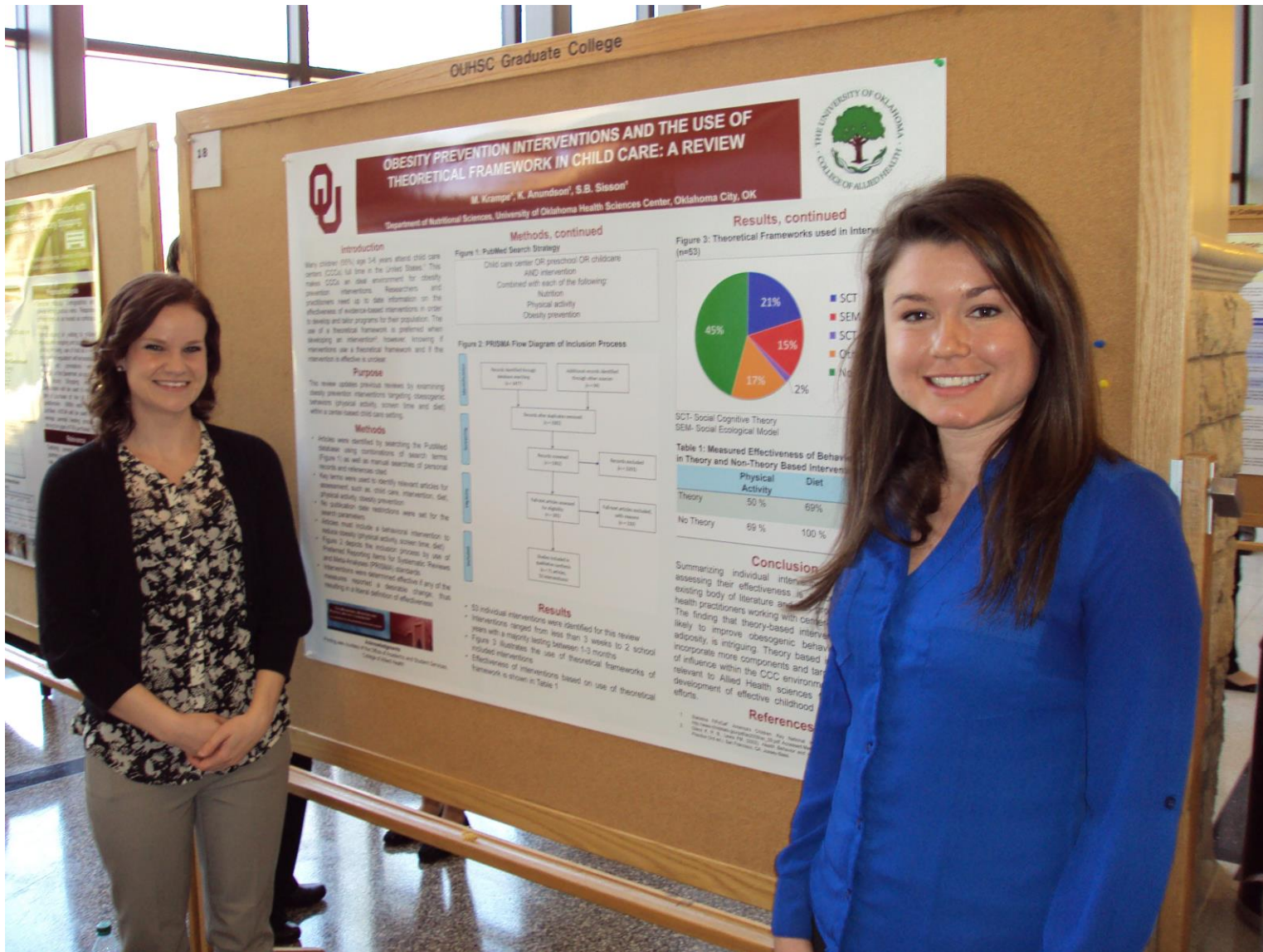




Alicia Nelson, Susan Sisson, Megan Krampe, Kat Anundson, Katy Swyden



Megan and Kat at poster: Megan Krampe and Kat Anundson

OBESITY PREVENTION INTERVENTIONS AND THE USE OF THEORETICAL FRAMEWORK IN CHILD CARE: A REVIEW

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Introduction
 Many children (30%) age 14 years attend child care centers (CCC) full time in the United States. This makes CCCs an ideal environment for obesity prevention interventions. Researchers and practitioners need up to date information on the effectiveness of evidence-based interventions in order to develop and tailor programs for their population. The use of a theoretical framework is preferred when developing an intervention. However, knowing if interventions use a theoretical framework and if the intervention is effective is unclear.

Purpose
 The review updates previous reviews by examining obesity prevention interventions targeting obesogenic behaviors: physical activity, screen time and diet within a center-based child care setting.

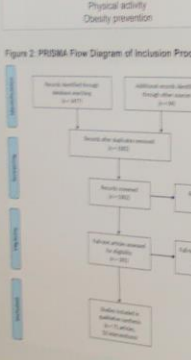
Methods
 • articles were identified by searching the PubMed database using combinations of search terms (Figure 1), as well as manual searches of personal records and references cited.
 • Key terms were used to identify relevant articles for assessment, such as: child care, intervention, diet, physical activity, obesity prevention.
 • No exclusion date restrictions were set for the search parameters.
 • Articles that include a behavioral intervention to reduce obesity (physical activity, screen time, diet).
 • Figure 2 depicts the inclusion process by use of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) standards.
 • Interventions were determined effective if any of the measures reported a beneficial change, that resulting in a lower definition of effectiveness.

Results
 • 50 individual interventions were identified for this review
 • Interventions ranged from less than 3 weeks to 2 school years with a majority lasting between 1-3 months
 • Figure 3 illustrates the use of theoretical frameworks of included interventions.
 • Effectiveness of interventions based on use of theoretical framework is shown in Table 1.

Methods, continued

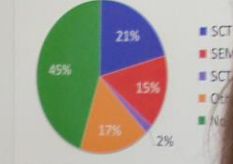
Figure 1: PubMed Search Strategy
 Child care center OR preschool OR childcare AND intervention
 Combined with each of the following:
 Nutrition
 Physical activity
 Obesity prevention

Figure 2: PRISMA Flow Diagram of Inclusion Process



Results, continued

Figure 3: Theoretical Frameworks used in Interventions (n=53)



SCT- Social Cognitive Theory
 SEM- Social Ecological Model

Table 1: Measured Effectiveness of Behavior in Theory and Non-Theory Based Interventions

	Physical Activity	Diet
Theory	50 %	69 %
No Theory	69 %	100 %

Conclusion

Summarizing individual interventions and assessing their effectiveness is a challenging task. Existing body of literature on obesity prevention interventions for health practitioners working with centers. The finding that theory-based interventions are more likely to improve obesogenic behaviors and reduce obesity is intriguing. Theory based interventions incorporate more components and target more areas of influence within the CCC environment. The use of theoretical frameworks is relevant to Allied Health sciences and the development of effective childhood interventions.

References

1. Institute of Medicine. (2002). *Preventing Childhood Obesity: The National Academies Report*. Washington, DC: National Academies Press.
2. Jones et al. (2010). *Childhood Obesity: A Global Public Health Problem*. *Journal of the American Medical Association*, 303(12), 1239-1242.



End of year lab party: Katy Swyden, Diana Wiley, Megan Krampe, Susan Sisson, Alicia Nelson, Kat Anundson



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