

PHYSICAL ACTIVITY AND SPORT

Resilience in Youth With Type 1 Diabetes During COVID-19: A Qualitative Investigation

Rowan Williams, Eddie Hill, and Justin Haegele

Abstract

During the onset of the COVID-19 pandemic, access to youth programming for youth with type 1 diabetes was disrupted, preventing access to opportunities to build meaningful relationships and important skills related to diabetes management. Using a qualitative descriptive methodological approach to study design and analysis, semi-structured interviews were conducted with three youths aged 10-13. Interview prompts based on Wolin and Wolin's (1993) conceptualization of resilience were asked to youth about their everyday experiences, including illness management, protective and risk factors, and resilience characteristics (insight, independence, relationships, initiative, creativity, humor, and morality). Findings suggest that although access to supports, opportunities, programs, and services designed with the specific needs of youth with T1D diminished with the onset of COVID-19, protective factors present within their immediate environments were perceived as helpful to their overall well-being. Protective factors included existing relationships supported through digital communication and parents,

Rowan Williams, Scholar Recruitment and Engagement Coordinator, McNair Scholars Program, Old Dominion University; Eddie Hill, Associate Professor, Outdoor and Community Recreation Education, Weber State University; and Justin Haegele, Professor, Director for the Center of Movement, Health, and Disability, Old Dominion University. Please send author correspondence to edwardhill@weber.edu

and other adult family members present within the household as compensatory adult support.

Introduction

Relationships drive connectedness within supports, opportunities, programs, and services (SOPS), such as camps, acting as both a process and product of youth's experience. However, an estimated 6.7 million youth were unable to access many SOPS during the summer of 2020, which has largely been attributed to the SARS-CoV-2 pandemic (Browne & Wycoff, 2021; Gillig, 2022). On March 11, 2020, the World Health Organization declared the spread of the SARS-CoV-2 virus as a pandemic, prompting schools to transition to distance learning (Gillig, 2022). The shift to virtual instruction prompted by the pandemic reduced or removed access to support, including peer and adult interaction outside of their immediate households, as well as specialized camps and other programming modes to support individual accommodations due to chronic illnesses such as diabetes.

With a steady increase in diabetes diagnoses since the initial onset of the pandemic (Unsworth et al., 2020), understanding lifestyle changes and disease management is an important factor in preventing future complications. As of 2020, it has been reported that the prevalence and occurrence of type 1 diabetes (T1D) is increasing globally, with every 15 per 100,000 people being diagnosed with the chronic illness and 9.5% prevalence, respectively (Mobasseri et al., 2020). Although the development and successful administration of insulin as a viable treatment for type 1 diabetics occurred over 100 years ago, access to insulin is still inaccessible for those who need it (Colagiuri & Wilson, 2020). Factors including cost, manufacturing, and administration of the drug serve as global barriers to access insulin, which may increase as a response to the increase in disease prevalence (Colagiuri & Wilson, 2020; Mobasseri et al., 2020).

Additionally, health factors associated with complications with diabetes include “vision loss, renal failure, and cardiovascular disease... [and] elevated levels of depression and anxiety” (Sallay et al., 2021, p. 1). For youth living with T1D, additional stressors associated with their development and transition into wider society may pose additional sources of psychosocial stressors that require

special consideration in diabetes management (Liesch & Elertson, 2020). Key aspects of diabetes management include lifestyle changes and diabetes education, such as including nutrition and physical activity as routine parts of their everyday life alongside their established relationships with endocrinologists and diabetes educators. Programming designed explicitly with youth living with T1D in mind often applies an interdisciplinary approach to address the medical, psychosocial, and developmental needs of this specific population, including education and support related to the chronic condition (Boman et al., 2017; Hill et al., 2019; Weissberg-Benchell & Rychlik et al., 2017; Weigensberg, et al., 2018).

Kaye-Kauderer and colleagues (2021) discuss resilience as a preventive and promotional mechanism essential to human development. As a marker of skills and coping mechanisms required to thrive, resilience can be described as “the ability to bounce back from adversity, serious threat or trauma” (Kaye-Kauderer et al., 2021, p. 166). As the world shares in exploring creative means of managing stressors related to the COVID-19 pandemic, experiencing hardships is an inevitable part of life. Therefore, understanding individual response to objective calamity may help better support youth’s desire to thrive.

Resilience in the context of positive youth development can be understood as a dynamic characteristic impacted by biological, ecological, contextual risk, and protective factors present in a young person’s life (Kaye-Kauderer et al., 2021). Risk factors such as alienation, high levels of stress, and addiction can lead to negative or undesirable and unhealthy behaviors (Huston et al., 2016). To mitigate risk present in youths’ lives, engaging in goal setting and maintaining positive relationships can serve as protective interventions that counteract present risk (Fraser et al., 1999). Practitioners and scholars working with youth have focused significant attention on the concept of resilience, shifting their focus on young people’s adaptability in the face of adversity and providing SOPs to promote resilience (Allen et al., 2021; Ettekal & Agans, 2020; Witt, 2018).

Our study focuses on Wolin and Wolin’s (1993) articulation of seven traits associated with being a resilient individual, which include *insight*, *independence*, *relationships*, *initiative*, *creativity*, *humor*, and *morality*. Insight is an individual’s ability to make appropriate

adjustments to their behavior based on their ability to perceive situations and actions of others within nonverbal and verbal communication. Independence refers to the capacity to make sound decisions based on one's wants and needs as opposed to external influences. Relationships include the maintenance of connection with peers, family members, and significant adults in one's life. Maintenance of relationships included the establishment and retention of healthy relationships and the identification of codependent behavior. Proactiveness is a defining characteristic of initiative, being the desire to improve one's selves and the environment around them with the tools they possess. Creativity and humor both prioritize the ability to find joy in one's life despite circumstances. While creativity entails the ability to generate alternatives and options in life to address risk factors, humor highlights the ability to identify new perspectives within their current circumstance. Morality is the theoretical proximity between an individual's immediate decision-making process and one's moral convictions. This specific construct has been modified in other studies emulating Wollin and Wollin's (1993) conceptualization of resilience to better align with youth-centric outcomes (see *values orientation* in Hill et al., 2007). Individuals who possess higher values orientation tend to make appropriate decisions and possess the courage required to stand by their decisions.

Research supports the idea that resilience and individual perceptions of protective and risk factors present within their everyday lives can impact the self-regulation of youth living with T1D (Thomas, 2004), including the development and practice of important health-related behaviors (Hillard et al., 2017; Hill et al., 2018; Huston et al., 2016). However, little attention has been given to the social and individual processes that youth engage with daily. Therefore, the present study sought to address the following question: how do youth with type 1 diabetes construct their experiences with protective and risk factors in their everyday lives amidst a pandemic?

Methods

To explore youth's everyday experiences, the researchers utilized a qualitative descriptive (QD) methodology applied through a constructivist paradigm. Aligned with the belief that individual understanding is facilitated through distinct interactions and experiences, constructivism aims to inform researchers of the development of

multiple complex subjective meanings of participant experience (Creswell & Poth, 2018; Sallay et al., 2021). Participant experience was examined within its natural state through QD, prioritizing the “who, what, and where of events or experiences and gaining insight from informants regarding a poorly understood phenomenon” (Kim et al., 2017, p. 2). Features of QD, including semi-structured interviewing, purposeful sampling, and content analysis supplemented by data describing the study sample, are used within this study (Kim et al., 2017).

Setting and Participants

Participants were recruited from a recreation program serving youth with T1D held on a college campus. The program operated face-to-face before the pandemic, then switched to virtual programming to continue offering support to these youth. The overall program itself utilizes outcome-focused programming to promote positive youth development by focusing on an individual’s strengths rather than deficits through curated activities and experiences available to participants (Witt, 2018). The program’s overall aim is to encourage youth to engage in lifelong health and wellness behavior through a combination of diabetes education and traditional camping activities. The inclusion criteria were: T1D diagnosis at least one year prior to the beginning of the study, under the age of 18 years, and having participated in at least one program session during or before the pandemic. Program participants who met the inclusion criteria were invited to participate in a semi-structured interview related to their everyday experiences, including illness management and resilience.

After obtaining Institutional Review Board approval, potential participants were contacted through the program email list, which consisted of families of youth living with T1D. Families were initially emailed with details describing the study and research goals, and an invitation was additionally extended for parents to share the study’s details with their children. Furthermore, the option to share study details and schedule correspondence directly with the participant was also provided, with the parent included in all correspondence. Three participants expressed interest in the study, and interviews were scheduled.

Study participants comprised Cleo, Ivan, and Jared, all youth participating in the medical specialty recreation program specific to diabetes education and management and provided pseudonyms. Cleo is a 10-year-old female who was diagnosed with T1D at the age of eight. She is currently in sixth grade, having matriculated from elementary school to middle school amid the transition from in-person schooling to synchronous/asynchronous learning during the fall of 2020. Cleo reported that she attempts to stay relatively active through team sports and other extracurricular activities such as volleyball and dance. Ivan is a 13-year-old male who was diagnosed with T1D at the age of eight, and Jared is a 13-year-old male who was diagnosed with T1D at 10 years old. Jared reported that much of his time is spent engaging in science, technology, engineering, and math (STEM) related extracurricular activities. Given the lack of access to typical recreational opportunities due to COVID-19, Ivan reported an increase in biking with his friends around his neighborhood. Video games were reported as a preferred extracurricular activity for Ivan and Jared, with increased time for all three youths to engage in technology-dominated recreation during COVID-19.

Data Collection

Semi-structured interviews were conducted with each participant following an interview protocol based on relevant literature. Interviews centered around each participant's everyday experience, including within frequently interacted-with settings (home, school, and out-of-school time programming), challenges and opportunities faced among changes influenced by COVID-19-related policy, as well as their experiences of disease management and resilience. The first and second authors conducted interviews (doctoral student and senior researcher, respectively). In contrast, the last author (senior qualitative researcher) offered discussion forums, guidance, and mentorship throughout the iterative process associated with qualitative inquiry. Through this configuration of expertise, shared knowledge between research members encouraged the required scaffolding between metatheoretical understandings and applied research methodology in the study (Berbary, 2015).

Example questions include, "Can you (tell me) describe what the typical day is like for you recently?" "Can you tell me (describe)

your current experience in school?” and “How do you feel about the way you have adapted to this new environment?” The interview protocol was reviewed by an expert in youth-centered research modalities (third author), and the pilot test was conducted with youth within the age range of the participants (Creswell & Poth, 2018). Feedback was used to modify the interview protocol used in the study (Agee, 2009).

Data Analysis

Data analysis was led by the first author, a youth development professional coordinating the recreation program; they are also experienced in qualitative research. Members of the research team engaged in ongoing discussions on analytic codes presented by the first author, reflections on the process, and preliminary results (Sally et al., 2021). After transcribing interview audio files verbatim according to the principles of QD methodology, interview transcripts were divided into relevant content units established by the research question using structural coding (Saldana, 2021). Following preliminary coding, concept coding was used to extract and synthesize data further, seeking possible patterns in both individual and collective interviews. Initial codes were then sorted based on interpersonal and individual-setting processes relevant to the study’s aim. The thematic analysis allowed the researchers to reduce the likelihood of differentiating perspectives of findings within the research, encouraging straightforward presentation and representation of study findings (Kim et al., 2017). Themes were formed as an outcome of initial and subsequent coding of data, following an iterative approach required of qualitative inquiry.

Results

Structural and concept coding identified two main themes that describe and explain participants’ everyday experiences of resilience and their context. Based on the processes that occurred within data analysis, varying degrees of transformation to both participant’s physical and social environments during 2020 at the onset of the COVID-19 pandemic and continuing into the 2020-2021 academic year were identified. Their experiences were complex and shifted over time, evolving with social norms brought on by the global pandemic. Two themes describe the youth’s reflections on their expe-

periences of change from familiar modalities of program delivery to remote experiences facilitated predominantly through technology, both communicative and medical.

Life at Home

Challenges and opportunities perceived by youth served as consequential factors to resilience characteristics and associated risk and protective factors present in their home environment. Jayden and Jared's shared access to integrative medical technology, such as continuous glucose monitoring (CGM) devices, provided constant readings of their glucose levels via Bluetooth connectivity, sending data gathered to their personal internet-enabled devices and to their parents. Ivan explained:

I have the DEXCO CGM so they have an app on their phone that they can see my numbers cause if like, if I have my phone on like silence during school or something I can just check every once a while and see, "oh, I'm high, so I need to like do a correction." Or from my parents- if I just didn't get the alert somehow [on my phone] my parents can see and will tell me that I'm high, so I have [do] like a correction or whatever.

For Cleo, however, glucose levels are manually reported to adults around her, given the medical devices she can access. While at home during the day, Chloe explains, "If I have to go check my blood sugar or something, I'll just take my iPad and do what I need to do." When it came to advocating for her management of diabetes during her time in dance classes, she noted that "The instructors understood, and if I like, didn't feel good, I'd like, check my blood sugar and do what I need to do." Interactions with adults, including youth workers, presented strategic support when managing their diabetes, including independence.

In strong contrast, structural barriers to participation before transitioning to a virtual environment were much more of a concern for Ivan and Jared due to needing to make their way to their nurses' office physically. Jared noted that his fluctuating blood glucose levels often take away from his time with the group. Jared noted that his fluctuating blood glucose levels often takes time away from spending with his peer group at school. Similarly, Ivan reported that he felt

frustrated with the procedure in place requiring him to trek from one building to another to reach the nurse's office:

Before lunch every day I had to walk all the way down to the nurse's office and it was frustrating because I couldn't get pass and you have to have these passes to unlock the door to the main building. So, I had to wait for someone to come to the door every day for like 15 minutes... But now I can just do my checks and stuff in class and just do all the things I need to do in class without the nurse.

Growth in Lieu of Change

Access to support, opportunities, programs, and services was limited compared to before the onset of the COVID-19 pandemic. Yet, Cleo, Ivan, and Jared's interaction with peers was recalled as rich in instances of engagement within various social environments despite physical barriers. All three youths reported experiencing changes in access to SOPS, which had the greatest impact on their daily schedule. Cleo recounted her typical week during the COVID-19 pandemic, with instruction during the first half of her day during the week, supplemented by walks and other leisure activities:

So, I wake up, do school to about 11:45, eat lunch, do more schoolwork, and on Tuesdays and Wednesdays I have dance for an hour and a half. Other days I walk outside and stuff. The only thing that changed is doing school at home. Like, I still go to dance, but I mean, I would do volleyball, but they're not adding that because of COVID... the team I play for, they use a school gym so they can't use it unless we're in school.

Recreational opportunities like dance and volleyball for Cleo were limited by structural barriers brought on by COVID-19 that disallowed her from participating in all preferred recreational opportunities. Ivan also recalled his altered recreation opportunities and preferences due to the risk posed by COVID-19, describing his typical day as "very slow with time spent outside with friends that live down the street." In addition to using technology for diabetes management, the youth additionally utilized technology to stay con-

nected with friends. Both Ivan and Jared shared that they engaged in video game streaming with peers to stay connected despite physical barriers.

Although the modes of schooling were identified as different for participants, schooling was described as comparable to their prior experiences within the building aside from their ability to form new connections and relationships. Jared shared, “Face to face and being virtual... we’re just sitting on our screen because face to face [we] would just look at a smart board.” While the tools used for instruction were comparable to tools used prior, establishing new relationships with peers and adults was seemingly more difficult for Chloe and Ivan, while Jared sees the process of establishing new relationships and discussing their experience with diabetes management as the same, just “needing to do it virtually.”

Chloe, Ivan, and Jared all agreed that they perceived peers as being supportive, regardless of the setting. To better understand their diagnosis and its impact on their everyday lives, peers will often ask participants questions about diabetes management. Chloe shared, “They asked questions, but they don’t treat me any different.” Similarly, in one instance for Ivan, the sharing of diagnosis with a peer encouraged the exchange of diagnosis information and deepened their connection, “So I told my friend that I had diabetes. He told me that he had Lyme disease. So, we had like, a whole conversation about how it’s like hard to have like incurable diseases it was nice relate.” Ivan shared, “there’s no way to like talk over the Zoom meeting. It’s pretty hard to make friends over Zoom meeting.” Activities like standing in line for food, chatting with peers during transition periods such as moving between classes, and other activities allowed youth to socialize and practice skills that facilitated relationship-building efforts.

Discussion

The purpose of this study was to explore how youth with type 1 diabetes construct their experiences with protective and risk factors in their everyday lives during a pandemic. For this group of youth, risk factors present within their lives were counteracted by creative means to stay connected with significant adults and peers despite access restrictions. Although Chloe, Jared, and Ivan were provided fewer opportunities to access supports, opportunities, programs, and

services (SOPS) during the time of the study, protective factors such as increased support from household members, peer relationships, and independence were still present in their lives (Wolin & Wolin, 1993). Other researchers have documented indicators of resilience for youth living with chronic illnesses such as T1D (Boman et al., 2017; Liesch & Elertson, 2020; Weissberg-Benchell & Rychlik, 2017), which given these youths' experiences, extends to their lives within a sustained high-risk environment exasperated by COVID-19. Consistent with the findings from Liesch and Elertson (2020), the youth presented characteristics of "resilience through acknowledgment of difficulties... coupled with plans for future success" (p. 1162). Given the COVID-19 policy requiring social distancing in addition to other virus mitigation strategies, Cleo, Ivan, and Jared found themselves mostly telecommunicating with other adults and peers outside of their households using software such as tablets, cellphones, and other smart devices that supported communication with other devices connected to supporting networks. While a large concentration of indispensable interactions was now reliant on technology as the required medium, the integration of internet-connected devices is not unfamiliar to the youth.

The youths' experiences of navigating risk associated with managing their T1D changed as they transitioned to the virtual setting. The additional layer of accountability afforded by parental access to CGM data reduced youth's likelihood of encountering structural disablism through their exclusion from and opportunities to engage in both physical and social settings. Ivan experienced situations that, according to Thomas (2004), resulted in his exclusion from preferred activities with his peers due to structural barriers preventing timely access to the required medical personnel in the school building. Jared additionally expressed dissatisfaction with opportunities to engage in class due to diabetes management obligations. Much of this difference could be explained by their stages in development, with Ivan and Jared matriculating from middle school to high school during 2020-2022, while Chloe is currently transitioning from elementary school to high school. In other words, the psychosocial needs relevant to their developmental stages place different emphasis on the social landscapes that will be engaged in (Liesch & Elertson, 2020).

All three youths prioritized time spent with friends and family, recognizing their importance during the pandemic, thereby enabling them to sustain that relationship via technology use (Witt, 2018; Wolin & Wolin, 1993). Feeling connected is tied to experiencing resilience through forming relationships, a trait of resilient individuals (Browne & Wycoff, 2021; Wolin & Wolin, 1993). While preferred SOPS were unavailable for the youth, they could maintain relationships established before the pandemic. Youth experienced resilience when opportunities were available to engage with those that matter to them. Time shared with others was one way individuals in the youths' support system demonstrated understanding and support. Despite the modality of connection migrating to predominantly virtual spaces, positive social relationships were maintained and countered to risks such as isolation and loneliness (Huston et al., 2016).

In conclusion, understanding how youth experience resilience during sustained environmental risk (i.e., a global pandemic) is paramount in creating meaningful SOPS in which all youth can participate. The perspectives shared by Chloe, Jared, and Ivan bring attention to the impact of protective factors attributed to resilience on their experiences amid the COVID-19 pandemic. Building on already present relationships through meaningful interaction can deepen the relationship already present with a peer. Yet, opportunities to engage in conversation during transitional periods were minimized for youth to meaningfully engage with one another within the virtual environments. Questioning the presence of traits associated with resilience experienced by the youth explained some of the potential risks associated with living with T1D, including the structural barriers preventing them from fully engaging in activities with peers (Liesch & Elertson, 2020). The experiences of Chloe, Jared, and Ivan brought attention to the importance of opportunities to build connections and the need for innovative ways SOPS providers can continue to facilitate positive youth development during these dynamic times.

References

- Allen, A., Hill, E., Williams, R., Viglietta, C., & Miles, D. (2021). Using rock climbing for recreation among youth with type 1 diabetes: Evaluating the REACH program. *Journal of Outdoor Recreation, Education, and Leadership*, 13(2), 67–72.

- Agee, J. (2009). Developing qualitative research questions: A reflective process. *International Journal of Qualitative Studies in Education*, 22(4), 431–447. <https://doi.org/10.1080/09518390902736512>
- Berbary, L. (2015). Creative analytic practices: Onto-epistemo-theoretical attachments, uses, and constructions within humanist qualitative leisure research. *International Leisure Review*, 4(2). <https://doi.org/10.6298/ILR.2015.4.11>
- Boman, Å., Bohlin, M., Eklöf, M., Forsander, G., Munthe, C., & Törner, M. (2017). Health care to empower self-care in adolescents with type 1 diabetes mellitus and an immigrant minority background. *SAGE Open Medicine*, 5, 205031211770005. <https://doi.org/10.1177/2050312117700056>
- Browne, L., & Wycoff, T. (2021). Camps and COVID-19: What we know, what we don't know, and where we go from here. *Journal of Outdoor Recreation, Education, and Leadership*, 13(2). <https://doi.org/10.18666/JOREL-2021-V13-I2-10661>
- Colagiuri, S., & Wilson, M. (2020). WHO insulin access workshop 21–25 September 2020 – Joint IDF, JDRF and NCDA statement. *Diabetes Research and Clinical Practice*, 170, 108594. <https://doi.org/10.1016/j.diabres.2020.108594>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Ettekal, A. V., & Agans, J. P. (2020). Positive youth development through leisure: confronting the COVID-19 pandemic. *Journal of Youth Development*, 15(2), 1–20. <https://doi.org/10.5195/jyd.2020.962>
- Fraser, M. W., Galinsky, M. J., & Richman, J. M. (1999). Risk, protection, and resilience: Toward a conceptual framework for social work practice. *Social Work Research*, 23(3), 131–143. <https://doi.org/10.1093/swr/23.3.131>
- Gillig, T. K., Booth, A., & Couto, L. (2024). Anxiety, COVID-19 risk, and LGBTQ+ youth's participation in an affirming summer camp. *Journal of LGBT Youth*, 21(1), 99–114. <https://doi.org/10.1080/19361653.2023.2166641>
- Hill, E., Reifschneider, K., Goff, J., Ramsing, R., Kennedy, B., Collins, T., & Turnage, M. (2018). Family diabetes camp: Fostering resiliency among campers and parents. *Diabetes Spectrum*, 31(4), 86–92. <https://doi.org/10.2337/ds18-0001>

- Hilliard, M., Hagger, V., Hendrieckx, C., Anderson, B., Trawley, S., Jack, M., Pouwer, F., Skinner T., & Speight, J. (2017). Strengths, risk factors, and resilient outcomes in adolescents with type 1 diabetes: Results from diabetes MILES youth—Australia. *Diabetes Care*, *40*(7) 849–855. <https://doi.org/10.2337/dc16-2688>
- Huston, S. A., Blount, R. L., Heidesch, T., & Southwood, R. (2016). Resilience, emotion processing and emotion expression among youth with type 1 diabetes. *Pediatric Diabetes*, *17*(8), 623–631. <https://doi.org/10.1111/pedi.12347>
- Kaye-Kauderer, H., Feingold, J. H., Feder, A., Southwick, S., & Charney, D. (2021). Resilience in the age of COVID-19. *BJPsych Advances*, *27*(3), 166-178. <https://doi.org/10.1192/bja.2021.5>
- Kim, H., Sefcik, J. S., & Bradway, C. (2017). Characteristics of qualitative descriptive studies: A systematic review. *Research in Nursing & Health*, *40*(1), 23–42. <https://doi.org/10.1002/nur.21768>
- Liesch, S. K., & Elertson, K. M. (2020). Drawing and dialogue: youth's experiences with the “face” of diabetes. *Journal of Patient Experience*, *7*(6), 1158–1163.
- Mobasser, M., Shirmohammadi, M., Amiri, T., Vahed, N., Hosseini Fard, H., & Ghोजazadeh, M. (2020). Prevalence and incidence of type 1 diabetes in the world: A systematic review and meta-analysis. *Health Promotion Perspectives*, *10*(2), 98–115. <https://doi.org/10.34172/hpp.2020.18>
- Saldana, J. (2021). *Coding manual for qualitative researchers*. SAGE Publications, Limited. https://openlibrary.org/books/OL34698392M/Coding_Manual_for_Qualitative_Researchers
- Sallay, V., Klinovszky, A., Csuka, S. I., Buzás, N., & Papp-Zipernovszky, O. (2021). Striving for autonomy in everyday diabetes self-management—Qualitative exploration via grounded theory approach. *BMJ Open*, *11*(12), e058885. <https://doi.org/10.1136/bmjopen-2021-058885>
- Thomas, C. (2004). Rescuing a social relational understanding of disability. *Scandinavian Journal of Disability Research*, *6*(1), 22–36. <https://doi.org/10.1080/15017410409512637>
- Weissberg-Benchell, J., & Rychlik, K. (2017). Diabetes camp matters: Assessing families' views of their diabetes camp experience. *Pediatric Diabetes*, *18*(8), 853–860. <https://doi.org/10.1111/pedi.12499>

- Weigensberg, M. J., Vigen, C., Sequeira, P., Spruijt-Metz, D., Juarez, M., Florindez, D., Provisor, J., Peters, A., & Pyatak, E. A. (2018). Diabetes empowerment council: Integrative pilot intervention for transitioning young adults with type 1 diabetes. *Global Advances in Health and Medicine*, 7, 216495611876180. <https://doi.org/10.1177/2164956118761808>
- Witt, P. A., & Caldwell, L. L. (2018). *Youth development: Principles and practices in out-of-school time settings* (2nd ed). Venture Publishing, Inc. https://openlibrary.org/books/OL38575311M/Youth_Development_2nd_Ed
- Wolin, S. J., & Wolin, S. (1993). *The resilient self: How survivors of troubled families rise above adversity* (1st ed). Villard Books.