three points. When comparing the pre-test and the post-test scores, researchers identified an increase of 2.23 points. The research hypothesis was, therefore, not supported but results did indicate an increase in knowledge. In the midst of this finding, the small sample included in the study and the use of a previously untested instrument are important limitation that should be considered when interpreting these results. Further research is needed to evaluate whether the Intro to Trauma group and similar psychoeducational groups conducted in other setting are benefitting participants.

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
62	Pugh	Ellen	SOWO	G	EDNA evaluation	<p>This study is an evaluation of Gladney Center for Adoption's EDNA program, which serves pregnant women experiencing homelessness. Our evaluation examined if services identified during intake assessments were the services women received during their time in the program. During the intake assessment, the mothers set 6 goals/resources they would like to receive during their stay. These goals were set with the purpose of assisting mothers in reaching three Gladney goals: stable housing, education completion / job training, and sustainable income. The achievement of these goals was re-evaluated during the mother's exit assessment. Participants in the study included homeless, pregnant women over the age of 18 that were wanting to place their child up for adoption. We hypothesized that 90% of mothers would receive 75% of the services requested. Our research found that only 50% of participants received identified services. Our research also found there was an overrepresentation of Caucasian participants in the study and that a majority of the participants were in early adulthood.</p>
63	Warren	Kelly	CNL	G	Process improvement for improved patient medication communication	<p>There has been difficulty with maintaining good Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores on medication communication. The third floor east medication communication scores remain steadily low. Studies have showed that with better medication communication and improved knowledge on medications patients can better control their health and avoid early readmission. One way to improve the patient's knowledge of their medications is to review their home medications and hospital medications with them. The intervention developed consisted of having a printed copy of the patient's medication list and making sure they patient first understand their home medications and that the list we have is accurate. Despite the fact that the patients may have been taking this medication for years they may have no idea what it is for. Poor understanding of medicines leads to lack of compliance, improper usage or dosing and increases hospital readmission rates and creates safety issues for patients. The patient's inpatient medications are also reviewed to make sure they understand their medications and their plan of care. Also sometime drug allergies are pointed out at this time. Improved safety and patient understanding are our goals.</p>

Poster No.	Last Name	First Name	Major	U/G	Title	Abstract
64	Sulgrove	Kelsi	SOWO	G	Professionals' perspectives on partnering with families of individuals with an intellectual disability	An estimated 1 in 6 individuals in the United States live with intellectual and developmental disability (IDD). They rely on a number of helping professionals (e.g. social workers, teachers) for support and services. This mixed methods study was conducted to gather professionals' perspectives on partnering with families of individuals with IDD. IDD professionals completed a demographic questionnaire and Family professional partnership self-assessment for professionals (Beach Center on Disability, 2003), and participated in a focus group that included open ended questions about participants' thoughts on family involvement, characteristics of the their most and least effective partnerships, supportive and challenging factors in forming partnerships with parents. Forty three professionals completed the survey and participated in focus groups. Through statistical and thematic techniques, we found that the best partnerships are characterized by quality parent-professional relationship, family involvement in the treatment plan, and family's openness throughout the process. The barriers to partnership include lack of knowledge of IDD, lack of resources for the individual with IDD, and lack of parent-professional communication. These findings can inform both the training of future professionals and parent education initiatives, and in turn positively impact the quality of parent-professional partnerships.