Additional File 3: Loop Story Table for Group Session 1

Loop name	Type	Connections	Story	Alternative Story/ Questions
Assessment delay	Reinforcing	Timely trauma/maltreatment assessments + → child maltreatment incidents + → Timely trauma/maltreatment assessments	When assessments are delayed, children are not removed from the home in a timely manner, when necessary, and suffer additional incidents of maltreatment. Further, and maltreatment incidents increase and potential reports, resources are strained and assessments take even longer to occur.	
Bootstrap policy	Balancing	Social norms of individualism - → family assistance policy + → social norms of individualism + → social norms of individualism	As sentiments rise that people should be responsible for their own well-being, policies that assist families and are supportive are created less often. Existing assistance policies may breed resentment that those who receive are undeserving and further increase social norms of individualism.	
Child behavior stress	Reinforcing	Problematic child behavior + → parent emotional stress - → positive parenting - → problematic child behavior	When children present with problematic behavior/misbehave, they increase parents' emotional stress, which reduces parental ability to positively parent. In the absence of positive parenting practices, child behavior becomes increasingly negative or problematic.	
Community involvement	Reinforcing	Community involvement + → strong relationships and connections + → emotional support - → parent emotional stress + → fear (DSS,	Related to the community violence loop, as individuals are more involved in the community, they build strong relationships and feel emotionally supported, thus reduced parent emotional stress. If parents are stressed	

		ICE) - → community involvement	and do not feel emotionally supported, however, they becoming increasingly fearful of community threats such as ICE or being reported to DSS, thus reducing their community involvement.	
Community violence	Balancing	Community involvement - → community violence + → natural support - → lack of parenting + → child maltreatment incidents + → family isolation + → emotional support + → strong relationships and connections + → community involvement - → community violence	As community involvement increases, community violence decreases, thus creating more opportunities for natural support and reducing the lack of parenting in the community, This, in turn, reduces child maltreatment incidents, which reduces family isolation. When families don't feel isolated, they feel emotionally supported and develop or maintain strong relationships. These strong relationships increase community violence, creating a virtuous circle.	
Drug misuse expense	Reinforcing	Drug misuse + → parental health expenses + → parental basic needs stress + → drug misuse	As parental drug misusers increase drug misuse, health complications arise from the drug use and increase health expenses. Difficulty in meeting these health expenses increases parental basic needs stress, and parents increase drug use to cope with the stress.	*Do we want to include child maltreatment incidents in this?*
Emotional support	Reinforcing	Emotional support + → parent emotional stress + → child maltreatment incidents - → emotional support	As parents feel emotionally supported, they have less emotional stress and are less likely to maltreat children. Once maltreatment occurs, emotional support often declines	
Family crisis	Balancing	Family crisis + → access to crisis support + → parent emotional stress - → family crisis	As families experience crisis, they increase their utilization of crisis support services, which decreases parent emotional stress and in turn decreases the negative	

			effects or even likelihood of family crisis again.	
Family permanency	Reinforcing	Child maltreatment incidents - → family permanency - → caregiver well-being - → child maltreatment incidents	After child maltreatment incidents, family permanency often decreases, thus reducing caregiver well-being. Caregivers feel less apt to positively care for children and create a positive environment as their family is dispersed, leading to additional maltreatment.	*This story is incomplete.*
Innovation lag	Reinforcing	Poor governance/leadership + → fear of innovation + → fear of change and waiting	When leadership does not have the best interest of families at heart and a strong vision for the future, they tend to be afraid of change and thus wait to implement potentially helpful interventions. The fear of change leads to continued poor leadership as the current leaders continue to hold power or hire those similar to themselves.	*Poor governance motivation accurate?*
Inter-generational trauma	Reinforcing	Child ACEs + → parent trauma history + → parent mental health issues + → Child ACEs	When children experience ACEs, they grow up to be parents with a trauma history and this increases their mental health issues. Poor parental mental health increases the ACEs of their children, continuing the cycle.	*Should this be replaced by the parent trauma loop? Rename the loop maybe?*
Low-pay employment child care quality	Reinforcing	Employment stability (low pay) - → unsteady employment hours - → accessible childcare hours + → blended placement + → disposable income + → employment stability	As parents have more stable employment, the stability of their work hours increases and thus increases how well childcare hours match their employment hours (?). Parents can place children in blended placemen with more accessible hours, which increases their ability to work and thus their disposable income.	*This story feels incomplete and partially inaccurate*

Parent trauma	Balancing	Child ACEs + → parent trauma history + → trauma specific care for adults + → mental health treatment + → mental health treatment - → parent mental health issues + → drug misuses + → child maltreatment incidents + → child ACEs	Parents who experienced ACEs need trauma specific care for adults and mental health treatment. If they receive this treatment, their mental health issues decrease and any associated drug misuse with untreated mental illness also decreases. This improve mental status and reduced drug misuse reduces the likelihood of child maltreatment and additional ACEs in the next generation.	
Parenting Knowledge	Balancing	Access to supportive services + → Parent knowledge of child development - → child maltreatment + → Access to supportive services	As parents access supportive services, they learn about appropriate milestones for child development and standards for child behavior. Increased understanding can help increase patience when children are acting out or behaving in a stressful manner that is still appropriate for their age, thus reducing the likelihood of maltreatment. Should maltreatment occur, parents are more likely to be connected to supportive services (assuming service recommendation/availability and substantiation).	
Poverty		Financial resources - → poverty - → hygiene and housing security + →parent basic needs stress + → child maltreatment incidents + → parent basic needs stress	As financial resources decline, poverty goes up and associated basic needs such as hygiene and housing security decrease, thus increasing parent basic needs stress and increasing the risk of child maltreatment (particularly neglect), and after child maltreatment occurs parents have increased basic needs stress as they try to maintain family togetherness or reunification	*This feels incomplete.*

Shame and support	Reinforcing	Child maltreatment incidents + → judgment - → peer support + → emotional support - → parent emotional stress + → child maltreatment incidents	After a child maltreatment incident, if the community is aware, parent may experience and increase in judgment and thus a decrease in peer support. With reduced peer support, emotional support of parents decreases and thus increases their emotional stress, making them more likely to maltreat their child again.	*Create additional related loop of realization and support, mediated by perceived need instead of judgment but otherwise the same?*
System Involvement	Balancing	Child maltreatment incidents + → system involvement + → Coordination with other services + → quality of child welfare system + → access to supportive services + → parent knowledge of child development - → child maltreatment incidents	After a child maltreatment incident, families have increased involvement with the systems that should serve them, particularly child welfare. This requires increased coordination with other services, and should increase the quality of the child welfare system, as the system is better able to serve when services are not duplicated and are coordinated so as to ensure comprehensive care. With this coordination comes increased access to supportive services as gaps in need are identified, and thus improved parenting knowledge (and other important outcomes as well), leading to a reduction in child maltreatment incidents.	
Trauma provider availability	Reinforcing	Trauma specific care for children - → caseload severity + → vicarious trauma + → compassion fatigue + → burnout + → worker turnover - → trauma specific clinicians	As more children receive trauma care, clinicians have more severe caseloads (trauma versus no trauma), although if trauma is treated severity may actually decrease over time, shifting this arrow. As severity increases, providers experience vicarious trauma and compassion fatigue, thus increasing feelings of burnout	*Should the first arrow be positive?*

			and worker turnover, reducing the number of trauma specific clinicians that are available to provide care and reducing the number of children that can receive trauma specific care.	
Trauma Treatment	Balancing	Trauma specific clinicians + → trauma specific care for children and adults + → mental health treatment - → parent mental health issues	As more trauma specific clinicians are available, adults can access more trauma specific treatment and mental health treatment, perhaps one in the same or different settings if needed, and thus reduce their mental health issues.	*This loop is incomplete*
Untreated drug misuse	Reinforcing	Parent trauma history + → drug misuse + → parent trauma history	To cope with trauma history, parents increase drug misuse. As a result of or through drug misuse, parent witnesses or experiences additional trauma, requiring more drugs to cope with the new trauma.	*Do we want to include child maltreatment incidents in this?*