Regular Routines

The Science of Resilience

rrc@dal.ca
www.resilienceresearch.org

RRC - Evaluation
and Training Institute

Table of Contents

Definition

At the broadest level, routines can be defined as predictable, reoccurring interactions or events that follow a similar pattern each time. Some of the earliest routine researchers, Wolin and Bennett (1984), defined routines as "patterned interactions that are repeated on a daily or weekly basis" (Loukas & Prelow, 2004, p. 253). In the occupational therapy literature, routine is the structure through which any activity is organized (Clark, 2000). Often, we think of daily routines, which can be understood as relatively fixed patterns of sequenced activities one participates in during a typical day (Clark, 2000). Yet, routines are not solely individual pursuits, and the literature often looks at family or classroom routines. Thus, routines can also be defined as specific and predictable interactions involving two or more people of the family or classroom (Crespo et al., 2013; McNamara & Humphrey, 2008).

The most researched form of routine is the family routine. According to Sprunger et al. (1985) family routines are "universal attributes of family life, varying only in content and frequency from family to family (p. 565, cited in Denham, 2003, p. 311). Family routines and rituals are embedded in the cultural context of the family, and there are cultural variations in the practice of family rituals (Fiese et al., 2002). Additionally, routines vary across the developmental course of the family. Fiese et al. (2002) found that when families are focused on the caregiving demands of raising an infant, they report fewer predictable routines and less meaning associated with family gatherings; however, they also report a plan to begin more routines and rituals once their child is older. In support of this plan, Fiese et al. (2002) found that once children reached preschool age and were able to be a more active participant in family life, routines became more regularly established and rituals carried greater meaning. While there is a great variability to family routines, there are also some constants. Wolin and Bennett (1984) identified three types of family rituals: celebrations, traditions, and patterned interactions. Family celebrations refer to occasions such as weddings, funerals, and anural events like Christmas, Chunukah, or other holidays. Family traditions include vacations, birthdays, anniversaries, and family gatherings. Patterned interactions refer to daily family interactions, such as dinnertime; this category is what we typically think of when we speak of "routines".

In the literature on family routines, the terms "routines" and "rituals" are often used interchangeably; despite this conceptual confusion, many researchers claim there are significant differences between the terms, although both are important to family functioning. Fiese et al. (2002) claim that routines and rituals can be contrasted along dimensions of communication, commitment, and continuity. They claim that routines typically involve instrumental communication such as instructions on what needs to be done, whereas rituals involve symbolic communication that conveys a message of "this is who we are" as a family, or other group. Routines typically involve a momentary time commitment and little afterthought, whereas rituals require an affective commitment that imparts a feeling of rightness, a sense of

belonging, and lingering emotions. Routines are repeated over time and mainly defined through the repetition of the behaviour; rituals can provide continuity in meaning across generations, and their disruption can constitute a threat to group cohesion. Fiese et al. (2002) claim that any routine has the potential to become a ritual once it moves from an instrumental to a symbolic act. Similarly, Crespo et al. (2008) note that family activities can often be both a routine and ritual, such as birthday parties, but they claim this is because rituals, though grounded in routines, go beyond patterned interactions by adding a layer of representation or beliefs concerning family identity and thus become symbols of family cohesiveness.

A commonality between routines and rituals in the literature is that both are identified by their role in well-adapted family life. Crespo and colleagues (2008; 2011) define family rituals, in part, by their contribution to family cohesion. The first research on family rituals defined rituals as "powerful organizers of family life, supporting its stability during times of stress and transition" (Bossard & Boll, 1950, cited in Fiese et al., 2002, p. 381). Similarly, Spagnola and Fiese (2007) characterize family rituals for how they provide both a predictable structure that guides children's behaviour and an emotional climate that supports children's early development.

In the occupational therapy literature, routines are also defined by their benefits. When a routine becomes a habit – that is, something that is repeated relatively automatically with little variation – there are several advantages for the individual: there is an increase in skill in action as the individual can focus less on the given action and more on its elaboration; there is a reduction in fatigue because habits require less effort; an individual's attention is free to attend to the unpredictable, allowing them to quickly to detect novel or threatening stimuli; and an individual is able to exercise functions without having to recall or attend to specific elements of a given practice (Clark, 2000). According to Clark (2000) routines set boundaries and enable people to predict and plan. Furthermore, Clark (2000) claims that they can be imbued with symbolic meaning, showing once again the thin line between a routine and a ritual.

Relationship to Resilience

Routines, whether part of the family, the classroom, or individual time management, have long been known to be beneficial. While most of the research has focused on family routines and their benefit for children and adolescents, other studies have looked at the role of routines for older adults with chronic health issues and for adults and children following traumatic experiences. Routines and rituals can help people's resilience in times of stress caused by illness, divorce, and trauma.

New research has examined the detrimental effect of a lack of routine on health and wellbeing. It has been found that the deprivation a routine time structure is one pathway between unemployment and low psychological health (Waters & Moore, 2002). Schneider and Harknett (2019) found that precarious schedules, wherein employees do not have routine work

hours and they encounter substantial uncertainty about when and how much they will work, is a strong predictor of health and wellbeing. Specifically, precarious schedules interfere with sleep and increase psychological stress and unhappiness (Schneider & Harknett, 2019). Uncertain work schedules affect health and wellbeing mainly through the work-life conflict it creates, as well as through economic pathways (Schneider & Harknett, 2019). In contrast, a regular work schedule provides employees with time protected from work and the ability to plan. Having a set work schedule is a routine that can build workers' resilience.

Family Routines and Rituals

The role of family routines in the wellbeing of children has been repeatedly shown. A well validated measure, the Benevolent Childhood Experiences Scale (BDE; Narayan et al., 2018) includes a measure of routine and order as a promotive factor, that is, a factor that is associated with favourable outcomes in both low- and high-risk contexts. The promotive factor of routine looks at whether children had a predictable home routine, including regular meals and bedtimes. Narayan et al. (2018) found that pregnant women who had more benevolent childhood experiences, including regular family routines, had lower prenatal PTSD, stress, and prenatal stressful life events. High scores on the BDE predicted these favourable outcomes over and above the effect of adverse childhood experiences, suggesting that family routines have a protective effect against adversity in childhood. As the BDE suggests, consistent bedtimes and family meals are two of the most recognized forms of family routine. The most commonly agreed upon element of sleep hygiene, for children and adults, is a consistent bedtime (Bartel et al., 2015; Brown et al., 2002; Halal & Nunes, 2014; Mindle et al., 2008). The association between routine and health, including consistent bedtimes and mealtimes, holds true for adults as well as children adhering to a parent-set routine. Darviri et al. (2014) developed the Healthy Lifestyle and Personal Control Questionnaire (HLPCQ) and found that the subscale which measured daily routine highly correlated with the other subscales of healthy dietary choices, dietary harm avoidance, organized physical exercise, and social and mental balance. Furthermore, sleep quality specifically positively correlated with the Daily Routine subscale. The authors concluded that, even though a consistent bedtime was not measured, having routines in other areas of one's life likely extends to one's sleep schedule and promotes better sleep quality, which in turn, promotes better health and wellbeing.

Family mealtime is one of the most frequently mentioned family routines in the literature (Fiese et al., 2002). According to Fiese et al. (2002), family mealtime is both a routine, something that happens on a consistent schedule involving patterned interactions, and a ritual, as time has been set aside to gather as a group and other demands have been put temporarily on hold. Fiese et al. (2002) cites a study by Baxter and Clark (1996) which found that for Asian American and European American families, mealtimes had meaning and were considered rituals when there was an open exchange of ideas and freedom to express individual opinions. When mealtime conversations were more adult-centered and high in conformity, individuals reported less meaning associated with the routine. Family mealtimes have been predicted to

support daily cohesion, stability, and connectedness (Compañ et al., 2001; Crespo et al., 2008; 2011), as well as help adolescent development, including problem-focused coping and social-emotional development (Harrison et al., 2015) and child language and social development (Spagnola & Fiese, 2007).

Adolescents

Family mealtime has long been thought to correlate with adolescent well-being. Harrison et al. (2015) conducted a systematic review of the association between family meal frequency (FMF) and various adolescent outcomes. They specifically looked at the frequency of mealtimes, that is, the routine aspect of family mealtimes rather than the ritual meaning aspect. They found that FMF had an inverse relationship with disordered eating, although this relationship was only found or studied in girls. FMF also had an inverse relationship with substance use, although this relationship was stronger and more consistent in females, and with violence in two studies which did not differentiate by gender. There was a positive relationship between FMF and self-esteem and academic achievement, which is supported by the literature (Dietz et al., 2010; Taylor & Lopex, 2005). There was also a statistically significant negative relationship between FMF and depressive symptoms and suicidal thoughts in both genders (Harrison et al., 2015).

The relationship between family mealtime and adolescent mental health has been well explored. Both Compañ et al. (2001) and Kiser et al. (2005) compared a clinical group of adolescents who were receiving clinical help from an outpatient program with a community sample of adolescents. Both studies look at family meals at rituals that may promote adolescent mental health. Compañ et al. (2001) looked at 259 adolescents, aged 14 to 23, from Spain; the clinical group was drawn from a public health care outpatient clinic (n = 82; mean age = 18.4, SD = 2.4, 45.4% male), while the rest was drawn from the community (n = 177; mean age = 17.8, SD = 2.5; 40.2% male). They found that adolescents who accessed mental health serves got together to celebrate special events with their families less frequently and partook in fewer family activities than adolescents not using mental health services. The authors suggest that the decrease in family activities impacts family communication and emotional closeness as adolescents with mental health complaints perceived a lower level of family functioning (Compañ et al., 2001). Similarly, Kiser et al. (2005) found that, in a sample of 42 parent/caregiver-child dyads, non-clinical families scored significantly higher on the index of family rituality than did families with adolescents receiving mental health care. In Kiser et al.'s (2005) sample, 21 families were drawn from the Day Treatment Program of the Division of Child and Adolescent Psychiatry at the University of Tennessee (age range = 11 to 18, mean = 13, SD = 1.84; 14 girls, 7 boys; 30.6% had an affective disorder, 18.9% anxiety disorder, and 22.7% behavioural disorder), the other 21 families consisted of adolescents from public schools (mean age = 14.14, SD = 2.15; 10 boys, 11 girls). There were no significant differences between the samples with regards to sex and age of the adolescents or the education and occupation level of the mothers or family structure; the clinical sample included significantly more Caucasians,

with the second largest group being African American (Kiser et al., 2005). Just as Compañ et al. (2001) posited communication and emotional closeness as mechanisms by which family meals promoted adolescent mental health, Kiser et al. (2005) suggests that families who see mealtime as a ritual used the time to maintain and support family relationships through communication, in contrast to families who eat together but watch TV. They also found that families described family mealtimes as an opportunity for problem solving, including discussing the issue and getting everyone's point of view (Kiser et al., 2005), further supporting the idea that it is not just the regularity or routine of eating together but the communication that such rituals foster. However, both sets of authors caution that their studies were correlational, and it wasn't possible to speak directly to causation. It is likely that adolescents impact the environment just as the environment impacts them, such that it is unclear whether the frequency and relational differences of the two samples' family rituals are part of the cause or the result of the adolescents' mental health (Compañ et al., 2001; Kiser et al., 2005).

Similar to Harrison et al. (2015), studies of family mealtime and adolescent mental wellbeing have found gender differences. In a longitudinal study of 713 parent-adolescent dyads from New Zealand (51.1% of the adolescents were boys, with ages ranging from 10 to 16 at Time 1 (Mean = 12.85, SD = 1.73); 69% identified as New Zealand European, 18% as solely or partly Maori, and 11% reported other ethnic backgrounds), Crespo et al. (2011) found that family ritual meaning predicted family cohesion one year later while simultaneously, family cohesion at Time 1 predicted ritual meaning at Time 2. Importantly, adolescent's wellbeing, their positive perceptions of themselves, their lives, and their future was linked to parents' report of family rituals through adolescents' perception of family cohesion (Crespo et al., 2011). However, the link between family rituals and adolescent wellbeing as mediated by family cohesion, was stronger for girls. Similarly, when Loukas and Prelow (2004) looked at the protective nature of family routines, they found that consistent family routines protected adolescent girls high in cumulative risk from experiencing elevated levels of externalizing problems, whereas the risk for externalizing problems was exacerbated for adolescent girls without consistent family routines. In their sample of 521 Latino adolescents (51% girls, aged 10 to 14, mean age = 11.97, SD = 1.42), family routine was not a significant protective factor for boys (Loukas & Prelow, 2004). Harrison et al. (2015) explains the different effects of family routine and rituals on girls and boys by citing literature which tends to report that boys respond differently to family dynamics than girls. The literature suggests that while family factors such as connectedness and parenting practices are protective for girls, they are not as effective for boys (Harrison et al., 2015).

Finally, routine has also been associated with adolescents' academic achievement. Taylor and Lopez (2005) looked at 200 African American adolescents and their mothers (96 boys, 104 girls; mean age = 14.7; mother's mean age = 38, mean years of school completed = 11.24; 44% unemployed); the families lived in areas of high poverty and the average income of participating families was $16,850, just slightly above the poverty threshold for four-person households in the U.S. They found that family routines were associated with all three measures

of school engagement: attendance, attention, and challenge-appraisal. School engagement mediated the relationship between family routine and academic achievement (Taylor & Lopez, 2005). Furthermore, the authors found that family routine was negative associated with adolescents' problem behaviour, moderated by school attendance and attention. They suggest that the ability to sustain attention in school and recognize the importance of attending school may be reinforced in an organized home where adolescents have responsibilities and time schedules; additionally, organized homes may model time management practices that benefit adolescents' school engagement strategies (Taylor & Lopez, 2005). Further supporting the benefit of the structure provided by daily routines, Dietz et al. (2010) found that students who had a daily routine were less inclined to procrastinate schoolwork and more likely to chose schoolwork over leisure activities in the case of a motivational conflict. In has also been shown that stable family routines predict better academic achievement in children of divorced or remarried families (Fiese et al., 2002).

In summary, adolescents' wellbeing appears to benefit from both the structure and ritual aspects of family routines.

Adults

Although there is less research than on the topic of adolescent wellbeing, the literature suggests that adults benefit from family routines just as much as children. Fiese et al. (2002), in their review of 32 studies, found that new parents feel more competent, are considered "successful" by parenting experts, and have better relationships with their children when they make an effort to create special times with their family through bedtime routines, special family activities, and holiday celebrations. The literature points to the meaning-filled aspects of family rituals in the relationship between family routines and marital satisfaction, as routine practices alone were not related to this outcome (Fiese et al., 2002). Crespo et al. (2008) found that family rituals were significantly associated with relationship quality in a variety of married couples. They looked at 150 married couples from urban areas in Portugal; the couples had been married anywhere from 3 months to 46.5 years (mean length of marriage = 16.24 years, SD = 12.66); 297 participants were in their first marriage (age ranged from 23 to 78 years, mean age = 42.10; SD = 12.79; 111 couples had children, 60.7% lived with children in the household). Crespo et al. (2008) found that perceived investment in family rituals was significantly associated with high levels of satisfaction and closeness for both men and women. Although this relationship was stronger for women than men; Crespo et al. (2008) found that the literature suggests the sociocultural role of developing and maintaining family rituals falls majorly on women, which explains why they are more effected by family investment in such rituals.

Children

The positive affect of family routines and rituals on parents also affects young children. Fiese et al. (2002) found that routines help mothers of young infants feel more competent and have a higher level of satisfaction in their parenting, while these routines also help regulate child behaviour and predict child health. Fiese et al. (2002) notes that it is difficult to claim causality, as it is also possible that children with easier temperaments may respond better to routines to begin with. Spagnola and Fiese (2007) reviewed the literature on the relationship between family routines and rituals and children's socioemotional, language, academic, and social skill development and note that most of the studies are correlational, making it impossible to suggest that family routines cause child development. Rather, the authors suggest that family routines are related to and provide opportunities for varies aspects of child development. For example, they suggest that family rituals such as mealtimes expose children to rich language, structured dialogue, and meta-language, as well as the social aspects of language, such as turn-taking, reading cues, and other language-related practices (Spagnola & Fiese, 2007). A longitudinal study found that with parents who engaged in more elaborative or narrative talk at the dinner table when their children were 3 or 4, their children developed larger vocabularies and stronger story comprehension skills (Spagnola & Fiese, 2007). Thus, the family ritual of mealtimes provides a pathway for children's language development. Family routines that include joint reading, especially ones that are collaborating and make meaning out of a shared story, foster children's early literacy skills (Spagnola & Fiese, 2007). Family routines likely ease the transition to school for young children as they provide a model of structure and culturally based expectations for behaviour and socialization (McNamara & Humphrey, 2008; Spagnola & Fiese, 2007). Finally, routines provide opportunities for scaffolding, where parents structure children's behaviour to reach a goal and provide modelling, encouragement, and praise (Spagnola & Fiese, 2007). Spagnola and Fiese's (2007) review concludes that family routines act as a promotive factor for young children's development.

Family routines can also be a protective factor for children experiencing stress and adversity, such as divorced parents, domestic violence, or chronic health difficulties. In their review, Spagnola and Fiese (2007) found strong support for the idea that stability of routines across divorced households related to fewer internalizing and externalizing symptoms in children. Additionally, the regularity of the bedtime routine between households predicted academic performance two years later, as well as fewer school absences and better overall health.

David et al. (2015) looked at the relationship between family routines and school readiness in 83 preschool children (aged 3 to 6, mean = 4.25, SD = 0/81; 47% boys, 53% girls; 69.9% African American, 26.5% Caucasian, and 1.2% Asian) who experienced some level of violence in their homes or community (68.7% of primary caregivers report that their child had seen or heard at least one violent domestic act and 87.8% reported that they had been exposed

to at least one violent act in the community). For children with lower levels of violence exposure, consistent discipline and daily routines were associated with greater school readiness; although this relationship did not hold true at high levels of violence (David et al., 2015). Overall, school readiness scores were lower for children whose caregivers reported less routine, regardless of the level of domestic violence (David et al., 2015). The authors concluded that daily routines are practical interventions for children to promote school readiness, regardless of whether there is domestic violence, and that when there are low levels of domestic violence, family routines are protective for children.

Family routines may also play a protective role for children with asthma, who are at greater risk of having anxiety or other internalizing problems (Markson & Fiese, 2000). In a comparison study of 43 families with children with asthma (mean age = 8.7, SD = 1.8, range = 6-12) and 43 families with children without asthma (mean age = 8.7, SD = 1.92, range = 6-12), Markson and Fiese (2000) found that, overall, child reports of anxiety were negatively correlated with parent reports of family rituals. Both ritual and routine aspects correlated with lower child anxiety; when mothers reported high ritual meaning, children had lower anxiety scores and when fathers reported high routine scores, children also had lower anxiety scores (Markson & Fiese, 2000). In cases where there were higher elevated health-life stress – a composite measure including the presence of asthma, emergency room visits, school days missed, family members' perception of the child's general health, and number of stressful life events reported – mothers' report of more meaning in family rituals predicted fewer anxiety symptoms in children (Markson & Fiese, 2000). The authors conclude that when families face multiple life and health stressors, family rituals help protect children against increased anxiety, especially when those rituals are seen as meaningful by the family. They suggest that families that are already well organized through routines may provide a sense of stability when other aspects of their lives are uncertain and they may be better equipped to integrate disease management into their lives, which is the premise of the research on the relationship between routines and health.

Chronic Health Problems and Management

Family Health

Family routines have been hypothesized to help families adapt to chronic health conditions, whether present from birth or developed through the lifespan, in children or parents. One way in which family routines and rituals can be conceptualized as protective against the stress associated with chronic health conditions is through the idea of family health. Fiese (2007) describes family health as, "the ways in which the household, as a whole, engages in daily activities to promote the well-being of its members and is emotionally invested in the maintenance of health over time" (p. 41). Fiese (2007) goes on to review the ways in which routines interact with family health. Supportive elements of family routines and rituals include management strategies, structure, time demarcation, support from others, planning, belonging

to a group, emotional containment, commitment to the future, emotional lineage, and consecration of the past. However, Fiese (2007) is also sensitive to the potentially disruptive elements of routines and rituals, including being too rigid, inspiring resentment and obligation, depleted energy, conflictual interactions, alienation, degradation, exclusion, coercion, and the potential cutting off of emotional expression. Health literature often talks about "routine burden" or the emotional burden of performing the routines of care. Fiese (2007) found that in the literature on paediatric asthma, when caregivers reported higher routine burden, children reported being more bothered by their asthma symptoms, worried more about their condition, and felt more emotionally upset by having asthma than children whose caregivers did not report such a burden. In a similar sample, families who reported little planning or forethought about their child's condition in the context of their daily routine also showed the lowest rate of medication adherence. Fiese (2007) concludes that family routines both affect and are affected by family health; furthermore, routines are embedded in the emotional climate of care. Dinnertime conversations are salient markers of a family's emotional climate, and the literature shows that the amount of meaning parents ascribe to family rituals correlates with the concern and emotional investment observed during family mealtimes (Spagnola & Fiese, 2007). In families where mealtimes were characterized by direct forms of communication and genuine interest in others, children with asthma were less likely to experience internalizing symptoms such as somatic complaints and worrying (Fiese, 2007). Thus, routines themselves are not universally beneficial, they interact with other elements of family lives, such as emotional climates. The author claims that these findings support that rituals, over and above routines, benefit family health.

Crespo et al. (2013) conducted a review of 39 studies concerning a broad definition of chronic health problems; from eight qualitative and three mixed methods studies, the authors found three main ways in which families utilized routines and rituals to adapt to various health challenges. Family routines and rituals constituted strategic resources, provided a sense of family normalcy, and promoted emotional support (Crespo et al., 2013). Families intentionally employed routines and rituals to address their needs in the context of health management, either by creating new routines and rituals or modifying existing ones. For example, parents of children with Autism Spectrum Disorder (ASD) modified bedtime routines to be consistent and predictable so as to help manage their child's anxiety, they also used that time to engage in meaningful rituals, such as lying down with their child or storytelling (Crespo et al., 2013). In another example, Crespo et al. (2013) discuss how families created a new routine of regular morning discussions regarding the parents' cancer, including information about the disease and their progress and an opportunity for children to ask questions. Secondly, families employed routines and rituals to regain a sense of normalcy, which was important for families seeking to maintain a sense that they were like other families or like the family they had been before the onset of the chronic condition (Crespo et al., 2013). Families adapted pre-established routines and rituals, which helped maintain a sense of continuity; a strategy for adapting routines included increased involvement of children in health management routines (Crespo et al.,

2013). Family rituals were especially adaptive as the meaning ascribed to them was flexible enough to fit their changing needs as a family (Crespo et al., 2013). Finally, routines and rituals were seen as sources of emotional support as parents saw them as pathways to express their "being there" for their children (Crespo et al., 2013). New routines were created to help children express their feelings regarding the chronic condition of either themselves or their parent and to help mark time and transitions in the health journey, for example, acknowledging cancer milestones with specifically tailored family celebrations (Crespo et al., 2013). New rituals held symbolic meaning that helped strengthen the relationship between parents and children around the shared experience of the chronic condition (Crespo et al., 2013). Furthermore, routines and rituals are associated with better adherence to health regimes and directly and indirectly with clinical outcomes (Crespo et al., 2013; Denham, 2003), likely because they provide concrete ways to implement health management strategies and behaviours. According to Denham (2003), routine-focused interventions can be used to "(a) assess knowledge and health behaviours, (b) teach family clients how to synthesize health information into consistent actions, (c) plan ways to incorporate meaningful family values and goals into effective coping patters, and (d) identify effective use of limited resources" (p. 3.21), as well as ensure culturally sensitive interventions.

Older Adults

Daily routines may benefit older adults' adherence to medication and self-care schedules. Chronic conditions are common in older adults; unfortunately, so is medication nonadherence, at an estimated 50-75% in the U.S. (Sanders & Van Oss, 2013). Incorporating medication schedules into daily routines may be one way to address this issue. In a community sample of 149 older adults (mean age = 70.42, SD = 14.97, range = 51-98; mean amount of pills taken in a week = 59.6, or 8.5 pills a day, a rate higher than the national average), Sanders and Oss (2013) found that 91% of their participants embedded their medication in their daily routines (64% took them with breakfast, 45% dinner, 40% morning hygiene, 33% evening hygiene). However, the specific sequencing of events within the routine was unique to each individual; thus, the authors suggest that medication habits should be individually developed and incorporated into existing routines. However, Sanders and Oss (2013) also found that medication adherence was easily disrupted when participants' routines were disrupted by anything as small as getting home late from work, and although participants tried to adapt their routines around travel or eating out, they were not always successful. Larger disruptions and stressors, such as financial insecurity, housing and employment instability, violence, and trauma can also make it harder to engage in a consistent daily routine. O'Conor et al. (2019) suggests that as individuals of lower socioeconomic position (SEP) are disproportionally exposed to these stressors, the presence of a daily routine may somewhat mediate the common relationship between SEP and health. Using a subsample of data from the National Institute of Aging study (n = 461, mean age = 69, SD = 5.3, range = 60-82; 71.2% women; 52.7% self-identified as White, 37.5% as Black; 59% were living with three or more chronic conditions), O'Conor et al. (2019)

found that health status and SEP did impact daily routine score, such that individuals with three or more chronic conditions reported lower levels of daily routine ($p = .05$) and individuals of low SEP significantly differed from those of moderate and high SEP on daily routine scores ($p < .001$). Thus, the ability to maintain a daily routine may be challenged by health problems and the stressors associated with low SEP. However, the authors also found that individuals with a high level of daily routine had better self-reported health outcomes, even after controlling for well-documented predictors, including SEP, age, and comorbidity, suggesting that daily routines can positively impact one's health. Furthermore, although the lowest levels of daily routine were negatively associated with physical functioning, there were minimal differences in mental health outcomes between medium and high levels of daily routine, suggesting that a general framework of routine is beneficial (O'Conor et al., 2019). The authors hypothesize that a daily routine may help individuals accomplish tasks with minimal cognitive effort – which is supported by occupational literature (Clark, 2000) – which provides a sense of control and self-efficacy and thus ameliorates depressive symptoms (O'Conor et al., 2019). As such, O'Conor et al. (2019) suggest that a daily routine is particularly beneficial for low SEP individuals who may be dealing with multiple stressors requiring more cognitive effort and seeking to reduce depressive symptoms.

Trauma Recovery

Returning to a normal routine is one of the most highly endorsed practices following a traumatic experience (Burton et al., 2015; Kayser et al., 2008; Masten & Narayan, 2012). Masten and Narayan (2012) find that re-establishing routines in a child's life is an important resilience factor following disasters or war. They assert that children's normal routines of school and play are natural protective systems and returning to these routines is one of the consensus recommendations from a Delphi study of leading humanitarian agencies. Similarly, Kayser et al. (2008) found that first responders in South India following the 2004 tsunami attempted to engage children in their normal school routines to help them feel more secure and to help compensate for the affected adults' inability to meet their children's needs for stability as they delt with their own trauma. Kayser et al. (2008) found that returning to routine was one of the most common ways people coped following the tsunami; they suggested that "returning to a routine minimizes stress by attempting to create order out of chaos" (p. 91). Kayser et al.'s (2008) participants described how much survivors of the tsunami desired a return to their normal routine, wanting utensils for cooking and tools for fishing rather than packages of food provided by aid agencies. First responders noted how returning to their daily routines helped people engage with what was going on and decreased their level of trauma (Kayser et al., 2008).

Daily routines have also been recommended for use in posttraumatic stress disorder (PTSD) treatment, as PTSD symptoms often include an avoidance of things that remind us of the trauma which can continually disrupt daily routines and have negative consequences, such as further withdrawal, negative affect, loss of a job, etc. (Burton et al., 2015). In a review of

trauma interventions, Burton et al. (2015) finds that therapeutic processes can support individuals in structuring a daily routine by targeting avoidance behaviours and functional impairment (e.g., unemployment as a result of PTSD), and through pleasant event scheduling. Pleasant event scheduling in the therapeutic practice of encouraging clients to incorporate pleasant activities into their day; it is also a common component of treatment for depression (Burton et al., 2015). Simple interventions, such as incorporating going on walks, playing with a pet, or watching a favourite show in a routine, can substantially boost clients' mood and self-esteem as they learn that life can be pleasant even after the experience of trauma. However, Burton et al. (2015) cautions that the scheduling of these activities should move from easy to more challenging based on clients' ability to implement them. In summary, routines are a useful aspect of the recovery process following natural disasters and other traumatic events.

Improving

Young Children's Routines

McNamara and Humphry (2008) explore the ways in which very young children develop and adapt to daily routines in the classroom. Looking at two childcare classrooms, one with toddlers aged 17 to 19 months, and one with infants aged 7.5 to 12.5 months, the authors focused on 5 toddlers and 3 infants as well as the teacher and teacher's assistant in both classrooms for direct observation. They found that, initially, teachers structured routines by organizing the day into chunks of time and naming them. Teachers used a variety of strategies to initiate and include children in routines, including verbal and physical direction, asking questions, handing children objects to be used during the routine, and modelling the behaviour. The days followed roughly the same pattern; however, as children participated more, the routines changed somewhat. McNamara and Humphry (2008) note that one of their main findings was that the children actively participated in and requested routines that they were familiar with; if the teacher did not follow the same routine, the children would often prompt her to do so. Furthermore, they would attempt to coach their classmates to participate in the routines as well as learning from their classmates how to participate; McNamara and Humphry (2008) conclude that in these classrooms, routines became social events for the children. Due to this finding, the authors suggest that children with disabilities or other resistance to classroom routines should not be removed from the classroom to learn routine activities, as that eliminates the important social aspects of the routines. McNamara and Humphry (2008) suggest that interventions should build on the behaviour of peers by having another child offer an invitation to a child who is unmotivated to join the routine or encourage the child to watch how others engage in the routine. Another important finding was the interactive and reciprocal nature of learning routines that was characterized by adult-initiated/child-engagement and child-request/adult response (McNamara & Humphry, 2008). The authors claim that their study shows the importance of being responsive to children's active requests for routines and thus, teachers and parents should collectively discuss how best to engage children with special

needs. McNamara and Humphry (2008) also suggest picture books or other visual representations of the sequencing of activities involved in a routine to help children with special needs remember them.

Interventions

Framework for Family Routine and Health Management Interventions

Routines are often leveraged in the implementation of health management interventions; these interventions must be sensitive to the family's current routines as well as assist them in adjusting or developing new routines. Fiese (2007) outlines a strategy for family routine intervention called "the Four R's of Routine Intervention." This strategy aims to start where the family is currently functioning and create an intervention that makes sense in the daily lives of the specific family; the four types of interventions depend on the family routine history.

- Remediation is the first level of intervention and requires the fewest changes to family routines, as they are already well established and organized. For example, remediation could include adding a daily medication to an individual's morning routine that already includes taking a daily vitamin.
- Redefinition occurs when pre-existing routines or rituals have been disrupted by a health condition and need slight adjustments to become adaptive again. For example, illness or chronic conditions often become the centre of family life and identity where every activity revolves around health management and there is little room for communication or interest in other activities. In these instances, redefinition is needed to separate health management from other family activities.
- Realignment is needed when there is conflict over the relative importance of routine, which gets in the way of healthy habits. For example, this disagreement often occurs in the case of divorced families when there are different rules at different households.
- Re-education is the most difficult intervention to implement and occurs in situations when families have little or no history of successfully creating and sustaining routines. When educating a family about the benefit of routines, one also has to question why there has been a lack of organization in the first place, as it may be the result of a previous history of abuse, neglect, and/or psychiatric disturbances (Spagnola & Fiese, 2007).

Enhancing Interactions Tutorial – A Daily Routine Intervention for Children with ASD

Completing daily routines is often difficult for children with Autism Spectrum Disorder (ASD) and a source of stress for parents, despite the fact that daily routines can help ease anxiety in children with ASD (Fiese, 2002) and teach important socioemotional developmental

skills (Ibañez et al., 2018; Spagnola & Fiese, 2007). Ibañez et al. (2018) proposes a self-directed, web-based training tool for parents that focuses on home routines:

Intervention: The Enhancing Interactions Tutorial

- Highly interactive, including interactive learning activities that present new information and tests parents' comprehension of materials
- The content emphasizes the importance of everyday routines as opportunities for learning
- Teaches parents how to use evidence-based strategies such as using simple instructions and visual supports, and how to avoid less optimal strategies such as repeating verbal instructions if the child fails to comply
- Four levels of engagement in routines are defined: not tolerating, tolerating, cooperating, engaging socially. Parents learn how to systematically move their child's behaviour from one level to the next
- Includes videos of parents demonstrating the techniques with their children in actual home settings

The tutorial has three main sections:

1. Introductory material, including a definition of home routines and tips for establishing routines
2. Description and illustration of four daily routines – bath time, snack time, play time, and bedtime – which includes both general information and individualized content
3. "Toolbox" modules describing specific, evidence-based behavioural strategies for enhancing children's cooperation and participation in routines.

The tutorial is structured so that parents can target one the four daily routines and choose a specific activity within that routine they would like to improve. For each routine, individualized content allows parents to identify the sequence of steps in their routine, identify a specific step within the routine that they would like to improve, identify their child's current level of participation in that step of the routine, and learn behavioural strategies for improving the child's participation during that step

Ibañez et al. (2018) evaluated the intervention in a sample of 104 parents of children with ASD (94 mothers, 10 fathers) recruited through Vanderbilt University and the University of Washington in the U.S.

- Tutorial group: n = 52, child mean age = 42.83 months, SD = 13.39; 37 boys, 6 girls, 9 who did not report child's gender; 47 White; parent mean age = 34.71 years, SD = 6.24
- Control group: n = 52, child mean age = 44.77 months, SD = 12.5; 39 boys, 10 girls, 3 who did not report child's gender; 42 White; parent mean age = 34.61 years, SD = 6.22

Results

- In this study, participants were evaluated before beginning the tutorial to establish baseline, one month later – when they had just finished the tutorial – and a month after they had stopped actively learning from the tutorial to look at sustained effects.
- Parents using the Enhancing Interactions Tutorial significantly increased their use of evidence-based strategies during the intervention, and, one month after completing the tutorial, used significantly more evidence-based strategies than the control group.
- Children of parent in the tutorial group showed a significant improvement in engagement behaviours during the intervention, and, one month after its completion, engaged more in routines than children in the control group
- Parents in the tutorial group indicated high levels of satisfaction with the technical aspects and clinical content of the intervention
- Following the intervention, parents reported decreased stress regarding the parent-child relationship and increased parenting efficacy, and children displayed higher levels of social communication compared to the control group and their initial scores at baseline.

Ibañez et al. (2018) conclude that this is an effective, low-cost intervention for improving parent-child interactions during daily routines for children with ASD. They suggest that the web-based nature of this intervention is useful for circumventing prominent and widespread barriers to obtaining ASD services.

Digital Wells – Incorporating Wellness into the Daily Routine of Older Adults

Digital Wells aims to form and support interventions into the daily routines of the "young elderly" (defined as adults aged 60-75 years) so that these interventions form wellness routines to preserve physical, cognitive, mental, and social wellness (Carlsson & Walden, 2017). This intervention was developed by Carlsson and Walden (2017) and tested in a population of young elderly from the Aland Islands in Finland. The authors found that certain groups of young elderly were more supportive users of digital wellness services, these groups included: young elderly who are active in full time/part time/ volunteer work and are experienced users of mobile aps and are less than 70 years old; the second group is young elderly who are experienced users of mobile apps and are more educated; the third group is young elderly men with good physical health and an income above 30 k€ per year; the fourth group is young elderly who are more educated and find mobile apps good value for the price (Carlsson & Walden, 2017).

The authors propose combining the Digital Wells app with a digital coach called VADIYA (Virtual Assistance for Intelligent Digital wellness services for Young elderly Autonomy) to give users individual advice and guidance on how to improve their wellness routines. This coaching is adaptive to national language, cultural habits, and changes in legislation (Carlsson & Walden, 2017). They suggest that integrating a digital coach will counteract the finding that interest and

use of digital and mobile services tends to diminish quickly around 3-5 months, while wellness routines need to be sustained for at least 3-5 years to have positive health effects.

Assessment

Family Measures

Family Ritual Questionnaire (FRQ; Fiese & Kline, 1993)

- A 56-item measure. It uses a forced-choice format to reduce social desirability bias; items are framed so that neither option is more desirable than the other.
    - Assesses family rituals in 7 settings (subscales):
        - Dinner time – shared family meal
        - Weekends – leisure or planned activities that occur on nonworking days
        - Vacations – events or activities surrounding a family vacation
        - Annual celebrations – Yearly celebrations: birthdays, anniversaries, or first day of school
        - Special celebrations – celebrations that occur regardless of religion or culture: weddings, graduation, or family reunions
        - Religious celebrations – Christmas, Chanukah, Easter, Passover
        - Cultural traditions – celebrations tied to culture and ethnic groups: naming ceremonies, wakes, funerals, or making particular ethnic foods
    - Has 8 dimensions:
        - Occurrence – how often the activity occurs
        - Roles – assignment of roles and duties during activities
        - Routines – regularity in how activity is conducted
        - Attendance – expectations about whether attendance is mandatory
        - Affect – emotional investment in activity
        - Symbolic significance – attachment of meaning to activity
        - Continuation – perseverance of activity across generations
        - Deliberateness – advance preparations and planning associated with activity
    - A Family Ritual Routine score can be calculated by summing responses to the roles and routines dimensions.
    - A Family Ritual Meaning score can be calculated by summing responses to the occurrence, attendance, affect, and symbolic significance dimensions.
- The measure was initially validated in a sample of 214 undergraduate students (109 women, 105 men, mean age = 18 years, range = 18-21, primarily middle- to upper-middle-class families; 88% were Caucasian, 5% African American, 7% from other

ethnicities; 48% Catholic, 20% Protestant, 21% Jewish, 20% reported no religious affiliation.
    - Internal consistency coefficients range from .52 to .90 – the different setting subscales were not highly related to one another, which is to be expected.
    - A test-retest reliability of .88 was found for a 4-week period.
- A follow-up study assessed agreement among family members in their perception of family rituals. A sample of undergraduate students (n = 241, 86 men, 155 women, mean age = 18, range = 17-21; 78% Caucasian, 10% African American, 3% Hispanic, 5% Asian, and 3% other; primarily middle- and upper-middle class) who had previously filled out the survey sent it to their parents (77 were returned by both parents, 49 by just mothers, and 26 by fathers only)
    - In general, family members agreed about the relative level of ritualization in their family.
- One of the most commonly used measures of family rituals (Spagnola & Fiese, 2007), used in:
    - Marson and Fiese's (2000) study of children with asthma (U.S.):
        - For this study, mother and fathers completed the questionnaire as it has not been adapted for children.
        - Alpha coefficients on the Meaning subscale was .89 for mothers and .90 for fathers, and for the Routines subscale, .69 for mothers and .76 for fathers.
    - Crespo et al.'s (2008) study of married couples (Portugal):
        - Measure was translated into Portuguese and only the Ritual Meaning factor was used.
    - Crespo et al.'s (2011) study of adolescent well-being and family cohesion (New Zealand):
        - Only used the subscales for dinner time and annual celebrations

Family Routine Inventory (Jenson, James, Boyce, & Hartnett, 1983; Appendix A)

- A 28-item measures.
- One of the most widely used measures of family routines (Spagnola & Fiese, 2007).
- Has four scoring options:
    - Raw score: simple numerical sum of all routines endorsed by respondent. Scores range from 0 to 28
    - Weighted score: sum of the underlying Thurstone S values of all routines endorsed by respondents. Scores range from 0 to 255.9
    - Frequency score: simple numerical sum of all endorsed routines, weighing the score for each routine endorsed by the frequency with which the family participates in it:
        - Always/ everyday = 3

        - 3-5 times a week = 2
        - 1-2 times a week = 1
        - Almost never = 0
            - Scores range from 0 to 84
    - Importance scores: can be summed from an additive to each item "how important is this routine for keeping <u>your</u> family strong?" with responses:
        - Very important
        - Somewhat important
        - Not at all important
- Validation sample: 307 mothers, each with at least one child under 16 living at home, recruited from PTA's, churches, social clubs, etc. in North Carolina (40% Black, 60% White; majority aged 31-40; majority married; majority had college or higher level education). Participants completed the measure twice, 30 days apart for reliability testing.
    - 30-day test-retest reliability:
        - Raw score – 0.74
        - Weighted score – 0.75
        - Frequency score – 0.79
    - The frequency score proved to be the most valid, correlating strongly with other measures of family organization. While there was a 0.99 correlation between raw score and weighted score, suggesting they are essentially identical, the frequency score correlated less highly (0.80 and 0.81), suggesting it covers information not captured by the other scoring methods. The authors conclude that the frequency score of the FRI is a valid measure of family cohesion, solidarity, order, and overall satisfaction with family life.
- The FRI was used in Taylor and Lopez's (2005) study of family routines and adolescent school achievement (U.S):
    - Reported an alpha coefficient of 0.74.
    - Used scores of frequency and importance.

Child Routines Inventory (CRI; Sytsma et al., 2001; Appendix B)

- A 36-item, parent-report measure.
- Initial validation study: 216 mothers with children between the ages of 5 and 12 (median age = 8; 55.6% boys; 44.4% girls). Sixty-six percent of the mothers were married, 18% never married, 3% were separated, 12% divorced, and 1% were widowed. Racial composition for the sample was 58.9% White, 37.9% Black, 1.9% Hispanic, 1.7% Asian, 1.0% Native American and Pacific Islander, and 0.5% Other. Children were from a broad range of socioeconomic statuses.
- This measure is valid for school-aged children.
- Four-factor structure:

1. Daily Living Routines – 11 items on morning routine, bedtime routine, meals, and typical family social interaction (α = .81; test-retest = .85).
2. Household Responsibilities – 9 items on personal responsibilities, household chores, and hygiene (α = .83; test-retest = .75).
3. Discipline Routines – 11 items on rules, methods of discipline, and structured family activities (α = .82; test-retest = .77).
4. Homework Routines – 5 items on homework and adult supervision (α = .79; test-retest = .85).

- Internal consistency for the total scale was .90; test-retest reliability over a 2- to 4-week period was .86.

Individual Measure

The Healthy Lifestyle and Personal Control Questionnaire – Daily Routine subscale (Darviri et al., 2014; Appendix C)

- The Daily Routine subscale contains 8 items with a Likert-type response scale: 1 = Never or rarely, 2 = Sometimes, 3 = Often, and 4 = Always. It assesses an individual's control over consistent timing of meals and sleep.
- The measure was validated with a convenience sample of 28 postgraduate students from Athens' Medical University and their friends and relatives. The majority were aged 23 to 76, (mean age = 50.18, SD = 10.1; 41.8% men; 66% married; 73.3% have children; 57.9% have tertiary education, 75.1% employed).
- The Daily Routine factor showed satisfactory internal consistency (α = .818).

Other Ways of Assessing Routine

Interviews are a useful way to understand the importance of specific routines and rituals to individual family members (Spagnola & Fiese, 2007). Interviews are helpful in conjunction with questionnaires or observations as they give participants the opportunity to clarify and expand on the role of specific practices (Spagnola & Fiese, 2007). One commonly used interview format is the Family Ritual Interview (Wolin et al., 1979), a semi-structured interview that covers religious background and religious-related activities, storytelling, deliberateness in planning for the future of the family and the results of that planning so far, people resources during times of stress, and detailed descriptions of two daily routines and two special occasions and activities. The Family Ritual Interview was used by Kiser et al. (2005) in their study of parents and adolescents from clinical and community populations in the U.S.

Another common method for assessing routines is through direct observation, which can involve in-person or videotaped observations of families carrying out their regular activities (Spagnola & Fiese, 2007). McNamara and Humphrey (2008) use this method in their study of young children's classroom routines, and Sanders and Van Oss (2013) use it in their study of older adults; there is no age range on the effectiveness of this method. Both used a

phenomenological study design to understand the individualized components of each participant's routine. Sanders and Van Oss (2013) combined direct observation with semi-structured interviews.

References

Bartel, K. A., Gradisar, M., & Williamson, P. (2015). Protective and risk factors for adolescent sleep: A meta-analytic review. Sleep Medicine Reviews, 21, 72–85. https://doi.org/10.1016/j.smrv.2014.08.002

Brown, F., Buboltz, W., & Soper, B. (2002). Relationship of Sleep Hygiene Awareness, Sleep Hygiene Practices, and Sleep Quality in University Students. Behavioral Medicine, 28(1), 33-38.

Burton, M. S., Cooper, A. A., Feeny, N. C., & Zoellner, L. A. (2015). The Enhancement of Natural Resilience in Trauma Interventions. Journal of Contemporary Psychotherapy, 45(4), 193–204. https://doi.org/10.1007/s10879-015-9302-7

Carlsson, C., & Walden, P. (2017). Digital Coaching to Build Sustainable Wellness Routines for Young Elderly. In Bled eConference (p. 45).

Clark, F. A. (2000). The Concepts of Habit and Routine: A Preliminary Theoretical Synthesis. The Occupational Therapy Journal of Research, 20(1_suppl), 123S-137S. https://doi.org/10.1177/15394492000200S114

Compañ, E., Moreno, J., Ruiz, M. T., & Pascual, E. (2002). Doing things together: Adolescent health and family rituals. Journal of Epidemiology & Community Health, 56(2), 89–94. https://doi.org/10.1136/jech.56.2.89

Crespo, C., Davide, I. N., Costa, M. E., & Fletcher, G. J. O. (2008). Family rituals in married couples: Links with attachment, relationship quality, and closeness. Personal Relationships, 15(2), 191–203. https://doi.org/10.1111/j.1475-6811.2008.00193.x

Crespo, C., Kielpikowski, M., Pryor, J., & Jose, P. E. (2011). Family rituals in New Zealand families: Links to family cohesion and adolescents' well-being. Journal of Family Psychology, 25(2), 184–193. https://doi.org/10.1037/a0023113

Crespo, C., Santos, S., Canavarro, M. C., Kielpikowski, M., Pryor, J., & Féres-Carneiro, T. (2013). Family routines and rituals in the context of chronic conditions: A review. International Journal of Psychology, 48(5), 729–746. https://doi.org/10.1080/00207594.2013.806811

Darviri, C., Alexopoulos, E. C., Artemiadis, A. K., Tigani, X., Kraniotou, C., Darvyri, P., & Chrousos, G. P. (2014). The Healthy Lifestyle and Personal Control Questionnaire (HLPCQ): A novel tool for assessing self-empowerment through a constellation of daily activities. BMC Public Health, 14(1), 995. https://doi.org/10.1186/1471-2458-14-995

David, K. B., LeBlanc, M. M., & Self-Brown, S. (2015). Violence Exposure in Young Children: Child-Oriented Routines as a Protective Factor for School Readiness. Journal of Family Violence, 30(3), 303–314. https://doi.org/10.1007/s10896-015-9676-z

Denham, S. A. (2003). Relationships between Family Rituals, Family Routines, and Health. Journal of Family Nursing, 9(3), 305–330. https://doi.org/10.1177/1074840703255447

Dietz, F., Hofer, M., & Fries, S. (2007). Individual values, learning routines and academic procrastination. British Journal of Educational Psychology, 77(4), 893–906. https://doi.org/10.1348/000709906X169076

Fiese, B. H. (2007). Routines and Rituals: Opportunities for Participation in Family Health. OTJR: Occupation, Participation and Health, 27(1_suppl), 41S-49S. https://doi.org/10.1177/15394492070270S106

Fiese, B. H., & Kline, C. A. (1993). Development of the Family Ritual Questionnaire: Initial reliability and validation studies. Journal of Family Psychology, 6(3), 290–299. https://doi.org/10.1037/0893-3200.6.3.290

Fiese, B. H., Tomcho, T. J., Douglas, M., Josephs, K., Poltrock, S., & Baker, T. (2002). A review of 50 years of research on naturally occurring family routines and rituals: Cause for celebration? Journal of Family Psychology, 16(4), 381–390. https://doi.org/10.1037/0893-3200.16.4.381

Halal, C. S. E., & Nunes, M. L. (2014). Education in children's sleep hygiene: Which approaches are effective? A systematic review. Jornal de Pediatria, 90(5), 449–456. https://doi.org/10.1016/j.jped.2014.05.001

Harrison, M. E., Norris, M. L., Obeid, N., Fu, M., Weinstangel, H., & Sampson, M. (2015). Systematic review of the effects of family meal frequency on psychosocial outcomes in youth. Canadian Family Physician, 61(2), e96–e106.

Ibañez, L. V., Kobak, K., Swanson, A., Wallace, L., Warren, Z., & Stone, W. L. (2018). Enhancing interactions during daily routines: A randomized controlled trial of a web-based tutorial for parents of young children with ASD. Autism Research, 11(4), 667–678. https://doi.org/10.1002/aur.1919

Jensen, E. W., James, S. A., Boyce, W. T., & Hartnett, S. A. (1983). The family routines inventory: Development and validation. Social Science & Medicine, 17(4), 201–211. https://doi.org/10.1016/0277-9536(83)90117-X

Kayser, K., MSW, L. W. P., & PhD, R. A. S. (2008). Disaster Relief Within a Collectivistic Context. Journal of Social Service Research, 34(3), 87–98. https://doi.org/10.1080/01488370802086526

Kiser, L. J., Bennett, L., Heston, J., & Paavola, M. (2005). Family Ritual and Routine: Comparison of Clinical and Non-Clinical Families. Journal of Child and Family Studies, 14(3), 357–372. https://doi.org/10.1007/s10826-005-6848-0

Loukas, A., & Prelow, H. M. (2004). Externalizing and Internalizing Problems in Low-Income Latino Early Adolescents: Risk, Resource, and Protective Factors. The Journal of Early Adolescence, 24(3), 250–273. https://doi.org/10.1177/0272431604265675

Markson, S., & Fiese, B. H. (2000). Family Rituals as a Protective Factor for Children With Asthma. Journal of Pediatric Psychology, 25(7), 471–480. https://doi.org/10.1093/jpepsy/25.7.471

Masten, A. S., & Narayan, A. J. (2012). Child Development in the Context of Disaster, War, and Terrorism: Pathways of Risk and Resilience. Annual Review of Psychology, 63(1), 227–257. https://doi.org/10.1146/annurev-psych-120710-100356

McNamara, P., & Humphry, R. (2008). Developing Everyday Routines. Physical & Occupational Therapy In Pediatrics, 28(2), 141–154. https://doi.org/10.1080/01942630802031826

Mindell, J. A., Meltzer, L. J., Carskadon, M. A., & Chervin, R. D. (2009). Developmental aspects of sleep hygiene: Findings from the 2004 National Sleep Foundation Sleep in America Poll. Sleep Medicine, 10(7), 771–779. https://doi.org/10.1016/j.sleep.2008.07.016

Narayan, A. J., Rivera, L. M., Bernstein, R. E., Harris, W. W., & Lieberman, A. F. (2018). Positive childhood experiences predict less psychopathology and stress in pregnant women with childhood adversity: A pilot study of the benevolent childhood experiences (BCEs) scale. Child Abuse & Neglect, 78, 19–30. https://doi.org/10.1016/j.chiabu.2017.09.022

O'Conor, R., Benavente, J. Y., Kwasny, M. J., Eldeirawi, K., Hasnain-Wynia, R., Federman, A. D., Hebert-Beirne, J., & Wolf, M. S. (2019). Daily Routine: Associations With Health Status and Urgent Health Care Utilization Among Older Adults. The Gerontologist, 59(5), 947–955. https://doi.org/10.1093/geront/gny117

Sanders, M. J., & Oss, T. V. (2013). Using Daily Routines to Promote Medication Adherence in Older Adults. American Journal of Occupational Therapy, 67(1), 91–99. https://doi.org/10.5014/ajot.2013.005033

Schneider, D., & Harknett, K. (2019). Consequences of routine work-schedule instability for worker health and well-being. American Sociological Review, 84(1), 82-114.

Spagnola, M., & Fiese, B. H. (2007). Family Routines and Rituals: A Context for Development in the Lives of Young Children. Infants & Young Children, 20(4), 284–299. https://doi.org/10.1097/01.IYC.0000290352.32170.5a

Sytsma, S. E., Kelley, M. L., & Wymer, J. H. (2001). Development and Initial Validation of the Child Routines Inventory. Journal of Psychopathology and Behavioral Assessment, 23(4), 241–251. https://doi.org/10.1023/A:1012727419873

Taylor, R. D., & Lopez, E. I. (2005). Family management practice, school achievement, and problem behavior in African American adolescents: Mediating processes. Journal of Applied Developmental Psychology, 26(1), 39–49. https://doi.org/10.1016/j.appdev.2004.10.003

Waters, L. E., & Moore, K. A. (2002). Reducing latent deprivation during unemployment: The role of meaningful leisure activity. Journal of Occupational and Organizational Psychology, 75(1), 15–32. https://doi.org/10.1348/096317902167621

Wolin, S. J., Bennett, L. A., & Noonan, D. L. (1979). Family Rituals and the Recurrence of Alcoholism Over Generations. American Journal of Psychiatry, 136(4B), 589–593. https://doi.org/10.1176/ajp.1979.136.4b.589

Appendix A: The Family Routines Inventory

Jensen et al. (1983)

Responses are: “Always/ everyday,” “3-5 times a week,” “1-2 times a week,” and “Almost never.”

An additional question can be added to each item to assess the importance of each routine to the family: “How important is this routine for keeping your family strong?” with responses: “Very important,” “Somewhat important,” and “Not at all important.”

Workday routines

1. Parents(s) have some time each day for just talking with the children
2. Parents(s) have certain things they do every morning while getting ready to start the day
3. Working parent has a regular play time with the children after coming home from work
4. Working parent takes care of the children sometime almost every day
5. Children so the same things each morning as soon as they wake up
6. Parent(s) and children play together sometime each day
7. Non-working parents and children do something together outside the home almost every day (e.g., shopping, walking, etc.)
8. Family has a ‘quiet time’ each evening when everyone talks or plays quietly

Weekend and leisure time

9. Family goes some place special together each week
10. Family has a certain ‘family time’ each week when they do things together at home

Children’s routines

11. Parent(s) read or tell stories to the children almost every day
12. Each child has some time each day for playing alone
13. Children take part in regular activities after school
14. Young children go to play-school the same days each week
15. Children do their homework at the same time each day or night during the week

Parent(s)’ routines

16. Parents have a certain hobby or sport they do together regularly

Bedtime

17. Children have special things they do or ask for each night at bedtime (e.g., a story, a good-night kiss, a drink of water)
18. Children go to bed at the same time almost every night

Meals

19. Family eats at the same time each night
20. At least some of the family eats breakfast together almost every morning
21. Whole family eats dinner together almost every night

Extended family

22. At least one parent talks to his or her parents regularly
23. Family regularly visits with the relatives

Leaving and homecoming

24. Family checks in or out with each other when someone leaves or comes home
25. Working parent(s) come home from work at the same time each day
26. Family has certain things they almost always do to greet the working parent(s) at the end of the day

Disciplinary routines

27. Parent(s) have certain things they almost always do each time the children get out of line

Chores

28. Children do regular household chores

Scoring:

Frequency score: simple numerical sum of all endorsed routines, weighing the score for each routine endorsed by the frequency with which the family participates in it:

- Always/ everyday = 3
- 3-5 times a week = 2
- 1-2 times a week = 1
- Almost never = 0

Appendix B: Child Routines Inventory – Factor Loadings

Sytsma et al. (2001)

Factor 1: Daily Living Routines	Factor Loadings
My child takes turns with family members talking about their day	.69
My child does the same thing each night before bed (e.g., brushes teeth, reads story, says prayers, kisses parents goodnight)	.65
My child has a set routine for getting ready in the morning (e.g., brushing teeth, washing face, doing hair, and dressing)	.58
My child wakes up at about the same time on weekdays	.57
My child eats meals with family at the table each day	.56
My child hugs/kisses parent before bed	.55
My child goes to bed at about the same time on weeknights	.54
My child spends special time talking with parent (e.g., in the car or before bed) each day	.53
My child eats breakfast at about the same time and place (e.g., at kitchen table or at school) each morning	.53
My child eats dinner at about the same time each day	.52
My child brushes teeth before bed	.51
Factor 2: Household Responsibilities	
My child picks up dirty clothes after changing	.75
My child cleans up food mess after snack	.72
My child picks up toys and puts them away when done playing	.72
My child straightens bedroom daily	.67
My child washes hands before mealtime	.57
My child has regular chores (e.g., takes out trash, helps with laundry, feeds/cares for family pet)	.55
My child helps clean up after meals	.53
My child washes hands after using toilet	.52
My child says prayers before meals	.45
Factor 3: Discipline Routines	
My child receives smaller punishment for minor misbehaviour (e.g., not following instructions) and larger punishment for major misbehaviour (e.g., fighting)	.74
My child is disciplined for misbehaviour (e.g., time out, loss of a privilege, or spanking)	.71
My child knows what will happen if he or she doesn't follow parent instructions or rules	.70

My child is praised or rewarded for specific good behaviour (e.g., "I like the way you put away your toys")	.61
My child receives rewards or privileges for specific good behaviour (e.g., finishing homework or completing chores)	.54
My child helps decide and prepare for family fun or events	.52
My child has time limits on fun activities (e.g., outside play, TV, video games, or phone use)	.48
My child takes part in "family time" each week when the family does planned activities together (e.g., plays games, watches movies, and goes out to eat)	.47
My child has household rules such as "No cursing," "No talking while eating," or "No running inside"	.47
My child must finish household responsibilities (e.g., homework or chores) before play time	.45
My child helps put things away after shopping	.43
Factor 4: Homework Routines	
My child studies for tests (e.g., weekly spelling tests)	.71
My child is supervised by an adult who helps child with homework by explaining tasks, demonstrating the task, and/or checking the answers when it is completed	.70
My child begins homework at about the same time and place (e.g., at the kitchen table) during the week	.68
My child completes homework	.68
My child shows parent schoolwork after school (e.g., art work or spelling test)	.62

Appendix C: Daily Routine subscale of the Healthy Lifestyle and Personal Control Questionnaire

Darviri et al. (2014)

Response scale:

1 = Never or rarely 2 = Sometimes 3 = Often 4 = Always

Item:
1. How often do you eat your meals at the same time every day?
2. How often are you careful about not missing a meal each day?
3. How often do you eat a good breakfast?
4. How often you sleep at the same time each day?
5. How often do you follow a scheduled program for your daily activities?
6. How often do you eat breakfast at the same time every day?
7. How often do you eat lunch at the same time every day?
8. How often do you eat dinner at the same time every day?

R2

For more information about R2 or to discover how you can bring the program to your organization, business or educational setting, please contact us.

Paul McGuinness
Operations Manager

rrc@dal.ca
(902) 494-8482

Michael Ungar, PhD
Director

michael.ungar@dal.ca
(902) 229-0434

RRC - Evaluation and Training Institute