

**Table S1. Overview of content of reviewed literature in relation to domains and themes.**

Reference	Safety and Security	Control	Enriched environments
Bollo & Donofrio, 2021 [12]	<p>Defensible Environments:</p> <ul style="list-style-type: none"> <li>• clear sightlines—preview space at thresholds and interior glazing (visibility)</li> <li>• larger transitional spaces, multiple exits and wide doorways (escape)</li> </ul> <p>Environmental Stressors:</p> <ul style="list-style-type: none"> <li>• secure space for sleeping outside</li> <li>• no fluorescent lights</li> </ul>	<p>Self-reliance:</p> <ul style="list-style-type: none"> <li>• individually operated lighting</li> <li>• ‘teaching’ kitchen</li> </ul> <p>Territory:</p> <ul style="list-style-type: none"> <li>• high ratio of common areas to private space and multiple/discrete spaces</li> <li>• flexibility in furniture</li> <li>• anti-institutional reception desks</li> </ul>	<p>Connection to Nature:</p> <ul style="list-style-type: none"> <li>• visual and direct access to outdoor spaces, trees and planting</li> <li>• preference for daylight</li> </ul> <p>Environmental Diversity:</p> <ul style="list-style-type: none"> <li>• varied lighting</li> <li>• multiple common spaces with different sensory qualities</li> <li>• opportunities for personalization (artwork/photos)</li> </ul>
Datta, 2005 [66]	<p>Defensible Environments:</p> <ul style="list-style-type: none"> <li>• lines of sight from interior to exterior (visibility)</li> <li>• architecture of the shelter ‘blending in’ (concealment)</li> <li>• importance of secure external boundaries (secure boundaries)</li> </ul> <p>Environmental Stressors:</p> <ul style="list-style-type: none"> <li>• perception of ‘bad neighborhood’</li> </ul>	<p>Self-reliance:</p> <ul style="list-style-type: none"> <li>• convenience of location</li> <li>• ability to prepare own food (access to kitchen and equipment) and importance of storage to keep things ‘tidy and orderly’</li> <li>• line of sight from laundry to children's play area</li> </ul> <p>Territory:</p> <ul style="list-style-type: none"> <li>• importance of private/personal space (bedrooms, bathrooms, kitchens)</li> </ul>	<p>Environmental Diversity:</p> <ul style="list-style-type: none"> <li>• personalization (display of objects, moveable furniture)</li> </ul> <p>Image:</p> <ul style="list-style-type: none"> <li>• ‘markers’ of home (e.g. furniture, appliances, décor, size of space) relative to individual/context)</li> </ul>
Huffman, 2018 [21]		<p>Self-reliance:</p> <ul style="list-style-type: none"> <li>• garden/food production promotes self-reliance, self-learning, and self-value</li> </ul> <p>Territory:</p> <ul style="list-style-type: none"> <li>• garden/food production as site of conflict (of control)</li> </ul>	<p>Connection to Nature:</p> <ul style="list-style-type: none"> <li>• garden place of peace and quiet and promotes positive childhood memories</li> </ul> <p>Image:</p> <ul style="list-style-type: none"> <li>• ‘grand’ spaces promote positive feelings of being ‘away’ (hotel)</li> </ul>

Koehn et al. 2020 [69]	<p>Defensible Environments:</p> <ul style="list-style-type: none"> <li>• social interaction only occurs in visible common areas (visibility)</li> <li>• importance of personal spaces with lockable doors (secure boundaries)</li> </ul> <p>Environmental Stressors:</p> <ul style="list-style-type: none"> <li>• noise as trigger (avoid alarms and importance of acoustic separation)</li> </ul>	<p>Territory:</p> <ul style="list-style-type: none"> <li>• importance of self-contained private spaces (bedrooms and bathrooms)</li> <li>• use of common spaces limited due to institutional rules</li> </ul>	
Lygum et al., 2019 [70]	<p>Defensible Environments:</p> <ul style="list-style-type: none"> <li>• not having to be uncertain as to what happens behind your back' (visibility)</li> <li>• lines of sight to garden with good quality lighting (visibility)</li> <li>• value of 'dark corners' as places to hide and visual screening for privacy (concealment)</li> <li>• opportunity for courtyard typology to create secure boundaries in common outdoor spaces (secure boundaries)</li> </ul>	<p>Self-reliance:</p> <ul style="list-style-type: none"> <li>• residents' desire for vegetable plot</li> </ul> <p>Territory:</p> <ul style="list-style-type: none"> <li>• importance of privacy within common spaces (visual screening and acoustic control)</li> <li>• garden perceived as 'free space' (particular importance for children)</li> <li>• uncertainty over access and use of common spaces— lack of clarity in visual cues and institutional 'rules'</li> <li>• importance of multiple common spaces or defined areas to meet diverse needs</li> </ul>	<p>Connection to Nature:</p> <ul style="list-style-type: none"> <li>• garden as therapeutic setting— direct immersion, connections with wildlife, food production and views of plants</li> </ul> <p>Environmental Diversity:</p> <ul style="list-style-type: none"> <li>• garden as opportunity for diverse sensory qualities (fruit, colors, smells)</li> <li>• garden supports 'many ways to play' (diverse needs of children who have experience trauma)</li> </ul>
McLane & Pable, 2020 [22]	<p>Defensible Environments:</p> <ul style="list-style-type: none"> <li>• importance of preview to common spaces (visibility)</li> </ul>	<p>Self-reliance:</p> <ul style="list-style-type: none"> <li>• importance of cleanliness (of self and environment)</li> </ul> <p>Territory:</p> <ul style="list-style-type: none"> <li>• communal areas sized to support multiple activities (use distinct zoning with separation/screening).</li> <li>• larger spaces with clearly delineated 'functional zones' with sense of privacy</li> </ul>	<p>Connection to Nature:</p> <ul style="list-style-type: none"> <li>• Value of daylight and views of nature</li> </ul> <p>Image:</p> <ul style="list-style-type: none"> <li>• scarcity of furnishings results in 'overpoweringly institutional feeling'</li> <li>• sense of hominess – cleanliness, acoustics, lighting quality, furniture, fixtures, accessories and décor</li> </ul>

		<ul style="list-style-type: none"> <li>Use of common spaces influenced by spatial design factors— location in building, visibility into and from the space, wayfinding, size and adjacencies to kitchens and private rooms</li> </ul>	<ul style="list-style-type: none"> <li>aesthetics found to be second most important factor in use of common spaces after location</li> </ul>
McLeod & Walsh, 2014 [65]	<p>Defensible Environments:</p> <ul style="list-style-type: none"> <li>peepholes, buzzers for entry (visibility)</li> <li>staff surveillance promotes sense of security (visibility)</li> <li>solid doors, locked facilities, locked personal storage (secure boundaries)</li> </ul> <p>Environmental Stressors:</p> <ul style="list-style-type: none"> <li>perceived 'unsafe' and 'rundown' area contrasted with value of 'non-judgmental' communities and access to services</li> </ul>	<p>Territory:</p> <ul style="list-style-type: none"> <li>importance of designated private space (including bathrooms)</li> </ul>	<p>Image:</p> <ul style="list-style-type: none"> <li>creation of welcoming environment (shared areas)— cleanliness, décor, music, soft furnishings, flowers, books</li> </ul>
Nuamah et al., 2021 [67]	<p>Defensible Environments:</p> <ul style="list-style-type: none"> <li>awareness of surroundings— windows with views to exterior, no need to have 'back turned', no blind corners, preference for larger/open/circular spaces and reduced clutter (visibility)</li> <li>clarity in location of entrances and exits (wayfinding), wider walkways and hallways, free of obstacles (escape)</li> </ul> <p>Environmental Stressors:</p>		<p>Connection to Nature:</p> <ul style="list-style-type: none"> <li>views of nature, feel of air (openable windows)</li> <li>integrate green space— plants and trees as calming environments</li> <li>preference for daylight</li> <li>color green as calming</li> </ul> <p>Environmental Diversity:</p> <ul style="list-style-type: none"> <li>preference for 'vibrant' colors</li> </ul>

	<ul style="list-style-type: none"> <li>• unexpected noise as trigger and general concern about noise levels (need for good acoustic separation)</li> <li>• odors as triggers and general concern over provision of natural ventilation/good air quality</li> <li>• negative association of cramped spaces with combat</li> </ul>		
Pable, 2012 [71]	<p>Defensible Environments:</p> <ul style="list-style-type: none"> <li>• importance of storage of possessions (for objects and children) (secure boundaries)</li> </ul> <p>Environmental Stressors:</p> <ul style="list-style-type: none"> <li>• 'sense of space' (without altering floor area) reduces feelings of claustrophobia and enhances children's behavior e.g. Dutch door (views out), storage (reduces visual clutter), mirror, visual separation (curtains)</li> </ul>	<p>Self-reliance:</p> <ul style="list-style-type: none"> <li>• storage of possessions enhances perceptions of control (organization/cleanliness)—general importance of cleanliness of built environment)</li> </ul> <p>Territory:</p> <ul style="list-style-type: none"> <li>• importance of maintaining personal space/privacy in shared bedrooms</li> <li>• clear boundaries for private/personal space (visual and physical separation) e.g. curtains, Dutch door (substantially enhanced perceptions of privacy and control) and 'markers' of personal territory (e.g. display boards) within shared family bedroom</li> </ul>	<p>Environmental Diversity:</p> <ul style="list-style-type: none"> <li>• enhanced opportunities for occupation and activity through flexible furniture/décor (seating cubes, bolsters, cushions, rugs)</li> <li>• elements as 'vehicles for imagination' (Dutch door as 'store', curtains as 'hide and seek')</li> <li>• opportunities for personalization—integrated shelving, pin boards, external signage (thresholds)</li> </ul>
Peters et al. 2020 [63]			<p>Connection to Nature:</p> <ul style="list-style-type: none"> <li>• direct access to nature (sensory experiences and interaction with living (animals) and 'non-living' (plants) associated with higher parental need satisfaction and lower</li> </ul>

			parental need frustration, particularly for parents with young children
Peters et al., 2021 [64]			<p>Connection to Nature:</p> <ul style="list-style-type: none"> <li>• direct access to nature (sensory experiences and interaction with living (animals) and 'non-living' (plants) 'significantly affected basic psychological need fulfilment', but not overall wellbeing</li> </ul>
Refuerzo & Verderber, 1989 [72]	<p>Environmental Stressors:</p> <ul style="list-style-type: none"> <li>• perceived sense of neighborhood safety is related to quality of sleep, relaxation and perception of ability to attain personal goals.</li> </ul>	<p>Territory:</p> <ul style="list-style-type: none"> <li>• importance of personal space</li> </ul>	<p>Image:</p> <ul style="list-style-type: none"> <li>• exterior appearance of the shelter, nearby buildings, and quality of children's outdoor play areas affects use</li> <li>• neighborhood location and presence of trees and vegetation affect feelings of personal status</li> <li>• quality of interior spaces including size, windows, views, amenities and overall appearance affect feelings of personal status</li> <li>• use of the shelter is associated with size of spaces, quality of furnishings, daylight, lighting, and overall appearance</li> </ul>
Refuerzo & Verderber, 1990 [68]	<p>Defensible Environments:</p> <ul style="list-style-type: none"> <li>• importance of windows with views to outside 'without sacrificing occupant safety' (visibility and concealment)</li> <li>• screen building, entrances and on-site parking from street/public view</li> </ul>	<p>Self-reliance:</p> <ul style="list-style-type: none"> <li>• importance of location in close proximity to shops and recreation facilities and provision of car parking</li> <li>• visually connect play areas for children (surveillance)</li> </ul>	<p>Connection to Nature:</p> <ul style="list-style-type: none"> <li>• landscaped 'outdoor rooms' and views to landscape create 'calming' settings</li> <li>• benefits of access to daylight</li> </ul> <p>Image:</p> <ul style="list-style-type: none"> <li>• 'cheery' interior spaces</li> </ul>

	<p>with set-backs and use of trees and bushes (concealment)</p> <p>Environmental Stressors:</p> <ul style="list-style-type: none"> <li>• quiet site location</li> <li>• smaller shelters perceived as more stressful</li> </ul>	<p>Territory:</p> <ul style="list-style-type: none"> <li>• importance of personal space for each family and individual including storage of personal belongings</li> <li>• flexible interior spaces support different uses</li> </ul>	<ul style="list-style-type: none"> <li>• neighborhood context and exterior appearance of the shelter important— 'attractive' neighborhood and 'well maintained' exterior</li> </ul>
--	---	---	---