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## Promoting Social Participation for Adolescents with Burn Injury: A Guideline for Occupational Therapy Practice

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# Promoting Social Participation for Adolescents with Burn Injury: A Guideline for Occupational Therapy Practice

## Abstract

Adolescents with burn injury are vulnerable to psychosocial dysfunction because of the complex nature of their neurobiological, cognitive, and interpersonal changes that occur during this developmental stage. Physical differences in appearance also make these adolescents prone to peer bullying and at further risk for social functioning challenges. These social functioning challenges may involve underlying difficulties with cognitive functions needed to support adaptive social functioning and can present as social isolation, inappropriate social behaviors, or social anxiety. Promoting social participation is a recognized intervention to support positive mental health and is necessary for identity formation during transition into adulthood. This guideline describes assessment and intervention for adolescents with burn injury to improve adaptive capacities and facilitate social participation. Assessment of social-cognitive skills, resilience, and behavioral indicators of adaptive social functioning are discussed. A cognitive-approach to intervention is also described. The goal of this guideline is to enable occupational therapists to provide psychosocial assessment and intervention to adolescents with burn injury. We hope that this guideline is an impetus for evidence-based practice on the role occupational therapists can contribute to promote interdisciplinary collaboration and provide more comprehensive patient care for this population.

## Comments

The authors have no conflicts of interest to declare.

## Keywords

adaptive capacity, adolescents, burn, psychosocial, resilience, social participation

## Cover Page Footnote

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## Credentials Display

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Burn injuries are a significant pediatric health problem, with approximately 265,000 youth sustaining burn-related injuries each year (World Health Organization, 2014). Scarring is one of the most prevalent life-long physical consequences of childhood burn injuries (American Burn Association, 2018; Esselman, 2007) and makes children more prone to peer bullying and social isolation, thus exacerbating the potential for mental health problems (Pinquart, 2017; Rimmer et al., 2007). Adolescents are a subset of this population identified as more vulnerable to psychosocial difficulties after burn injury because of the unique nature of their developmental, biological, and neurocognitive states during this life stage (Dahl & Suleiman, 2017; Dumontheil, 2015). However, a traditional focus on biomechanical recovery after burn injury places psychosocial difficulties at risk of being overlooked, making these adolescents at higher risk for social and psychological dysfunction (Dahl et al., 2016).

Social participation is defined as one's comfort and ability to partake in occupations with or in the presence of others (American Occupational Therapy Association, 2020). Interventions to promote social participation have been recognized as an effective means to mitigate the development of mental health problems in at-risk individuals (Uchino, 2006; Webber & Fendt-Newlin, 2017). The literature has shown that children with burn injuries of any size, location, or severity are at risk for developing difficulties with social reintegration and social functioning (Szabo et al., 2017; van Baar et al., 2011). Social isolation, withdrawal, and avoidance of interpersonal relationships are common manifestations of trauma responses in children and adolescents after burn injury and directly inhibit social participation (Bronson & Price, 2019). Therefore, social participation can serve as both a mechanism of and outcome in promoting positive mental health and adaptive psychosocial functioning in adolescents with burn injury.

### **The Role of Occupational Therapy**

Adolescents with burn injuries have a complex need for multifaceted treatment that involves integration of biomechanical, psychosocial, and environmental domains because of the unique biological and psychological changes that occur during this phase of development. Occupational therapists have the skilled training to analyze the relationships between these elements of dysfunction in order to provide holistic, client-centered interventions. Aside from the roots of occupational therapy being founded in mental health practice, a wealth of research has supported the positive impact of occupational therapists using psychosocial interventions on social functioning and community reintegration (Moses et al., 2017). The current literature, however, only discusses biomechanical roles, such as improving muscle strength, range of motion, fine motor skills, and daily living abilities, that occupational therapists contribute for this population (American Occupational Therapy Association, 2016). The lack of a clearly defined role in psychosocial domains of burn injury and the underrepresentation in the literature creates a contemporary barrier for occupational therapists to perform psychosocial assessment and intervention with this population despite a clear alignment with the occupational therapy scope of practice. Occupational therapists can contribute a skilled lens focused on function and participation unique to the interdisciplinary team. A guideline for practice supporting the psychosocial functioning of adolescents with burn injury from the lens of occupational therapists is needed.

This guideline for practice is designed to meet that need. It is intended to be used by occupational therapists working in outpatient, school, or community-based settings to support the social participation of adolescents with burn injury of any size, severity, or location who are not satisfactorily participating in the social contexts of their lives because of the psychosocial aspects of their burn injury.

Recommendations are offered for evaluating dysfunction and facilitating adaptive responses that can be transferred and generalized to a variety of future social contexts.

### **Theoretical Assumptions Guiding this Framework**

- Adolescence is a unique developmental time period characterized by a search for identity and social learning. This includes an innate desire for autonomy, sensitivity to peer rejection, and attention to physical appearance.
- Altered body appearance can increase internal and external stress during social participation and manifest as behavioral patterns of avoidance, withdrawal, and social isolation.
- Adolescents with burn injury are prone to cognitive dysfunctions because of the impact of stress on neurobiology during this sensitive period of brain development. This includes executive functions, such as decision-making, inhibition, and emotional regulation.
- Inability to achieve mastery in social contexts or observe others being successful in social experiences decreases motivation to pursue future social opportunities and creates patterns of dysfunction that can be difficult to recognize or control.
- Optimal capacity for promoting social participation is achieved when adaptive social-behavioral, cognitive, and resilience functions are maximized. Resilience is key to promoting the sustainability of adaptive social and cognitive behavioral patterns in future contexts.

These assumptions will be supported by theoretical bases and literature in the next section.

### **Theoretical Bases**

This framework is based on developmental (Erikson, 1959; Erikson, 1968) and neurobiological (Casey et al., 2008; Cermak & Toglia, 2018; Dahl & Suleiman, 2017) theories that explain why adolescents with burn injuries are (a) in a sensitive time period where social participation is critical for promoting mental health and well-being, (b) at risk for executive functioning difficulties related to social participation, and (c) in need of cognitive-based intervention strategies to prevent lifelong detrimental effects. Principles from the theory of occupational adaptation (OA) (Grajo, 2019; Schkade & Schultz, 1992, 2003), Bandura's social cognitive theory (Bandura, 1997, 2006), dynamic interaction model (DMI) (Toglia, 1992, 1998, 2011), and resilience theories (Fergus & Zimmerman, 2005; Zimmerman, 2013) provide the theoretical premise for assessing social, behavioral, and cognitive dysfunction and how to respectively approach intervention for adaptive functioning.

#### ***A Unique Time Period: Developmental Perspectives***

Adolescence is a developmental time period with profound biological and neurological changes. It is the stage of development labeled "identity vs. role confusion," characterized by an innate drive for autonomy and a search for personal identity (Erikson, 1959; Erikson, 1968). After a burn injury, biomechanical changes can cause a loss of independence and compromise feelings of autonomy while altered body appearance can contribute to feeling a loss of personal identity (Zamanzadeh et al., 2015). In addition, hormonal and neurostructural changes from puberty appear to restructure greater salience toward social and emotional information processing streams, and adolescents feel stronger desires to form social relationships. These biological changes promote self-conscious tendencies about one's appearance and greater sensitivity to peer acceptance and rejection (Dahl & Suleiman, 2017; Sebastian et al., 2008, Steinberg, 2007). This could impact an adolescent's adaptive functioning in social environments.

#### ***Neurobiological Perspectives***

Neurobiologically, adolescence is a unique time period of neuroplasticity and rapid development of cognitive functions (Casey et al., 2008; Eiland & Romeo, 2013). These include decision-making,

judgement, and inhibitory control related to the advancement of the prefrontal cortex and emotional regulation, related to the development of the limbic system (Casey et al., 2008; Steinberg, 2007). Emotional regulation refers to the ability to modify feeling states to select appropriate behavioral actions in order to accomplish intrapersonal goals. These executive functions related to the prefrontal cortex and emotional regulation abilities from the limbic system play critical roles in moderating social behavior and social decisions (Eisenberg & Spinrad, 2004; Guralnick, 2006; Olson, 2020). During these sensitive periods of brain plasticity, the brain is physiologically vulnerable to stress (Casey et al., 2008). Adolescents experience increased stress because of their natural biological changes and internal developmental conflicts related to peer acceptance. Physical differences from burn injury can further amplify internal stress related to identity formation and promote external stress related to social participation, such as bullying, unprovoked questioning, or staring, placing these cognitive functions at risk for perturbed development. These cognitive challenges at the developmental and neuro-cellular level may impact the adolescent's adaptive functioning. Thus, an adaptation and social cognitive perspective are needed to understand the social participation complexities of this population.

### ***Cognitive-Based Intervention Strategies***

**OA Theory.** The holistic and individualized nature of Schkade and Schultz's (1992) OA theory focuses on supporting an individual's adaptive capacity. This is defined as the tools, strategies, and mechanisms that are planned, generated, and evaluated in order to overcome challenges encountered in familiar and unfamiliar occupational environments (Grajo, 2019; Schkade & Schultz, 2003). OA emphasizes that performance and participation are the products of dynamic and situational experiences. This aligns well with the intervention needs of adolescents with burn injury as the contexts in which social participation occurs is highly situational and dynamic. In the literature, OA has been described as a manner of responding to change and life transitions, as a process that emerges during transaction with the environment, and as an ongoing process to form a desired sense of self and identity (Grajo et al., 2019). It is the transactional relationship of the adolescent and their social environments that promotes or hinders adaptation. This adaptation process then shapes their occupational identity. Much like an adolescent's drive for autonomy and mastery over social environments, OA recognizes that there is a natural press for mastery. When occupational challenges are encountered, an individual might display dysadaptive occupational responses that impact their perception of self-efficacy and their ability to function in a way that supports participation (Grajo, 2019). Social theories connecting cognition, adaptation, and self-efficacy are critical in the development of a guideline for practice for this population.

**Bandura's Social Cognitive Theory.** While OA provides insight on the importance of the adaptation process between an adolescent and their social environments, Bandura's (1977) social cognitive theory provides insight on social learning and how cognitive skills related to motivation and self-beliefs can deprive or support an adolescent in having opportunities for achieving a sense of mastery (Bandura, 2006). Social cognitive theory emphasizes the concept of self-efficacy, the belief in one's abilities to perform the actions required to be successful in current or prospective situations as a primary factor that influences how one learns, approaches, and manages social situations (Bandura, 1977, 1997). Self-efficacy plays a primary role in reinforcing one's motivation to pursue social opportunities and how one approaches, navigates, and recovers from social challenges. Unexpected adversity and setbacks can decrease self-efficacy and influence patterns of social avoidance. One can develop self-efficacy by participating in successful social experiences, observing others, and controlling one's physiological states (Bandura, 1997, 2006). Since perceptions of self-efficacy have strong cognitive

correlates that are sensitive to adversity, a cognitive and resilience approach to addressing the needs of this population is also warranted.

**Resilience.** Resilience is defined as the capacity to recover from setbacks and persist through adversity without impeding functioning (Ledesma, 2014). Since one must change physiologically to adjust to changing environments and cope with unexpected stressors, resilience is recognized as both a psychological and biophysiological construct. Therefore, the development of resilience is also physiologically vulnerable during periods of rapid brain development and increased stress (Dimitropoulou & Baxter, 2019). Without the ability to overcome adversity or setbacks during occupational challenge, one is at risk for compromising their self-efficacy (Bandura, 1997, 2006).

To improve resilience, one can expand their promotive factors. Promotive factors are internal and external social, individual, and contextual factors that enhance strengths and support positive change (Zimmerman, 2013). Internal promotive factors, known as assets, are one's intrinsic factors that support adaptation to adversity, such as self-efficacy, sense of identity, and stress management. External promotive factors, known as resources, are exterior supports to adaptation, such as adult mentors, support groups, and youth programs. By maximizing promotive factors, one can achieve optimal resilience and foster adaptive behavioral patterns (Zimmerman, 2013; Zimmerman et al., 2013).

**DIM.** It is vital to have awareness of current patterns of decision-making, impulses, emotions, or behaviors that are interfering with occupational performance to institute conscious control. The DIM stresses the importance of self-generating one's own cognitive tools, known as metacognitive strategies, to achieve self-awareness and effortful control. Metacognitive strategies are mental tools that promote self-awareness of thinking and behaviors. They aide with anticipating and recognizing cognitive dysfunction so that one can consciously use strategies for successful adaptive functioning. Metacognitive strategies are useful for promoting transfer generalization to new or unpredictable contexts (Toglia, 1992, 2003, 2018).

### **Guidelines for Evaluation**

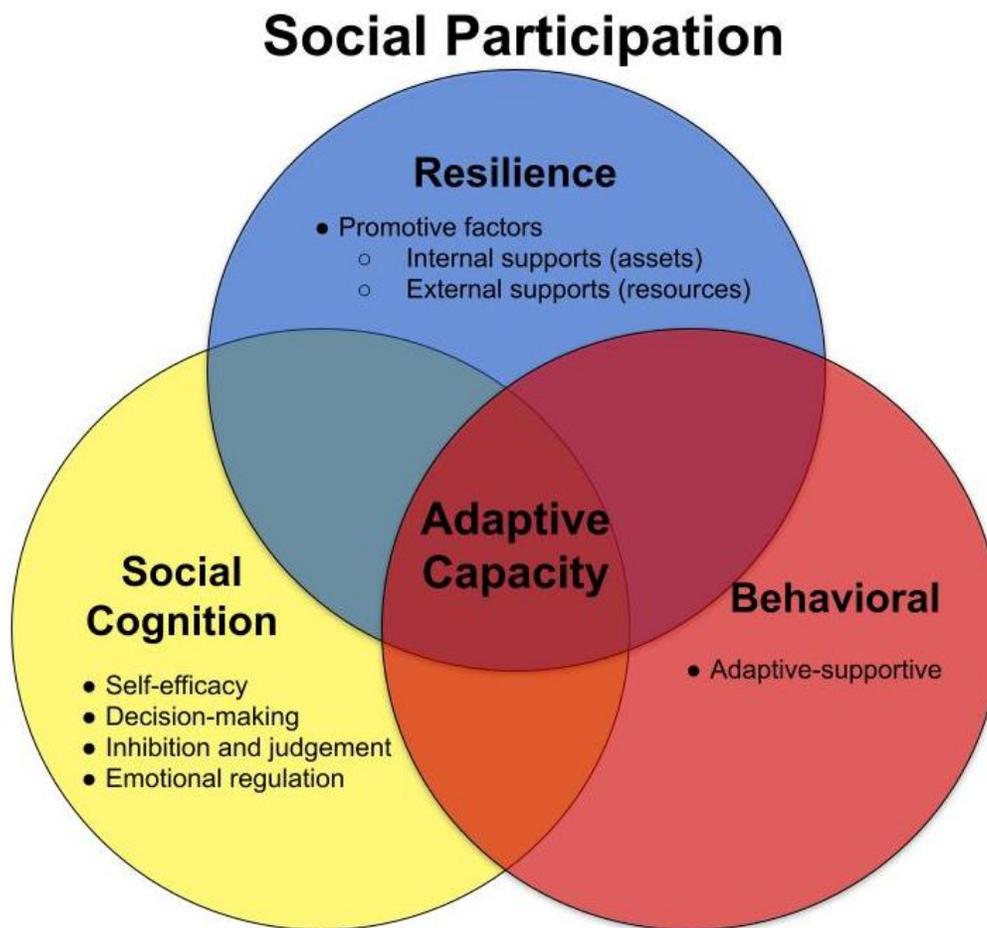
Gathering an occupational profile to understand current social occupations, contexts, and environments as well as daily routines, roles, and habits where intentional or unintentional social participation may occur is achieved through semi-structured interview. Subjective information from the adolescent regarding their perception of and satisfaction with current social participation and supports should also be acquired. Objective information on social participation from individuals involved in the client's daily social environments, such as teachers, should also be included when possible. The *Miller Function and Participation Scales* (Miller, 2006) includes home and school observations for rating children's participation in daily routines, social skills, behavior, and self-control. Subjective information from the adolescent regarding their own satisfaction and perception of social participation and supports can guide meaningful goal-setting. The *Canadian Occupational Performance Measure* (COPM; Law et al., 2014) is a useful assessment in identifying perceived performance issues and satisfaction related to social participation and peer relationships. Once the client's occupational profile, subjective report, and objective information is obtained, assessment should focus on client factors and performance skills that contribute to adaptive functioning during social participation.

### **Adaptive Functioning**

Adaptive functioning is defined as one's successful participation in desired occupations or contexts that promotes a sense of mastery or fulfillment. The goal of this guideline is to support the adaptive functioning of adolescents with burn injury in social activities and contexts by providing

assessment and intervention to optimize their adaptive capacities. Adolescents will therefore exhibit the awareness, tools, and strategies to overcome social challenges and improve their adaptive functioning across social occupations and contexts. There are three domains for achieving optimal adaptive capacity in this practice guideline: The behavioral (see Table 1), social cognition (see Table 2), and resilience (see Table 3) domains. If adaptive responses are not indicated across the three domains, occupational therapy intervention may be warranted. The goal is to maximize indicators in all three domains, so the adolescent's adaptive capacity is increased and adaptive functioning during social participation is achieved (see Figure 1).

**Figure 1**  
*The Three Domains of Adaptive Capacity*



*Note.* The three domains of improving adaptive capacity to support adaptive functioning in social occupations for adolescents with burn injury. Optimal adaptive capacity is achieved when the maximum amount of indicators is exhibited in all three domains.

### ***Behavioral Domain***

Behavioral indicators are defined as the behavioral presentations before, during, and after social participation (see Table 1). Behavioral responses are labeled as adaptive-supportive when they support social participation in desired occupational contexts and environments.

**Table 1**

*Behavioral Indicators of Adaptive Functioning*

<b>Behavior(s) of the adolescent that supports social participation in desired occupational contexts and environments irrespective of burn injury</b>
Accepts invitations to join social groups, interactions, or social activities
Initiates social interactions or participation in new social activities
Builds supportive relationships with caregivers, family, or peers through regular interactions
Welcomes and embraces social participation opportunities with peers, family, or others in social settings that they would otherwise not be inclined to do so
Goes out in public, to a new social setting, or social activity without worrying about their altered physical appearance, such that it does not limit desire, motivation, or action to go do so

**Social Cognitive Domain**

Social cognitive indicators are defined as the executive functions and self-perceptions required for conscious control over one’s emotional states and behaviors (see Table 2). These executive functions include decision-making, inhibition and judgement, and emotional regulation skills. Self-perceptions include the belief of one’s own capabilities to be successful in occupational contexts, known as self-efficacy. Social cognitive functions are important for facilitating patterns of response and actions that support or inhibit social participation.

**Table 2**

*Social Cognitive Indicators of Adaptive Functioning*

<b>Executive functions and self-perceptions that promote social participation irrespective of one’s burn injury</b>	
<b>Decision-making</b>	Decides to attend social gatherings, go to new or familiar public places, or participate in new leisure or community activities because of self-interest
	Decides to spend more time on grooming and/or cosmetic routines for own personal pleasure and satisfaction
	Decides clothing choices by personal preferences
	Chooses to have small group of family or friend supports as out of contentment
	Decides not to socialize with or date others of romantic interest out of personal preference and comfort
<b>Inhibition and Judgement</b>	Consciously considers opportunities for social participation, such that they are open to the prospect of socialization and choose to do so based on personal preferences
	Recognizes behavioral impulses and is able to control or modify behavioral, reaction, or responses, to promote progression of social participation goals
<b>Emotional regulation</b>	Recognizes own emotional state and is able to adjust, modify, or regulate it in order to be open to more social opportunities, adaptable during social interactions, develop social skills, and foster friendships
<b>Self-efficacy</b>	Believes that they are capable in successfully participating, managing, or navigating desired or unanticipated social contexts, such that they are motivated to continue to pursue social opportunities

**Resilience Domain**

Resilience indicators are defined as the awareness and use of one's promotive factors in order to respond to stress, navigate uncomfortable social situations, and recover from adversity related to social participation without rumination or emotional distress (see Table 3).

**Table 3***Resilience Indicators of Adaptive Functioning*

<b>Awareness and use of one's internal and external promotive factors in order to respond to stress, navigate challenging social situations, and recover from adversity, such that one is motivated to continue to pursue opportunities for social participation</b>
Has awareness of one's promotive factors and uses these internal and external supports to navigate stressful social experiences, overcome social challenges, or recover from adversity, such that they continue to pursue social opportunities to fulfill social participation goals
Recognizes negative affective states or impulsive tendencies and is able to use stress management skills, metacognitive strategies, and/or social supports to behave in a way that support social participation goals
Feels comfortable answering questions, setting boundaries, and navigating social situations relevant to the behaviors of others regarding their burn injury, such that appropriate social conversations can occur, friendships can be fostered, and a sense of mastery is supported
Is able to manage biological manifestations of social stress by using internal and external supports before, during, after, or in anticipation of social experiences to encourage behavioral patterns that support social participation goals
Is able to recover and/or move on from uncomfortable social experiences, setbacks, or challenges, such that it does not impede the ability, motivation, and/or desire to participate in future social encounters or activities

**Assessments of the Domains**

An unpublished scoping review of the literature was performed to determine assessment tools relevant to psychological and psychosocial domains that are used by interdisciplinary burn team members for pediatric populations. Several recommendations for assessment of the behaviors, social cognitive, and resilience indicators synthesized from the review are listed below (see Table 4). The Burn Specific Health Scale-Brief (BSHS-B) (Kildal et al., 2001), Burn Outcome Questionnaire (BOQ<sup>11-18</sup>) (Daltroy et al., 2000), and Brisbane Burn Scar Impact Profile 8–18 (BBSIP<sup>8-18</sup>) (Simons et al., 2019) are tools designed specifically for populations with burn injury and assess features related to the social behaviors domain. The BOQ<sup>11-18</sup> is validated for children and adolescents 11–18 years of age and the BBSIP<sup>8-18</sup> has acceptable validity, reliability, and responsiveness as a self-report measure for adolescents 8–18 years of age. The BSHS-B is validated for adult burn populations but has been used in pediatric burn research (Murphy et al., 2015).

The Resiliency Scales for Children and Adolescents (Prince-Embury, 2008), Piers-Harris Children's Self-Concept Scale 2nd Edition (Piers-Harris 2) (Piers, 2002), Child Behavior Checklist (CBC) (Achenbach, 2001), and Strengths and Difficulties Questionnaire (SDQ) (Goodman et al., 1998) are assessment tools designed for populations without burn injuries. However, they have been used in burn-related research and show promising psychometrics for use with child and adolescent populations (Maskell et al., 2014; Piers, 2002; Prince-Embury, 2008; Szabo et al., 2017). As there is currently no burn-specific assessment tool that addresses all three domains for optimizing adaptive capacity for social

participation, it is advised to use a combination of the burn-specific and non-burn-specific assessment tools.

**Table 4**

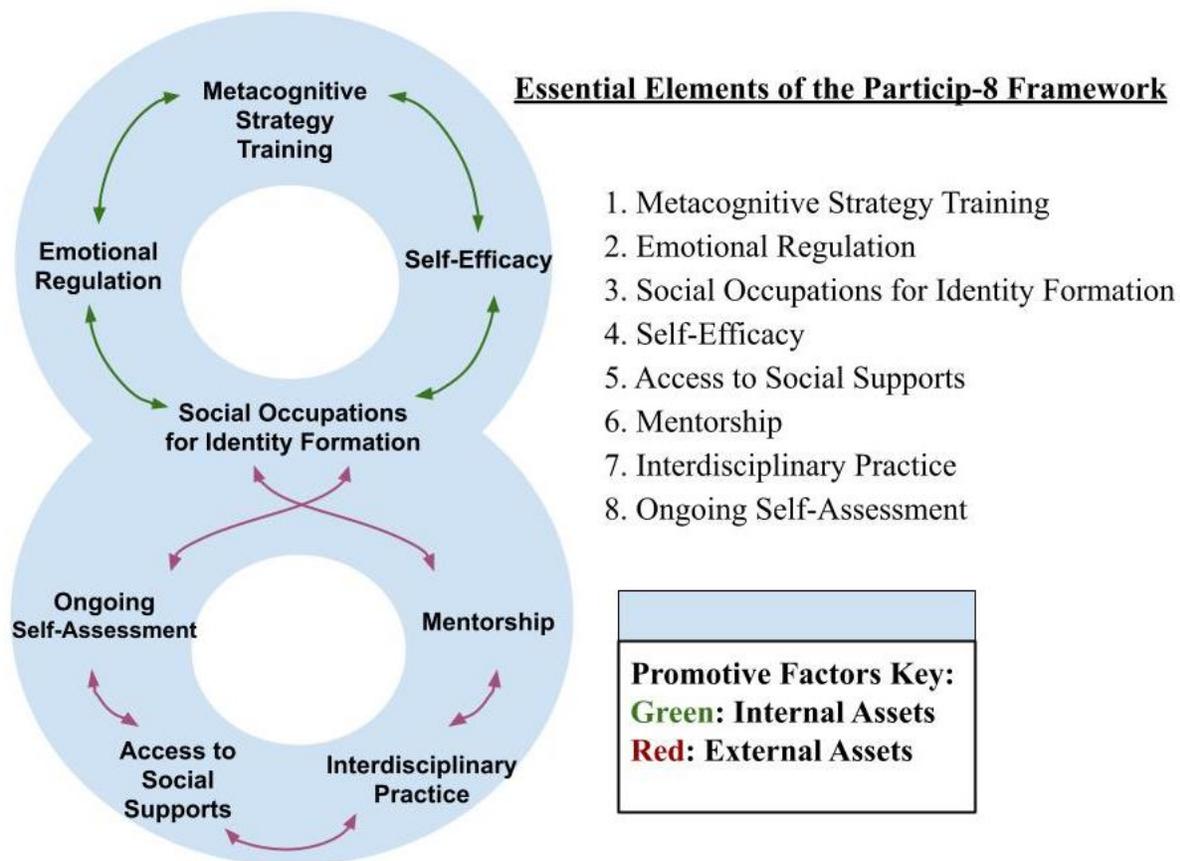
*Assessment Tools Used by Interdisciplinary Members of Burn Teams Relevant Psychological and Psychosocial Domains (0–17 years of age)*

Assessment		Purpose(s)	Related Domain		
			Social cognition	Social behaviors	Resilience
Burn-specific	Burn Specific Health Scale-Brief (BSHS-B) (Kildal et al., 2001)	Subjective appraisal of appearance and social-behavioral related to body image	X	X	
	Burn Outcome Questionnaire (BOQ <sup>11-18</sup> ) (Daltroy et al., 2000)	Health-related quality of life, appearance, emotional health, satisfaction, somatic complaints, physical function, family disruption, parental concern, school reentry		X	X
	Brisbane Burn Scar Impact Profile (BBSIP <sup>8-18</sup> ) (Simons et al., 2019)	Social interactions, social relationships, appearance, body esteem, emotional reactions, daily living activities	X	X	
Non-burn-specific	Resiliency Scales for Children and Adolescents (Prince-Embury, 2008)	Optimism, self-efficacy, adaptability, emotional reactivity, support, relatedness, sense of mastery	X	X	X
	Piers-Harris Children's Self-Concept Scale 2nd Ed. (Piers-Harris 2) (Piers, 2002)	Physical appearance, anxiety, intellectual and school status, behavioral adjustment, happiness, satisfaction, popularity	X	X	X
	Child Behavior Checklist (CBC) (Achenbach, 2001)	Social competence, behavior problems, internalizing behaviors, externalizing behaviors	X	X	
	Strengths and Difficulties Questionnaire (SDQ) (Goodman et al., 1998)	Emotional symptoms, conduct problems, hyper-inattention, peer problems, and pro-social behavior	X	X	

### Essential Elements of Intervention: Particip-8 Framework

Adolescents with burn injuries embody intrinsic desires for autonomy, identity formation, and social relationships and, therefore, require an assessment and intervention that epitomizes a truly individualized, person-centered approach. The goal of intervention is for the client to improve function of their social-cognitive skills, resilience, and behavioral responses to optimize their adaptive capacities for social participation. As the nature of social experiences are highly dynamic and unpredictable, fostering resilience is critical for creating long-term sustainable change and key to this framework. Particip-8 proposes eight essential elements of intervention using a strengths-based approach to maximize one's promotive factors (see Figure 2). By expanding adaptive capacity through improving behavioral, resilience, and social-cognitive indicators, the client can feel equipped to navigate future unexpected social contexts, recognize and inhibit the formation of dysfunctional patterns, and recover from social adversity or setbacks.

**Figure 2**  
*The Essential Elements of Particip-8*



### ***Metacognitive Strategy Training***

The purpose of learning metacognitive strategies is to help bring conscious awareness to more adaptive patterns of thinking and behaviors. An adolescent can use these strategies to execute control over behaviors and choose actions or responses that support their social participation goals. This approach includes the following considerations:

- Goal-setting: Therapist coaches adolescent to generate meaningful social participation goals.
- Strategy development: The adolescent is coached to develop an individualized set of cognitive strategies that will help to achieve the goal, fostering autonomy and the likelihood for recalling strategies outside of therapy contexts.
- Strategy use: The adolescent will practice these strategies in various group activities. The therapist provides mediation to promote refinement of strategies and self-efficacy.

### ***Enhancing Emotional Regulation***

Learning strong emotional regulation skills enhances an adolescent's social participation capacity because they are able to be open to more social opportunities and are in an emotional state where appropriate social behaviors can occur (Olsen, 2020). The adolescent should become adept at recognizing, labeling, and reframing their own emotions through intervention so they can select behavioral responses that support social participation goals. The Zones of Regulation program is an example of a structured, evidenced-informed curriculum that can promote awareness of emotional states

and the ability to modify or adjust behavioral and emotional responses (Kuypers, 2011). Using structured self-regulation programs also provides caregivers or others (i.e., teachers) with consistent terminology that is transferable to a wide variety of settings.

### ***Ongoing Self-Assessment***

To promote sustainable patterns of behaviors beyond therapy settings and to meet the changing demands of future social contexts, the therapist will coach the adolescent in forming habits of self-reflection. To do so, the adolescent can design their own rating tool that they will use as a means of self-reflection after social experiences. Personalization promotes autonomy in the therapeutic process and use outside of therapy settings. The goal is for the adolescent to form patterns of active self-reflection so they can feel empowered to modify future behaviors, emotions, or responses in the future.

### ***Use of Social Occupations to Support Identity Formation***

Establishing roles in social occupations is crucial in forming a sense of identity. During therapy sessions, the therapist can use structured small groups or therapeutic dyads engaged in social activity for the adolescent to practice metacognitive and emotional regulation skills in a controlled context with therapist support. Success during these groups can foster confidence to pursue social participation opportunities outside of therapy and establish a sense of identity through mastery and relatedness with peers. Coaching to identify current social occupations can promote initial transfer and generalization in familiar social contexts without therapist support.

### ***Self-Efficacy***

Self-efficacy is a critical component of intervention in order to elicit the motivation to pursue social opportunities and breach impulsive patterns of dysfunctional cognitive and social behaviors. When an adolescent embodies both the motivation to pursue social experiences and the belief that they have the capacity to be successful doing so, conscious control over behavioral actions and decision-making is promoted. To improve self-efficacy, intervention should promote mastery of experiences through peer models (Bandura, 2006). The therapist can facilitate connections to new resources with alike peers through local and virtual support groups, burn camps, and adaptive sports. To facilitate more opportunities for social modeling and mastery, the therapist can use strengths-based activity analysis to determine new social occupations and opportunities that are aligned with the adolescent's interests and strengths. This sense of mastery through social role models can change an adolescent's beliefs about their own abilities to be successful in social experiences and thereby expand their capacities for social participation.

### ***Mentorship***

Mentors are trusted adults that serve as models for positive social skills and safe emotional outlets. As adolescents often try to assert independence from their caregivers, establishing mentorship with a trusted adult assures opportunities for adult guidance similar to caregiver values. Mentors can also influence perception of one's abilities and potential, supporting self-efficacy and resilience. With therapist coaching, the adolescent will identify a mentor who accepts invitation of this role in the therapeutic process. The therapist, mentor, and adolescent will design a mentorship "contract" defining the roles and responsibilities of each member involved to promote accountability and clear expectation.

### ***Access to Social Supports***

Adolescent reintegration into social contexts and social environments post burn injury correlates strongly with the amount, accessibility, and use of social supports (Szabo et al., 2017). To improve awareness of current supports, the occupational therapist will provide coaching for the adolescent to

identify their current social supports, recognize potential supports available in their current environments, and project where there are opportunities for expansion.

### ***Interprofessional Collaboration***

The occupational therapist will collaborate with other disciplines, such as psychology, social work services, and case management services, to ensure appropriate referrals are made when there are psychological needs or resources that go beyond the scope of occupational therapy. An interdisciplinary approach aligns with best practice recommendations and promotes comprehensive patient care (D’Cruz et al., 2013).

### **Applications to Practice**

Occupational therapists can provide psychosocial assessment and intervention through a unique lens focused on function and participation. Occupational therapists can work collaboratively to support adolescents in developing cognitive skills for building self-efficacy, forming identity, and promoting resilience, through the use of metacognitive strategy training and participation in social occupations.

### **Case Application**

**Background and Occupational Profile:** James is a creative, 14-year-old male in 7th grade with no significant past medical history, who spends his free time playing video games or basketball in the neighborhood. He was referred to occupational therapy during an outpatient follow-up visit for a deep 2nd degree scald burn to his left forearm and thumb, sustained 4 months prior after spilling microwavable noodles. James’ scars have begun to slightly raise and the occupational therapist measures James for a sleeved compression glove. During this time, the occupational therapist gathers an updated occupational profile using caregiver and client interview. Mom endorsed concerns that James doesn’t seem interested in staying after school to try extracurriculars anymore and now avoids playing with the neighborhood kids. James is quick to dismiss further questions, sharply stating, “I don’t know” or “I don’t care” to inquiries. He is observed, however, to keep his left hand mostly hidden in his sleeve throughout the interaction. He does endorse that he “does” feel like he wants more friends.

**Assessment:** The COPM was performed to determine satisfaction and importance related to current social participation. The results indicated caregiver and client dissatisfaction with quantity, performance, and breadth of social occupations in home and school settings. The BSHS-B was performed to screen for potential executive functioning difficulties related to psychosocial performance restrictions for adaptive social participation. The results yielded concerns for difficulties with self-regulation skills, including impulsivity and emotions.

**Intervention:** Application of the Particip-8 framework in occupational therapy sessions is described in Table 5.

**Table 5**  
*Application of the Particip-8 Framework*

<b>Particip-8 Element</b>	<b>Intervention</b>	<b>Occupational Therapy Application</b>
<b>Meta-Cognitive Strategy Training</b>	Facilitate meaningful, self-generated goals	<ul style="list-style-type: none"> <li>From the results of the COPM, the occupational therapist and James determine the following two goals: (1) I will invite someone to join me at recess 1x a week. (2) I will try out for the basketball team.</li> </ul>
	Guided anticipation and mediation to build self-awareness	<ul style="list-style-type: none"> <li>Occupational therapist uses guided questions for James to anticipate social challenges related to his goals: “Let’s think about inviting a peer to join you at recess. What parts could be challenging?”</li> <li>James demonstrates self-awareness that he may struggle with other’s questioning his garment or scars.</li> <li>He anticipates “shutting down”, “getting defensive”, and “avoiding” when this occurs.</li> </ul>
	Coaching to generate cognitive strategies	<ul style="list-style-type: none"> <li>Occupational therapist and James develop the BRAVE cognitive tool to remind James to stop and <b>B</b>reathe, <b>R</b>emember goals, <b>A</b>ct towards goals, <b>V</b>ent or <b>V</b>oice to supports, and <b>E</b>steem.</li> <li>James thinks this tool is easy to remember outside of therapy contexts.</li> </ul>
<b>Interdisciplinary Approach</b>	Interdisciplinary referrals	<ul style="list-style-type: none"> <li>The occupational therapist contacts social work to acquire additional community resources related to adolescent interest groups and events. Psychology is consulted for concerns with apathy.</li> </ul>
<b>Emotional Regulation (ER)</b>	Identification, recognition, and control	<ul style="list-style-type: none"> <li>James participates in a ZOR group that meets 1x a week. He engages in group games like “Emotions Twister” to practice identifying and recognizing emotions with occupational therapy support.</li> <li>ZOR resources are provided to family and teachers to promote carryover across settings.</li> </ul>
<b>Occupation to Elicit Identity Formation</b>	Structured small group activities	<ul style="list-style-type: none"> <li>In therapy, James works in small groups to perform leisure and social occupations. He verbally invites peers to join card games, collaborates to build obstacle courses, negotiates jobs during a group cooking activity, and problem-solves peer conflicts to build a leggo city.</li> </ul>
	Identify current social occupations	<ul style="list-style-type: none"> <li>The occupational therapist and James identify his school, bus stop, home room, mom’s grocery trips, and his brother’s soccer games as current daily opportunities for socialization.</li> </ul>
<b>Self-Efficacy</b>	Participate in support groups	<ul style="list-style-type: none"> <li>James attends a 2-day burn camp. He builds confidence observing others with injuries like this. James and his family invite another to go to the town block party next month.</li> </ul>
<b>Access to Social Supports</b>	Identify supports	<ul style="list-style-type: none"> <li>With occupational therapist guidance, James identifies his dad and teacher Mr. R as current trusted supports.</li> </ul>
	Promote expansion	<ul style="list-style-type: none"> <li>The occupational therapist uses strengths-based activity analysis to guide James in exploring new common interest leisure activities with peers. James volunteers with 5th grade basketball tryouts, agrees to attend a school “gamers group” meeting, and offers to “DJ” the school dance.</li> </ul>
<b>Mentorship</b>	Identify mentor(s)	<ul style="list-style-type: none"> <li>James identifies Mr. R as a trusted adult he is comfortable with and one that he admires.</li> </ul>
	Mentorship contract	<ul style="list-style-type: none"> <li>Mr. R agrees to be a safe place for disclosing internal struggles and supporting James’ therapy plan. James and Mr. R established a day and time for weekly check-ins.</li> </ul>
<b>Ongoing Self-Assessment</b>	Create own self-reflection tool	<ul style="list-style-type: none"> <li>James creates a 5-point “emoji” scale on his phone. James rates an unexpected social contact a 2, indicating stress. James reflects that he can use his BRAVE tool next time.</li> </ul>

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