

UNIVERSITÉ DU QUÉBEC À TROIS-RIVIÈRES

ÉTATS D'ESPRIT HOSTILE ET IMPUSSANT : MIEUX COMPRENDRE  
L'ATTACHEMENT DES PERSONNES AYANT VÉCU DES TRAUMATISMES  
RELATIONNELS DURANT L'ENFANCE

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(PROFIL RECHERCHE)

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(PROFIL RECHERCHE) (Ph. D.)

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## Sommaire

Une quantité considérable de nouvelles connaissances sur les représentations d'attachement désorganisées à l'âge adulte a émergé depuis les dernières décennies avec l'ajout du concept d'état d'esprit hostile et impuissant (H-I). L'état d'esprit est conceptualisé comme une évolution possible de l'attachement désorganisé à l'enfance (Lyons-Ruth et al., 2005) et se caractérise par le fait que la personne n'a pas réussi à intégrer de façon cohérente les expériences relationnelles négatives vécues durant son enfance (Lyons-Ruth et al., 2011). Ce projet de thèse doctorale s'ancre dans la théorie de l'attachement (Bowlby, 1969/1982) et a pour objectif d'examiner l'apport de l'état d'esprit H-I pour mieux comprendre l'attachement des personnes ayant vécu des traumatismes relationnels durant l'enfance. Ce projet présente également l'état des connaissances actuelles sur l'étiologie de l'état d'esprit H-I et ses conséquences sur la santé et le fonctionnement de l'individu, la relation parent-enfant et le développement de l'enfant. Le premier article présente une description conceptuelle de l'état d'esprit H-I et ses implications cliniques et scientifiques en s'appuyant sur des écrits théoriques et empiriques. Le deuxième article prend la forme d'une étude de la portée et présente une synthèse des résultats des études empiriques portant sur l'état d'esprit H-I et propose des pistes de recherche futures. Les données de ces deux articles révèlent que les représentations d'attachement hostiles et impuissantes sont particulièrement fréquentes chez des personnes ayant subi des traumas relationnels durant l'enfance et qu'elles influencent la qualité des soins que ces personnes offriront à leurs enfants. Le troisième article examine la prévalence de l'état d'esprit H-I dans un échantillon à risque sur le plan

socioéconomique et documente la contribution de deux facteurs (expériences de maltraitance et qualité des interactions mère-enfant) dans la prédiction de l'état d'esprit H-I à l'âge adulte. Les résultats de cette étude indiquent que la qualité des interactions mère-enfant joue un rôle protecteur dans l'association entre les expériences de maltraitance et les représentations d'attachement H-I à l'âge adulte. Les résultats de cette thèse de doctorat pourraient avoir d'importantes contributions sur les plans clinique et scientifique. Ils offrent notamment une compréhension plus complète des facteurs contribuant au processus de développement et de transmission de la désorganisation de l'attachement. Ils offrent également des pistes d'intervention importantes à l'accompagnement des personnes ayant vécu des expériences familiales difficiles durant l'enfance et renforcent l'importance de développer des approches d'intervention thérapeutiques centrées sur les traumas.

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## **Introduction générale**

Le concept de « trauma » a grandement évolué au cours des dernières décennies. Les premières définitions proposées par l'*American Psychological Association* (APA) se rapportaient principalement à l'exposition à un événement traumatisant isolé (p. ex., un accident de voiture) menaçant l'intégrité physique de la personne (American Psychiatric Association, 1980, 1994). Or, les dernières décennies ont permis de démontrer que le *trauma* peut aussi prendre des formes plus complexes, découlant notamment d'expériences traumatisantes répétées et prolongées vécues au sein des relations parent-enfant (Ogawa et al., 1997). Une telle conceptualisation suppose que le trauma s'inscrit dans l'environnement même de l'enfant, celui dans lequel il se développe au quotidien. Étant fortement dépendant de ses principaux donneurs de soins, il est très difficile pour l'enfant d'échapper à ces blessures psychiques qui s'inscrivent dans une relation significative, lesquelles auront un effet durable sur ses processus de régulation psychologique, comportementale et émotionnelle à l'enfance et à l'âge adulte (Ehring & Quack, 2010; Goldsmith et al., 2013; van der Kolk & Fisler, 1994). Au Canada, près d'un tiers (32%) des adultes rapportent avoir subi des expériences relationnelles potentiellement traumatisantes durant l'enfance, comme l'abus physique, l'abus sexuel et l'exposition à la violence conjugale (Afifi et al., 2014). En raison de leur forte prévalence et des nombreuses répercussions qu'ils engendrent tout au long de la vie, les traumatismes relationnels sont aujourd'hui considérés par certains comme l'un des principaux déterminants de la santé de la population (Teicher et al., 2021).

Les répercussions des traumas relationnels varient non seulement en matière de durée et d'intensité, mais peuvent également s'enchevêtrer, « [augmentant] le risque de difficultés concomitantes chroniques » (Godbout et al., 2018; p.75). Les personnes victimes de tels traumatismes présentent des trajectoires marquées par des difficultés touchant plusieurs sphères de développement. Dès la petite enfance, les traumas relationnels peuvent conduire au développement d'un attachement insécurisant ou désorganisé (Baer & Martinez, 2006; Cyr et al., 2010) et à des difficultés sur le plan de la régulation des émotions (Schore et al., 2001). Chez les enfants d'âge préscolaire, il est possible d'observer des troubles du sommeil, de l'anxiété de séparation et des comportements régressifs (Gabowitz et al., 2008). À l'âge scolaire, des difficultés comportementales (agressivité, hyperactivité, opposition), des difficultés d'apprentissage (Gabowitz et al., 2008) et des signes de dissociation (Macfie et al., 2001; Milot et al., 2010) peuvent se manifester chez les enfants victimes, ces derniers cherchant à se protéger psychiquement d'une expérience émotionnelle insupportable (Oathes & Ray, 2008). Des difficultés sur le plan des relations interpersonnelles, notamment la relation d'attachement parent-enfant (Cicchetti et al., 2006; Cyr et al., 2010) et des difficultés de mentalisation (i.e., la capacité à comprendre et interpréter ses propres états mentaux et ceux des autres; Ensink et al., 2017) sont aussi rapportés dans la documentation scientifique. Ces difficultés peuvent se traduire, à l'adolescence, par un manque d'estime de soi, des symptômes dépressifs ou des comportements autodesctructeurs (p.ex., abus de substances, délinquance; Courtois & Ford, 2012; Gabowitz et al., 2008). À l'âge adulte, les traumas relationnels subis dans l'enfance augmentent le risque qu'une personne présente des

problèmes de santé mentale (p.ex., trouble du stress post-traumatique, troubles anxieux, dépression, troubles de la personnalité, troubles alimentaires), une dysrégulation des affects, des comportements d'agressivité ou de violence dans les relations intimes (voir Dugal et al., 2016 pour une revue des écrits) et des représentations d'attachement désorganisées (Lyons-Ruth et al., 2005; Milot et al., 2014). Lors de la transition à la parentalité, ces représentations d'attachement désorganisées peuvent augmenter le risque chez les futurs parents d'adopter des comportements parentaux perturbés ou maltraitants à l'égard de l'enfant (Jacobvitz et al., 2006; Lyons-Ruth et al., 2005), contribuant ainsi à la transmission intergénérationnelle des expériences traumatisques. Bien que l'étendue de ce phénomène soit largement documentée (Assink et al., 2018; van IJzendoorn et al., 2020), les chercheurs peinent à identifier quels facteurs permettent de distinguer les parents qui maintiennent le cycle intergénérationnel de ceux qui réussissent à interrompre ce cycle.

Dans l'ensemble, ces données soutiennent le constat que les difficultés d'adaptation à différentes périodes développementales sont fortement influencées par les expériences relationnelles traumatisques vécues durant l'enfance. Un large éventail de conséquences sur le plan psychosocial sont répertoriées à l'âge adulte, particulièrement lorsque ces expériences ne sont pas intégrées de façon cohérente. La compréhension des difficultés d'adaptation et des symptômes traumatisques à l'âge adulte doit ainsi s'inscrire dans une perspective développementale où une attention particulière devrait être accordée à la qualité des interactions parent-enfant vécues durant l'enfance, car ces interactions sont

déterminantes dans les représentations que se construit l'enfant de lui-même, des autres et des relations interpersonnelles (Bowlby, 1982).

### **La relation d'attachement parent-enfant**

L'un des principaux postulats de la théorie de l'attachement est que l'enfant recherche la proximité avec sa figure d'attachement pour obtenir protection et réconfort lorsqu'il est en détresse ou qu'il perçoit une menace (Bowlby, 1969/1982, 1980). Pour que l'enfant ressente que sa figure d'attachement est digne de confiance, cette dernière doit être disponible (physiquement et émotionnellement) pour accueillir sa détresse et répondre à son besoin de sécurité (Bowlby, 1969/1982). Les réponses de la figure d'attachement lors de ces moments détermineront la stratégie d'attachement que l'enfant va développer, soit les attitudes et les comportements qu'il adoptera pour maintenir un lien en situation de détresse (Main, 2000). Bien que la plupart des enfants réussissent à mettre en place une stratégie organisée et adaptée au comportement de la figure d'attachement, d'autres enfants ne parviennent pas à développer ou à maintenir une stratégie d'attachement cohérente et organisée pour s'adapter aux situations de stress, donnant lieu à des comportements contradictoires, désorientés ou apeurés en présence de leur figure d'attachement (Main & Solomon, 1990). La relation d'attachement de ces enfants est alors qualifiée de désorganisée.

Selon le modèle de diathèse-relationnelle développé par Lyons-Ruth et al. (1999), l'attachement désorganisé serait la résultante de l'exposition à une ou des expérience(s)

provoquant de la peur et l'incapacité du système d'attachement à assurer une protection permettant de moduler cette peur. Cette peur peut être inhérente aux interactions parent-enfant ou exacerbée par celles-ci. Entre autres, lorsque le parent adopte des comportements effrayants, effrayés ou extrêmement insensibles/dysrégulés à l'égard de l'enfant (Hesse & Main, 2006; Lyons-Ruth et al., 2005; Madigan et al., 2006; Main & Hesse, 1990). Notamment, un parent peut se montrer impuissant face à la détresse de son enfant en s'éloignant de lui (comportement effrayé) ou être hostile à son égard en exerçant un contrôle coercitif (comportement effrayant). Selon Lyons-Ruth et al. (1999), la figure d'attachement cherche ici à minimiser la réponse offerte au besoin de réconfort et de sécurité de l'enfant afin de se protéger elle-même contre l'activation de ses propres souvenirs et affects douloureux et non intégrés. Devant ces comportements parentaux effrayants, effrayés ou extrêmement insensibles/dysrégulés, l'enfant se construit deux représentations incompatibles de sa figure d'attachement : une personne qui est une source de réconfort dont l'enfant a besoin et une personne qui est source de peur (Main & Hesse, 1990). L'enfant, qui se retrouve en présence d'une figure d'attachement qui n'est pas en mesure de lui offrir un havre de sécurité, éprouve un sentiment de peur extrême qui l'empêche de se tourner vers son parent lorsque son système d'attachement est activé (Solomon & George, 1999). Ces expériences relationnelles nuisent à l'apprentissage de bonnes stratégies de régulation émotionnelle et peuvent amener l'enfant à intérieuriser des patrons relationnels sur un mode agresseur/victime. Ces processus mentaux contradictoires, bien que construits dans l'enfance, peuvent demeurer relativement stables au fil du temps.

### **Attachement désorganisé à l'âge adulte**

À l'âge adulte, l'attachement désorganisé (aussi appelé état d'esprit d'attachement désorganisé) est opérationnalisé de différentes façons, dont la plus courante est l'état d'esprit non-résolu, évalué par le biais de l'Entrevue d'attachement adulte (EAA; Main & Goldwyn, 1998). L'état d'esprit non-résolu regroupe les personnes qui, en raison de traumatismes non résolus, ne parviennent pas à maintenir un raisonnement et un discours cohérents et organisés lorsqu'elles discutent d'événements traumatiques qu'elles ont vécus, tels un abus ou un deuil (Hesse, 2016; Hesse & Main, 2000; Main et al., 2002). Des croyances irrationnelles, des indices de dissociation ou des phrases incohérentes peuvent apparaître dans le discours de ces personnes lorsqu'elles décrivent ces événements (Hesse, 2016; Hesse & Main, 2000; Main et al., 2002). Or, ces personnes sont en mesure de fournir un récit cohérent et organisé lorsqu'elles discutent d'événements non-traumatiques.

Lyons-Ruth et al. (1999) ont cependant constaté que certaines personnes affichent des distorsions représentationnelles plus globales et sévères, celles-ci s'étalant à l'ensemble du discours lors de l'EAA. L'état d'esprit non résolu, conceptualisé comme des signes de désorganisation de la pensée et du discours associés à des expériences spécifiques de perte ou de trauma, et qui se manifeste par un discours incohérent uniquement au moment de discuter de ces événements spécifiques, ne permet pas de rendre compte des personnes qui manifestent plus globalement une absence d'intégration cohérente des expériences vécues durant l'enfance (Lyons-Ruth et al., 2005). De plus, si la personne ne fait pas mention d'un événement traumatisant spécifique lors de l'EAA, l'état d'esprit non-résolu

ne peut pas être considéré au moment de qualifier les représentations d'attachement de la personne. C'est à la lumière de ce constat qu'est né le concept d'état d'esprit hostile-impuissant (H-I), une forme de désorganisation de l'attachement à l'âge adulte résultant de traumatismes interpersonnels vécus durant l'enfance au sein de la relation parent-enfant (Lyons-Ruth et al., 2005). Chez les adultes ayant un état d'esprit H-I, on observe une absence d'intégration des expériences vécues durant l'enfance, pouvant se traduire par des contradictions et des incohérences importantes dans les représentations mentales d'attachement de la personne, sans que celles-ci ne soient reconnues ou remises en question (Lyons-Ruth & Jacobvitz, 2016). Un état d'esprit H-I est présent, par exemple, lorsqu'une personne représente sa figure d'attachement de manière hostile/malveillante ou impuissante/victimisée, tout en reconnaissant ou en valorisant le fait qu'elle partage avec elle des traits communs. Bien que les représentations de soi et des autres soient teintées par les expériences négatives vécues durant l'enfance, la personne ne parvient pas à les expliquer dans un tout cohérent et organisé et à expliquer comment ces expériences ont pu affecter sa trajectoire développementale ou sa personnalité à l'âge adulte (Lyons Ruth et al., 2011). Ces états mentaux non-intégrés s'apparentent notamment à des concepts issus de la psychanalyse (p.ex., clivage, identification à la victime ou à l'agresseur) et de la littérature sur les traumas (p.ex., dissociation) (Melnick et al., 2008). Les auteurs du construit H-I se sont inspirés de ces concepts pour élaborer un système qui permettrait de capturer les mécanismes de défense identifiés chez des populations cliniques ou à haut risque psychosocial (Lyons-Ruth et al., 2005; Melnick et al., 2008).

Ces représentations d'attachement désorganisées (non-résolues ou H-I) peuvent avoir d'importantes conséquences sur la santé et le fonctionnement psychologique de l'adulte, pouvant se traduire par un usage problématique de substances (Finger, 2006), des signes de dissociation (Byun et al., 2016) et des symptômes psychopathologiques liés au trouble de la personnalité limite ou antisociale (Finger et al., 2015; Lyons-Ruth et al., 2007), aux troubles anxieux (Brumariu et al., 2013), au trouble dépressif (Dagan et al., 2018) et au trouble de stress post-traumatique (Stovall-McClough & Cloitre, 2006). Elles sont aussi susceptibles d'affecter la capacité d'une personne à répondre adéquatement aux besoins et à la détresse de son propre enfant, ce dernier devenant lui aussi à risque de développer un attachement désorganisé (transmission intergénérationnelle de l'attachement désorganisé). Comme mentionné précédemment, lorsque le parent interagit avec son enfant, il peut être submergé par un sentiment de peur en étant confronté aux souvenirs de ses propres expériences relationnelles traumatisques durant l'enfance, ce qui augmente le risque d'adopter des comportements effrayants, effrayés ou extrêmement insensibles/dysrégulés à l'égard de l'enfant (Hesse & Main, 2006; Main & Hesse, 1990). Ces comportements parentaux risquent, d'une part, d'influencer la manière dont l'enfant se perçoit et perçoit les autres et peuvent, d'autre part, mener à une conceptualisation des relations d'attachement sous un mode victime/agresseur. Ces représentations d'attachement, qualifiées d'hostiles et d'impuissantes (Lyons-Ruth et al., 2005), apparaissent donc comme un élément particulièrement important pour comprendre le fonctionnement psychologique des adultes ayant vécu des expériences potentiellement traumatisques durant l'enfance et la manière dont ils interagissent avec leur enfant.

L'objectif général de cette thèse doctorale est d'examiner l'apport de l'esprit H-I pour mieux comprendre l'attachement des personnes ayant vécu des traumatismes relationnels durant l'enfance et de documenter son étiologie et ses conséquences. La thèse est composée de trois articles distincts. Le premier prend la forme d'un article conceptuel rédigé en français qui comprend une description exhaustive du concept d'état d'esprit H-I, de son étiologie et de ses implications cliniques. Cet article vise à circonscrire les aspects conceptuels de l'état d'esprit H-I et les assises théoriques qui ont mené à son élaboration. Les caractéristiques principales d'un état d'esprit d'attachement H-I sont décrites et appuyées par des extraits de verbatim d'entrevues réalisées auprès de jeunes adultes, permettant au lecteur moins familier avec le domaine de bien saisir les particularités de l'état d'esprit H-I. Les distinctions dans la documentation contemporaine concernant la conceptualisation de l'attachement désorganisé à l'âge adulte sont également présentées et soutiennent la plus-value de l'état d'esprit H-I comparativement à l'état d'esprit non résolu. Finalement, cet article propose des pistes de réflexion pour l'intervention auprès des personnes ayant vécu des traumas relationnels.

Le deuxième article prend la forme d'une étude de la portée (*Scoping Review*) et vise à synthétiser les résultats des études empiriques portant sur l'état d'esprit H-I, à identifier les lacunes dans la documentation scientifique et à proposer des pistes de recherche et d'intervention futures. Ce deuxième article se différencie ainsi par sa rigueur méthodologique et par son apport pour soutenir empiriquement le concept d'état d'esprit H-I et intégrer ce concept dans l'étude plus générale des difficultés d'adaptation des

adultes. Plus spécifiquement, cet article présente l'état des connaissances relatives aux associations entre l'état d'esprit H-I et 1) les expériences antérieures de maltraitance; 2) les problèmes de santé mentale; 3) les interactions parent-enfant; 4) les comportements parentaux maltraitants à l'égard de l'enfant et 5) le fonctionnement adaptatif de l'enfant. Les résultats suggèrent que les conséquences associées aux traumas relationnels sont plus importantes en présence d'un état d'esprit H-I qu'en absence de représentations d'attachement désorganisées. Une lacune identifiée dans la documentation scientifique est le nombre restreint d'études portant sur les précurseurs de l'état d'esprit H-I. Ainsi, l'une des recommandations qui se dégagent de l'étude de la portée est la nécessité de poursuivre l'examen des facteurs qui, parallèlement aux expériences de maltraitance vécues durant l'enfance, contribuent au développement d'un état d'esprit H-I.

Le troisième article s'inscrit en continuité avec cette recommandation et prend la forme d'un article empirique rapportant les résultats originaux d'une recherche longitudinale effectuée auprès de jeunes issus de familles à faible revenu et suivis sur une période de 15 ans (de la période préscolaire au début de l'âge adulte). Ainsi, l'objectif de cette étude est d'examiner les contributions respectives et combinées des expériences de maltraitance vécues durant l'enfance et de la qualité des interactions mère-enfant durant la période préscolaire/début de l'âge scolaire dans la prédiction de l'état d'esprit H-I et du niveau de désorganisation H-I (score de 1 à 9) à l'âge adulte. Considérant la pertinence clinique du concept d'état d'esprit H-I, une attention particulière est accordée, à travers

l'ensemble de la thèse, aux implications cliniques de ces travaux pour l'évaluation et l'intervention.

### **Article scientifique 1**

Traumatismes relationnels et état d'esprit hostile-impuissant: Mieux comprendre la désorganisation de l'attachement à l'âge adulte

**Traumatismes relationnels et état d'esprit hostile-impuissant : mieux comprendre  
la désorganisation de l'attachement à l'âge adulte<sup>1</sup>**

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## Résumé

Les traumatismes relationnels chroniques vécus durant l'enfance entraînent des conséquences importantes pour le développement socio-émotionnel d'une personne et peuvent conduire à l'intériorisation de modèles non intégrés des relations parent-enfant, sous la forme de ce que Lyons-Ruth et al. (2005) appellent un état d'esprit d'attachement hostile-impuissant. Le concept d'état d'esprit hostile-impuissant réfère à un type d'attachement désorganisé à l'âge adulte, caractérisé par une absence d'intégration cohérente des expériences négatives vécues durant l'enfance. Les résultats d'un nombre croissant d'études scientifiques appuient la pertinence de ce concept pour mieux comprendre le fonctionnement psychologique d'adultes traumatisés durant l'enfance. L'objectif de cet article est de présenter une description conceptuelle de l'état d'esprit hostile-impuissant tel que formulé par Lyons-Ruth et al. (2005) et de discuter de sa pertinence tant clinique que scientifique en s'appuyant sur des écrits théoriques et empiriques. À ce jour, les résultats de diverses études montrent des associations entre l'état d'esprit hostile-impuissant et les expériences de maltraitance vécues durant l'enfance, les problèmes de santé mentale chez l'adulte, les difficultés d'adaptation chez l'enfant et les difficultés dans la relation parent-enfant. Les études ayant comparé l'état d'esprit hostile-impuissant à d'autres formes de représentations d'attachement désorganisées à l'âge adulte (p. ex., état d'esprit non résolu) mettent aussi en évidence la validité discriminante de ce premier concept et appuient sa pertinence pour mieux comprendre les représentations d'attachement des populations cliniques et à risque. Des

pistes d'intervention et de recherche futures sont proposées à la lumière de la documentation actuelle.

Mots-clés : état d'esprit hostile-impuissant, attachement désorganisé, traumatismes relationnels, état d'esprit non résolu.

## Introduction

Cet article présente une description du fonctionnement psychologique des personnes ayant un état d'esprit hostile-impuissant (*Hostile-Helpless state of mind*) tel que développé et validé par Lyons-Ruth et ses collaborateurs (2005). L'état d'esprit hostile-impuissant (H-I) correspond à une forme de désorganisation de l'attachement chez l'adulte qui résulterait d'une exposition répétée à des situations potentiellement traumatiques de nature relationnelle vécues durant l'enfance au sein de la relation parent-enfant. L'état d'esprit H-I est présenté comme une forme possible d'évolution, à l'âge adulte, de l'attachement désorganisé à l'enfance (Lyons-Ruth et al., 2005). Il se distingue conceptuellement et empiriquement de l'état d'esprit non résolu (*Unresolved state of mind*; Lyons-Ruth et Jacobvitz, 2016). Alors que l'état d'esprit non résolu se manifeste par des incohérences dans le raisonnement de l'adulte lorsqu'il évoque des expériences spécifiques de perte ou d'abus, l'état d'esprit H-I se manifeste plus largement dans l'ensemble du discours d'une personne lorsqu'elle discute des divers aspects de ses relations d'attachement actuelles et passées. L'état d'esprit H-I se manifeste aussi, dans le discours, par le biais de mécanismes de défense (p. ex., clivage) régulièrement observés chez les adultes traumatisés (Lyons-Ruth et al., 2005).

Le concept d'état d'esprit H-I prend appui sur la théorie de l'attachement (Bowlby, 1982) et a été développé à la lumière de concepts issus des théories sur les traumas psychologiques (Lyons-Ruth et al., 2005). Les traumatismes relationnels vécus durant l'enfance peuvent résulter de l'exposition à des conduites parentales inadéquates qui

placent l'enfant dans un contexte de non-confiance, de non-disponibilité affective ou de dysrégulation émotionnelle (p. ex., violence ou négligence parentale, indisponibilité émotionnelle des parents, exposition à un parent hostile ou impuissant; Bureau et al., 2010). Ces traumatismes relationnels conduisent à l'intériorisation de modèles non intégrés des relations d'attachement, interférant de manière significative avec les processus de régulation émotionnelle et comportementale de l'enfant (Lyons-Ruth et Jacobvitz, 2016). Ces dysrégulations peuvent avoir un impact considérable sur le développement et l'adaptation psychosociale ultérieure. À l'âge adulte, elles peuvent conduire à une forme de désorganisation de l'attachement envahissante, caractérisée par un contenu mental globalement non intégré qui se traduit par des incohérences et/ou des contradictions importantes dans le raisonnement de l'adulte concernant son histoire d'attachement et les représentations qu'il se fait de ses figures d'attachement (Lyons-Ruth et al., 2005).

L'état d'esprit H-I est appuyé par un nombre croissant d'études qui en démontrent la pertinence pour mieux comprendre le fonctionnement psychologique d'adultes traumatisés durant l'enfance. À ce jour, les données récoltées auprès de participants d'une dizaine d'échantillons distincts (et dont les résultats ont été publiés dans une vingtaine d'articles ou de thèses doctorales) ont permis de documenter la présence de l'état d'esprit H-I chez des personnes issues d'une diversité de situations de vulnérabilité. Ces études ont également démontré des liens étroits entre l'état d'esprit H-I et des antécédents de violence familiale durant l'enfance (p. ex., Lyons-Ruth et al., 2003; Milot et al., 2014), de

même que des problèmes de santé mentale à l'âge adulte (p. ex., Finger et al. 2015; Lyons-Ruth et al., 2007) et des difficultés dans l'exercice du rôle parental (p. ex., Lyons-Ruth et al., 2005). Finalement, des études ont permis d'observer la validité discriminante de l'état d'esprit H-I par rapport à d'autres formes de représentations d'attachement insécuries et/ou désorganisées à l'âge adulte (Finger et al., 2015; Lyons-Ruth et al., 2005). Ces études scientifiques, présentées plus en détail plus bas, mettent en valeur la contribution de ce concept, tant pour l'avancement des connaissances que pour la mise en place de pratiques innovantes en matière d'interventions cliniques. L'état d'esprit H-I apparaît comme un élément important à considérer dans la compréhension des difficultés psychosociales des adultes exposés à des situations relationnelles potentiellement traumatiques durant leur enfance. Les chercheurs s'y intéressant proposent notamment de porter un regard particulier sur l'état d'esprit H-I de ces adultes et de s'attarder à certaines de leurs caractéristiques psychosociales afin de mieux comprendre la façon dont ils entrent en relation avec les autres (incluant leur enfant). L'état d'esprit H-I est d'ailleurs considéré comme un facteur important à la compréhension de la transmission intergénérationnelle des expériences traumatiques (Lyons-Ruth et al., 2005).

L'objectif principal de cet article est de faire un portrait du concept d'état d'esprit H-I et de présenter une synthèse de résultats d'études appuyant sa pertinence tant sur les plans scientifique que clinique. L'article débute par un bref aperçu de l'attachement au cours de l'enfance et, en particulier, de la désorganisation de l'attachement chez l'enfant. Une description détaillée de l'état d'esprit H-I à l'âge adulte est par la suite présentée,

suivie d'une recension des résultats des études ayant porté sur l'état d'esprit H-I. Les différences conceptuelles et empiriques entre l'état d'esprit H-I et l'état d'esprit non résolu sont par la suite brièvement abordées, permettant au lecteur de positionner le concept d'état d'esprit H-I comparativement à d'autres formes de représentations d'attachement désorganisées à l'âge adulte. Finalement, les contributions cliniques et scientifiques du concept H-I sont énoncées et de nouvelles avenues de recherche sont proposées.

### **Attachement et modèles internes opérants durant l'enfance**

L'une des théories les plus influentes dans le domaine de la psychologie du développement humain est la théorie de l'attachement (Bowlby, 1982). Elle a notamment permis de démontrer l'importance des relations sociales dans le développement, particulièrement la relation d'attachement qui s'établit entre l'enfant et les personnes qui en prennent soin. Selon les fondements de cette théorie, l'humain, dès sa naissance, est prédisposé à rechercher et à maintenir la proximité avec l'autre, en particulier lorsqu'il fait face à des situations menaçantes qui activent son système d'attachement (Bowlby, 1982). Ce système comportemental et représentationnel d'attachement a pour fonction première d'assurer la survie, la sécurité et la protection de l'enfant dans des contextes d'activation physiologique (Bowlby, 1982). La figure d'attachement représente à la fois un havre de sécurité pour l'enfant lorsqu'il se sent menacé, qu'il est en détresse ou qu'il cherche une réponse à ses besoins, puis une base de sécurité lorsqu'il souhaite explorer son environnement (Ainsworth; 1969, Ainsworth et al., 1978; Bowlby, 1982). Or, dans certains cas (p. ex., parent hostile ou agressif), la figure d'attachement peut représenter

elle-même une menace pour l'enfant; ce dernier ne peut donc y trouver refuge, ce qui compromet la qualité de la relation d'attachement qui se développera entre les deux (Ainsworth et al., 1978; Hesse et Main; 2000).

Au cours de la première année de vie, les interactions répétées entre un enfant et son parent le mèneront à se construire des modèles internes opérants (MIO; Bowlby, 1973). Les MIO sont des représentations mentales qui structurent la manière dont l'enfant se perçoit lui-même (p. ex., suis-je digne d'amour, de soutien, de l'attention des autres?) et la manière dont il perçoit et appréhende les relations sociales. Plus spécifiquement, ce sont les schèmes sur lesquels l'enfant se base pour comprendre et prévoir les comportements d'autrui (Bowlby, 1980; Bretherton et Munholland, 2016). Ces schèmes guident l'enfant dans ses interactions sociales, à la fois à l'intérieur et à l'extérieur de son environnement familial. En fonction de la qualité des soins qu'un enfant reçoit, les MIO qu'il construira seront plus ou moins cohérents et organisés. Le niveau de cohérence et d'organisation des MIO aura éventuellement un effet sur la qualité de l'adaptation plus générale (Bureau et Moss, 2010; Miljkovitch, 2001).

Lorsque le parent répond généralement aux besoins et aux signaux de son enfant de manière sensible (c.-à-d., chaleureuse, prévisible et appropriée), celui-ci intègre que sa figure parentale est physiquement et psychologiquement disponible pour répondre à ses besoins et l'aider à réguler ses états affectifs (Hesse et Main, 2000). D'une part, l'enfant intérieurise que sa figure d'attachement est digne de confiance et qu'il peut exprimer

ouvertement ses besoins (Sroufe, 1997). D'autre part, il généralise l'attente selon laquelle les autres seront disponibles en cas de besoin et prend ainsi conscience de sa valeur personnelle (Sroufe, 1997). Ces interactions répétées et positives entre l'enfant et sa figure d'attachement contribuent au développement d'une relation d'attachement sécurisante avec le parent (Deans, 2020; van IJzendoorn, 1995; Verhage et al., 2016).

Les enfants exposés à des comportements parentaux inconstants, insensibles ou de rejet intérieurisent que leurs figures d'attachement peuvent ne pas être disponibles ou réceptives à leurs demandes de soutien ou de réconfort (Liotti, 2004). Ces enfants développent alors un attachement insécurisant envers leurs parents. Cet attachement peut être de type insécurisant-évitant, insécurisant-ambivalent ou insécurisant-désorganisé. Chez les enfants ayant un attachement de type insécurisant-évitant, l'indisponibilité, le manque de chaleur et le rejet relativement constant subi de la part de leur figure d'attachement amènent ces derniers à adopter une position indépendante (à gérer seuls leurs émotions) et à initier que rarement des interactions avec leur figure d'attachement (Ainsworth et al., 1978; Main, 2000; Weinfield et al., 2008). Sur le plan représentationnel, ces enfants ont tendance à nier ou à minimiser leur détresse et leurs besoins d'attachement et dépendent peu des autres pour obtenir une réponse à leurs besoins (Moss et al., 2009; Solomon et al., 1995). À l'inverse, chez les enfants ayant un attachement de type insécurisant-ambivalent, une préoccupation constante est manifestée à l'égard de la figure d'attachement, qui elle, a généralement un comportement inconstant et peu adapté aux signaux de l'enfant (Ainsworth et al., 1978; Cassidy et Berlin, 1994;

Main, 2000). Ce dernier apprend alors à amplifier ses signaux émotionnels pour obtenir une réponse à ses besoins (Ainsworth et al., 1978; Main, 2000). Ces enfants ont des modèles internes teintés d'ambivalence, de colère et de dépendance à l'endroit de la figure d'attachement qui est perçue comme peu disponible et manquant de prévisibilité, notamment pour soulager leur détresse (Cassidy et Berlin, 1994; Granot et Mayseless, 2012; Solomon et al., 1995). Ces trois catégories d'attachement (sécurisant, insécurisant-évitant et insécurisant-ambivalent) sont considérées comme étant organisées, dans l'optique où la stratégie comportementale de l'enfant est constante et adaptée au comportement de sa figure d'attachement, lui permettant de maintenir un lien avec celle-ci (Main, 2000; Sroufe et Waters, 1977).

### ***Attachement insécurisant-désorganisé au cours de l'enfance***

Certains enfants manifestent pour leur part des comportements contradictoires (p. ex., approche et retrait), de désorientation ou d'apprehension en présence de leur figure d'attachement et sont considérés comme ayant un attachement de type insécurisant-désorganisé (Main et Hesse, 1990). Lorsque les MIO d'attachement de l'enfant sont désorganisés, ses représentations de soi, des autres et des relations qu'il entretient avec les autres deviennent altérées (Miljkovitch et al., 2012), l'amenant par exemple à attribuer des intentions hostiles aux comportements d'autrui (Cassidy et al., 1996; Zajac et al., 2020). Différents mécanismes sont évoqués pour expliquer l'émergence de ces MIO désorganisés, notamment l'adoption par le parent de comportements effrayants (p. ex., prendre l'enfant de manière brutale, ton de voix hostile), effrayés (p. ex., recul face à

l'enfant, impuissance face à ses pleurs) ou atypiques d'extrême insensibilité (p. ex., se moquer de l'enfant, attirer l'attention sur soi lorsque l'enfant éprouve des difficultés) à l'égard de l'enfant (Hesse et Main, 2006; Madigan et al., 2006; Main et Hesse, 1990). L'exposition à des comportements maltraitants peut être particulièrement effrayante pour l'enfant. Les résultats de la méta-analyse de Cyr et al. (2010) révèlent que les comportements maltraitants (p. ex., abus, négligence) et l'accumulation des risques socioéconomiques chez le parent (p. ex., faible statut socioéconomique, faible niveau d'éducation, statut monoparental) sont des prédicteurs importants de l'attachement désorganisé chez l'enfant.

Différents chercheurs évoquent que des traumatismes non résolus chez le parent peuvent être à l'origine de ces comportements effrayants, effrayés ou d'extrême insensibilité, le parent étant aux prises avec des intrusions et des souvenirs traumatisques potentiellement réactivés par les besoins et les signaux de détresse de son enfant (Hesse et Main, 2000; 2006). Les peurs et les émotions négatives non résolues du parent seraient donc transmises à l'enfant par le biais de comportements particulièrement hostiles ou passifs/désengagés. La désorganisation comportementale de l'enfant (attachement désorganisé) serait le reflet de son incapacité à concilier son besoin de proximité (la sécurité qu'il recherche) et la peur qu'il éprouve à l'égard de sa figure d'attachement (Main et Hesse, 1990). L'enfant se retrouve ainsi avec un sentiment de « peur sans solution », qui se traduit par l'absence ou l'interruption d'une stratégie comportementale

organisée et cohérente envers son parent (Lyons-Ruth et Spielman, 2004; Main et Hesse, 1990).

Des études longitudinales révèlent une continuité dans les patrons d'attachement désorganisés des enfants, de la petite enfance à l'âge préscolaire et scolaire. Au fil des années, la désorganisation peut prendre la forme d'attitudes ou de comportements contrôlants de la part de l'enfant envers sa figure d'attachement, celui-ci cherchant à diminuer le caractère imprévisible des interactions au quotidien (Cicchetti et Barnett, 1991; Main et Cassidy, 1988; Main et al., 1985; Moss, St-Laurent, et al., 2011). Ce contrôle peut se traduire par une attitude très positive, attentionnée ou protectrice à l'égard du parent (p. ex., orienter le parent, le divertir, le réconforter) ou au contraire par des comportements hostiles et punitifs (p. ex., humilier ou rejeter le parent; Main et Cassidy, 1988; Moss, St-Laurent, et al., 2011). Sur le plan représentationnel, le récit des enfants ayant un attachement désorganisé se distingue par un contenu apeurant et désorganisé : des silences inconfortables, des thèmes effrayants ou passifs et des scénarios catastrophiques peuvent être évoqués lors du test des histoires à compléter (Bureau et Moss, 2010; Cassidy, 1988; Solomon et al., 1995). Cette désorganisation se généralise dans les divers contextes de vie de l'enfant, conduisant à des difficultés d'adaptation sociale. Entre autres, les résultats de diverses études et méta-analyses montrent une association entre l'attachement désorganisé et les problèmes de comportement extériorisés (Fearon et al., 2010; Madigan et al., 2016; van IJzendoorn et al., 1999) et intérieurisés (Madigan et al., 2013, 2016; Moss et al., 2006). Les interactions parent-enfant pour leur

part sont caractérisées par un dysfonctionnement (p. ex., communication affective perturbée, interaction conflictuelle) et un manque de réciprocité (Moss et al., 2004). Les résultats d'études longitudinales montrent que ces difficultés persistent à l'adolescence et à l'âge adulte (Carlson, 1998; Lyons-Ruth, 2003; Ogawa et al., 1997).

### **Émergence de l'état d'esprit hostile-impuissant chez l'adulte**

Pour Lyons-Ruth et al. (2005), le fait d'être placé devant un paradoxe irréconciliable, où la figure d'attachement représente à la fois une source de peur et une source de réconfort, peut conduire à la formation de représentations mentales non intégrées et au développement d'un état d'esprit d'attachement marqué par de l'hostilité et/ou de l'impuissance. Une des principales caractéristiques observées chez les personnes ayant un état d'esprit H-I est qu'elles s'identifient à une figure d'attachement qu'elles se représentent comme malveillante et/ou impuissante (Lyons-Ruth et Jacobvitz, 2016). Cette identification peut prendre au moins deux formes. D'abord, certaines personnes rapportent se sentir très proches, voire en relation fusionnelle avec une figure d'attachement pourtant décrite comme hostile ou impuissante. D'autre part, certaines personnes rapportent reproduire envers leurs enfants les comportements inadéquats dont elles ont été victimes de la part de leur parent perçu comme malveillant ou impuissant (Lyons-Ruth et al., 2005; Melnick et al., 2008). Il y a ici une contradiction apparente entre, d'une part, le fait qu'une personne reproche à un parent ses comportements malveillants ou impuissants et, d'autre part, le fait qu'elle rapporte adopter des comportements malveillants ou impuissants similaires lorsqu'elle interagit avec ses propres enfants. Outre

le processus d'identification, une personne peut aussi émettre des déclarations contradictoires à propos de ses sentiments de vulnérabilité (p. ex., j'étais triste / cela ne m'affecte pas), de ses expériences d'enfance (p. ex., mes parents me frappaient / je n'ai pas été frappé) ou de sa relation avec ses figures d'attachement (p. ex., nous sommes très proches / je ne leur parle plus; Lyons-Ruth et al., 2011). Ces contradictions, qui ne sont pas relevées par la personne, témoignent d'un état d'esprit désorganisé dans la mesure où l'adulte ne semble pas s'être engagé dans une réflexion suffisante pour prendre conscience de ces contradictions, les mettre en relation et en dégager une signification commune (Melnick et al., 2008). Cette réflexion inachevée donne lieu à un discours manquant de cohérence : la personne décrit des expériences difficiles, mais ne parvient pas à parler des affects vulnérables associés à ces événements ni à élaborer sur la façon dont ceux-ci ont pu influencer ses représentations mentales de soi ou des autres (Lyons-Ruth et al., 2005).

Ce manque d'intégration et de cohérence dans les représentations mentales de l'adulte est particulièrement manifeste lors de l'Entretien d'attachement à l'âge adulte (EAA; *Adult Attachment Interview*; George et al., 1996). L'EAA est une entrevue semi-structurée qui vise notamment à « surprendre l'inconscient » (George et al., 1996, p.3) en recueillant les représentations de l'adulte en ce qui a trait à ses relations avec ses propres parents ou ses figures d'attachement principales dans l'enfance. Lors de cet entretien, l'adulte est amené à détailler les expériences de deuil ou les expériences traumatisques qu'il a vécues et qui ont pu influencer l'organisation de ses modèles internes opérants (Main et al., 2002). Bien que des événements traumatisques puissent être identifiés dans le

récit de la personne, cela ne signifie pas pour autant qu'elle présente un état d'esprit H-I. En fait, c'est plutôt la façon dont l'adulte parle de ses expériences passées, puis la signification et l'importance qu'il accorde à ces dernières qui vont déterminer sa classification respective (Lyons-Ruth et al., 2005). L'analyse du récit de l'adulte porte ainsi sur la façon dont il « raconte son histoire » (Lyons-Ruth et al., 2005, p.17). L'analyse de ces récits a permis de dégager deux formes distinctes d'états d'esprit H-I. L'un dont la dominante est un état d'esprit hostile et l'autre dont la dominante est un état d'esprit impuissant. Dans la section suivante, nous présentons les caractéristiques principales d'un état d'esprit d'attachement hostile et d'un état d'esprit d'attachement impuissant, appuyées par des extraits de verbatim d'entrevues réalisées auprès de jeunes adultes participants à un projet de recherche en cours.

### ***État d'esprit d'attachement hostile***

Les adultes ayant un patron principalement hostile représentent leur figure d'attachement comme étant malveillante, tout en s'identifiant à cette figure dépréciée, c'est-à-dire en se disant proche d'elle ou encore en adoptant les attitudes ou en perpétuant les comportements hostiles qu'ils ont subis de la part de cette dernière (Lyons-Ruth et Jacobvitz, 2016). Par exemple : « *Mon père c'est vraiment un manipulateur narcissique.* [...] *J'ai pris exemple sur lui sur le comportement qu'il adoptait avec ma mère* ». Ils peuvent employer des termes tels que « jamais » ou « toujours » pour décrire leur figure d'attachement, suggérant que la représentation qu'ils ont de cette dernière est peu nuancée (Lyons-Ruth et al., 2011). Par exemple : « *Mon père lui y'était jamais là, y'était tout le*

*temps parti* ». Des indices de clivage peuvent aussi être repérés dans le discours, où certains aspects d'un même comportement sont décrits comme étant « tout bon » et « tout mauvais » (Lyons-Ruth et al., 2011). Ces contradictions illustrent non seulement l'incompatibilité des représentations mentales des adultes H-I, mais aussi leur difficulté à concilier des évaluations divergentes (Lyons-Ruth et al., 2011). Une autre particularité des personnes ayant un état d'esprit d'attachement hostile est que leur discours témoigne d'une mentalisation faible, voire absente, et de peu d'émotions, en particulier lorsqu'elles parlent de leurs figures parentales (Melnick et al., 2008). Ces adultes ont tendance à être francs et concis lorsqu'ils décrivent leurs expériences interpersonnelles dans l'enfance (Lyons-Ruth et al., 2005). Bien que certaines personnes puissent exprimer de la colère à l'égard d'une figure d'attachement décrite comme malveillante à leur égard, certaines adoptent plutôt une position invulnérable, rient lorsqu'elles décrivent des expériences traumatisques ou blessantes, ou encore, semblent idéaliser une figure d'attachement représentée comme malveillante (Lyons-Ruth et al., 2005). Par exemple : « *Il [mon père] avait déjà fait une tentative de meurtre sur moi quand j'étais plus bébé mais y'avait réessayé. Justement en mettant le feu {rire} à la maison. Euh voilà* ». Lyons-Ruth et al. (2005) estiment que ces stratégies sont utilisées dans le but de minimiser l'impact des sentiments de vulnérabilité vécus durant l'enfance. Ces auteurs proposent que l'état d'esprit hostile pourrait être en continuité avec la dimension punitive de l'attachement désorganisé contrôlant à l'enfance.

### ***État d'esprit d'attachement impuissant***

Les adultes ayant un patron principalement impuissant rapportent pour leur part avoir vécu des expériences où au moins un parent présentait des comportements d'impuissance ou d'abdication de leur rôle parental. L'impuissance et l'abdication parentale réfèrent à des situations où les parents se sentaient si dépassés par leurs responsabilités parentales qu'ils ne les exerçaient pas adéquatement (p. ex., s'occupaient peu ou pas de l'enfant, ne le protégeaient pas; Lyons-Ruth et al., 2011). En réponse à l'impuissance observée chez leur parent, certains adultes rapportent avoir adopté des comportements parentaux durant leur enfance, tels que réconforter leur parent, lui rappeler ses responsabilités parentales ou veiller à sa sécurité (Lyons-Ruth et al., 2004). Par exemple : « *Elle [ma mère] savait qu'elle n'était pas capable de s'occuper de moi. Zéro zéro zéro. [...]. Je suis devenu le parent de ma mère très jeune* ». L'état d'esprit d'attachement impuissant est notamment considéré comme une forme d'évolution possible de la dimension attentionnée ou protectrice de l'attachement désorganisé contrôlant à l'enfance (Lyons-Ruth et al., 2005).

Tout comme les adultes au profil hostile, les adultes correspondant au patron impuissant ont tendance à décrire leur figure d'attachement en termes dépréciatifs, tout en s'identifiant à cette figure dépréciée ou victimisée (Lyons-Ruth et al., 2011). En revanche, ces personnes se distinguent du profil hostile par leur capacité à parler de leurs émotions et à reconnaître les sentiments de peur et de culpabilité qu'elles éprouvent face à leur figure d'attachement (Lyons-Ruth et al., 2011). Bien qu'elles s'efforcent de ne pas blâmer ou ressentir de la colère envers leur figure d'attachement qu'elles perçoivent comme étant

à la source de leurs propres sentiments d'impuissance, elles peuvent avoir tendance à se sentir responsables de ce qu'elles ont vécu, à se dévaloriser elles-mêmes ou à se décrire sous un angle « mauvais » ou « indigne » de soins (Melnick et al., 2008). Par exemple : « *Je me suis tout le temps sentie comme si j'étais une corvée plus que d'autre chose* ».

La peur, l'inquiétude et l'impuissance occupent une place centrale dans le discours de ces adultes, même lorsqu'ils décrivent des expériences non traumatiques (Lyons-Ruth et Jacobvitz, 2016). Par exemple : « *Je suis plus craintive. J'ai peur des gars. Y'a un gars qui va passer à côté de moi j'veais comme vouloir me protéger parce que j'veais comme avoir peur. Je suis craintive, j'aime bien avoir des amis de gars mais j'ai peur* ». Les adultes ayant un état d'esprit impuissant peuvent aussi avoir tendance à ignorer certains aspects douloureux de leurs expériences passées ou à proposer des réponses « vides » du genre « je ne sais pas » ou « je ne me souviens pas » (Lyons-Ruth et al., 2011). Quoiqu'ils se posent plusieurs questions dans l'optique de comprendre la signification de leurs expériences passées, ils peinent à présenter une vue d'ensemble cohérente de leurs relations d'attachement (Lyons-Ruth et al., 2011; Melnick et al., 2008).

### **État d'esprit hostile-impuissant, expériences antérieures de maltraitance et difficultés d'adaptation à l'âge adulte**

Les études ayant documenté les expériences de maltraitance vécues durant l'enfance sont particulièrement informatives du risque de développer un état d'esprit H-I. Les résultats de plusieurs études scientifiques révèlent une association significative entre la sévérité des expériences d'abus dans l'enfance et l'état d'esprit H-I à l'âge adulte, autant

chez des mères à faible revenu (Lyons-Ruth et al., 2003) que chez des jeunes adultes ayant un statut socioéconomique faible à modéré (Byun et al., 2016; Finger et al., 2015). Le cumul de traumas dans l'enfance a aussi été associé à un niveau de désorganisation plus élevé chez des mères signalées pour négligence physique ou risque de négligence (Milot et al., 2014). Il est à noter que ces expériences de maltraitance ont été évaluées par le biais de mesures auto-rapportées.

D'autres chercheurs ont examiné la relation entre l'état d'esprit H-I et la santé mentale des adultes. Les résultats d'une étude menée par Lyons-Ruth et al. (2007) mettent en évidence un plus grand nombre d'indicateurs H-I (p. ex., représentation d'un parent malveillant, tendance à s'identifier à un parent malveillant, comportements contrôlants dans l'enfance) dans le récit d'adultes ayant un trouble de la personnalité limite comparativement aux adultes ayant un trouble dysthymique. Une des particularités du trouble de la personnalité limite est une sensibilité extrême au rejet et à l'abandon (*American Psychiatric Association [APA]*, 2013). Les personnes ayant ce diagnostic manifestent souvent des difficultés marquées sur le plan des relations interpersonnelles et peuvent avoir tendance à idéaliser et à dévaloriser leurs relations (APA, 2013). Les façons de comprendre les relations sociales sont généralement non intégrées et imprégnées d'hostilité et d'impuissance, ce qui pourrait expliquer une proportion plus élevée de l'état d'esprit H-I chez cette population (Lyons-Ruth et al., 2007).

Ces résultats ont été corroborés auprès d'un échantillon de 103 jeunes adultes, auprès duquel une association significative entre l'état d'esprit H-I et le trouble de la personnalité antisociale a également été obtenue (Finger et al., 2015). Les résultats de cette étude mettent aussi en évidence la présence d'un effet médiateur de l'état d'esprit H-I sur la relation entre la sévérité des expériences traumatisques vécues durant l'enfance et les symptômes psychopathologiques à l'âge adulte. Ce même échantillon a fait l'objet d'une deuxième étude, où les chercheurs ont révélé que des scores plus élevés à l'échelle de désorganisation H-I étaient associés à des niveaux significativement plus élevés de symptômes dissociatifs (Byun et al., 2016).

Finalement, diverses études ont documenté les liens entre l'état d'esprit H-I et différents indicateurs de la qualité de la relation que les adultes entretiennent avec leur enfant. Globalement, ces études ont permis d'observer que l'état d'esprit H-I est lié à une communication affective perturbée entre la mère et son enfant durant la Situation étrange<sup>2</sup> (p. ex., ne pas réconforter l'enfant ou rire de lui lorsqu'il manifeste des signaux de détresse; demander à l'enfant de s'approcher tout en s'éloignant physiquement; Lyons-Ruth et al., 2005), de même qu'à des comportements désorganisés chez les enfants âgés de 18 mois (Lyons-Ruth et al., 2003). Chez des dyades mère-adolescent, l'état d'esprit H-I des mères est associé à une confusion de rôle-frontières dans les interactions parent-enfant (Vulliez-Coady et al., 2013), alors que l'état d'esprit H-I des adolescents est associé

<sup>2</sup> La situation étrange est une procédure de laboratoire qui permet d'évaluer l'attachement par le biais d'un protocole constitué d'épisodes de séparations et de réunions entre l'enfant et son parent (Ainsworth et al., 1978).

à la présence de comportements contrôlants-punitifs envers la mère (Obsuth et al., 2014). Les chercheurs de cette dernière étude suggèrent de rester à l'affût de ces comportements qui peuvent interférer dans les autres interactions sociales de l'adolescent. Obsuth et al. (2014) ont notamment repéré une association significative entre les comportements contrôlants-punitifs des adolescents envers leurs parents et la faible qualité de leurs relations amoureuses.

Terry et al. (2020) rapportent que l'état d'esprit H-I des mères durant leur grossesse contribue significativement à prédire le retrait des enfants du milieu familial entre l'âge de 0 et 24 mois. Selon ces auteurs, la transition à la parentalité peut faire émerger d'anciens traumas non résolus et conduire la mère à adopter une position hostile et/ou impuissante afin d'échapper aux affects et aux souvenirs intolérables qui peuvent faire surface et entraîner des difficultés d'adaptation à la parentalité. Une étude récente a notamment permis d'observer que la relation entre le vécu de maltraitance des mères et le risque de filicide était médiée par des niveaux plus élevés de représentations d'attachement H-I et amplifiée par de plus faibles capacités de mentalisation (Barone et Carone, 2020). Les expériences de maltraitance vécues durant l'enfance augmenteraient donc la probabilité d'adopter ultérieurement des conduites parentales abusives par le biais de leur effet sur les représentations mentales que se forme une personne.

### **Distinctions entre l'état d'esprit hostile-impuissant et l'état d'esprit non résolu**

L'état d'esprit non résolu (Hesse, 2016), comme l'état d'esprit H-I, est évalué par le biais de l'EAA. Dans la documentation clinique et scientifique, l'état d'esprit non résolu demeure la conceptualisation la plus répandue de la désorganisation des représentations d'attachement à l'âge adulte. Les adultes dont l'état d'esprit est non résolu ont vécu une perte (décès) et/ou des traumatismes et ne sont pas parvenus à intégrer de manière cohérente la signification de ces expériences et/ou leurs conséquences (Hesse, 2016; Main et al., 2002). Le discours de l'adulte est décrit comme étant désorganisé et désorienté, celui-ci pouvant être interrompu par des périodes prolongées de silence, des états de confusion (p. ex., la personne décrit un parent comme étant décédé alors qu'il est vivant; Hesse, 2016; Main et al., 2002). Bien que des indices de désorganisation puissent être repérés lorsque l'adulte décrit des situations potentiellement traumatiques de son enfance, ces indices sont habituellement brefs et isolés, de sorte que les autres sections du récit demeurent principalement organisées (Hesse et Main, 2000). Ces lacunes dans le raisonnement de l'adulte suggèrent la présence d'une peur non intégrée qui vient interférer avec les souvenirs de la personne (Hesse et Main, 2000).

Cette conceptualisation de la désorganisation semble toutefois comporter certaines limites. Une de ces limites repose possiblement sur le fait que l'état d'esprit non résolu a d'abord été conceptualisé et mesuré dans des études portant sur des adultes provenant de la population normale et que les caractéristiques du discours des personnes non résolues, et les processus psychologiques inhérents à ce type d'état d'esprit, ne semblent pas aussi

bien convenir à des populations cliniques (Lyons-Ruth et al., 2005). De fait, des études menées auprès de populations à risque ou en très grande difficulté ont permis d'observer une proportion relativement faible d'adultes ayant un état d'esprit non résolu (Holtzworth-Munroe et al., 1997; van IJzendoorn et al., 1997), ce qui peut étonner considérant qu'une grande proportion de ceux-ci ont vécu des situations potentiellement traumatiques durant leur enfance. Une autre limite est que les indices de désorganisation dans le discours lors de l'EAA peuvent seulement être codifiés lorsque la personne fait mention d'une perte ou d'un trauma spécifique. Lyons-Ruth et al. (2011) ont ainsi proposé une extension du système de classification traditionnel qui s'inspire des mécanismes de défense identifiés chez des populations cliniques (p. ex., clivage) et qui tient compte de l'ensemble des expériences négatives vécues durant l'enfance, plutôt que d'analyser uniquement le discours relatif à des expériences spécifiques de perte ou de trauma.

À ce jour, les études ayant comparé les systèmes de classification H-I/Non H-I VS Non Résolu/Résolu ont montré une contribution unique de l'état d'esprit H-I dans la compréhension de diverses difficultés. Par exemple, Lyons-Ruth et al. (2003) ont observé que seul l'état d'esprit H-I était associé à la sévérité des expériences de maltraitance vécues durant l'enfance, ce qui n'était pas le cas pour l'état d'esprit « non résolu ». Ces auteurs ont également observé auprès de dyades mères-enfants une association significative entre la présence d'un état d'esprit H-I chez la mère et la désorganisation chez l'enfant et ce, même en ayant contrôlé statistiquement pour la présence d'un état d'esprit non résolu (Lyons-Ruth et al., 2005). Finger et al. (2015) ont pour leur part

observé que seules les représentations d'attachement H-I (et non l'état d'esprit non résolu) permettent d'expliquer le lien (analyses de médiation) entre les expériences potentiellement traumatiques vécues durant l'enfance et des indices de psychopathologie à l'âge adulte. Dans l'ensemble, les résultats de ces études scientifiques (et autres études) constituent un appui important à la pertinence du concept d'état d'esprit H-I pour mieux comprendre l'adaptation des personnes ayant vécu des situations potentiellement traumatiques durant l'enfance.

### **Pertinence clinique et scientifique du concept**

Le concept d'état d'esprit H-I contribue non seulement à l'avancement des connaissances scientifiques, mais oriente également la mise en place d'interventions cliniques. D'une part, l'ajout de concepts théoriques dérivés des travaux sur le trauma et l'attachement permet d'accroître l'étendue des indicateurs de désorganisation repérés par le biais du système de classification traditionnel (Lyons-Ruth et al., 2005). D'autre part, le concept d'état d'esprit H-I permet de mieux comprendre et identifier le phénomène de désorganisation à l'âge adulte qui peut prendre la forme de pertes/traumas non résolus, mais également de représentations d'attachement non intégrées (MIO incompatibles et contradictoires, caractérisés entre autres par la présence de clivage et de dépréciation extrême) découlant d'expériences particulièrement traumatiques et douloureuses durant l'enfance (Lyons-Ruth et al., 2005).

Le concept d'état d'esprit H-I peut servir à détecter les représentations d'attachement des adultes ayant vécu des traumas relationnels au sein de la relation avec leurs parents et étant, par conséquent, à risque de transmission intergénérationnelle de la désorganisation de l'attachement (Lyons-Ruth et al., 2005; Melnick et al., 2008). Entre autres, Lyons-Ruth et al. (2005) rapportent que parmi les mères d'enfants ayant un patron d'attachement désorganisé, 75 % avaient un état d'esprit H-I. Milot et al. (2014) observent que 64 % des mères d'enfants négligés ou à risque de négligence de leur échantillon ont cet état d'esprit, alors que Barone et al. (2014) situent la proportion à 27 % chez des mères ayant un problème de santé mentale et à plus de 65 % chez celles ayant commis un filicide. En identifiant ces adultes avant même leur transition à la parentalité, il devient possible de mettre en place des interventions pour mieux préparer le parent à assumer ses responsabilités parentales et prévenir les difficultés dans la relation parent-enfant (Terry et al., 2020). À cet égard, Frigerio et al. (2013) soulignent l'importance d'intervenir dès le début de la grossesse afin d'ouvrir le dialogue sur les expériences d'attachement de la mère et lui offrir le soutien nécessaire en préparation à son nouveau rôle parental, des recommandations qui vont dans le sens d'autres auteurs s'intéressant à la transition à la parentalité (Berthelot et al., 2018).

Le concept d'état d'esprit H-I fournit également des explications au fait que certains parents vont réagir négativement à la détresse exprimée par leur enfant, notamment parce que cette détresse réactive des souvenirs traumatiques, pouvant les conduire à adopter des comportements hostiles et impuissants à l'égard de leur enfant. Une meilleure

compréhension des mécanismes sous-jacents aux comportements du parent peut aider les cliniciens à mieux cibler leur approche et à identifier des pistes d'intervention susceptibles d'améliorer le fonctionnement psychosocial de l'adulte et la relation parent-enfant, puis de prévenir les difficultés d'adaptation chez l'enfant.

Enfin, les résultats soulèvent plus largement l'importance de porter un regard particulier sur les adultes ayant vécu différentes formes de maltraitance en bas âge au sein de la relation avec leurs parents. Les cliniciens doivent notamment rester à l'affût des signes de la présence d'un état d'esprit H-I, soit à la fois les signes caractéristiques de la position d'hostilité (p. ex., dépréciation et identification à une figure d'attachement malveillante, attitudes d'invulnérabilité) et les signes caractéristiques de la position d'impuissance (p. ex., dépréciation et identification à une figure d'attachement victimisée, sentiments envahissants de peur et d'impuissance, dévalorisation de soi). Les interventions doivent permettre aux individus de s'exprimer sur leurs relations actuelles et passées avec leurs figures d'attachement et d'identifier les émotions associées aux expériences relationnelles vécues durant l'enfance. Un soutien doit être offert à ces personnes afin de les aider à réconcilier des déclarations contradictoires et à nuancer les évaluations qu'elles se font de leurs figures d'attachement (Lyons-Ruth et al., 2007). Les cliniciens doivent aussi accompagner les parents à identifier les stratégies de défense qu'ils ont développées en réponse à leurs expériences d'attachement passées et à comprendre comment celles-ci peuvent interférer dans la relation avec leur enfant. Lyons-Ruth et Spielman (2004) proposent également d'accompagner les parents dans la

compréhension des signaux de leur enfant et l'interprétation de ses besoins, mais aussi dans la reconnaissance de leurs propres besoins et de leur valeur comme personnes à part entière. À cet égard, de nombreuses études ont démontré l'efficacité d'interventions parent-enfant fondées sur l'attachement et utilisant la rétroaction vidéo (p. ex., Moss, Dubois-Comtois, et al., 2011; Moss et al., 2017). En étant capable de percevoir et d'interpréter adéquatement les besoins et signaux de l'enfant et d'y répondre avec chaleur et de façon appropriée, le parent pourra possiblement se sentir moins confus et dépassé par ses responsabilités parentales et contribuera à l'amélioration de la relation d'attachement avec son enfant.

### **Directions futures**

Une quantité considérable de nouvelles connaissances sur les représentations d'attachement désorganisées chez les adultes a émergé depuis les dernières décennies. Les chercheurs doivent poursuivre leurs recherches afin de mettre en évidence le concept d'état d'esprit H-I comme regard pertinent pour décrire les représentations d'attachement des populations cliniques et à risque. Les résultats des études empiriques citées dans cet article doivent toutefois être interprétés à la lumière de certaines limites. D'une part, les résultats de plusieurs études reposent sur des échantillons de petite taille et une faible proportion d'entre elles a inclus un groupe de comparaison. D'autre part, les chercheurs s'intéressant au lien entre l'état d'esprit H-I et la relation parent-enfant ont principalement évalué des dyades mère-enfant, alors que les résultats sont susceptibles de différer chez des dyades père-enfant. Il est donc important de demeurer prudent dans la généralisation

des résultats. Finalement, la plupart des études étant transversales, il n'est pas toujours possible de connaître la direction des effets observés. Des études longitudinales sont aussi nécessaires pour 1) vérifier si l'état d'esprit H-I est en continuité avec l'attachement insécurisant-désorganisé observé dans l'enfance et 2) comprendre les mécanismes impliqués dans le développement des représentations d'attachement de la personne de l'enfance à l'âge adulte (Finger et al. 2015). L'utilisation d'un modèle qui englobe des facteurs reliés à l'enfant (p. ex., tempérament, symptômes dissociatifs), à la relation parent-enfant (p. ex., type d'attachement), au parent (p. ex., niveau de détresse psychologique) et à l'écologie familiale (p. ex., niveau de risque sociodémographique de la famille, qualité du soutien social) devrait être privilégiée afin d'éclairer le processus de développement et de transmission de la désorganisation de l'attachement (Bernier et Meins, 2008).

Dans l'optique de contrer les limites associées aux mesures rétrospectives de la maltraitance (p. ex., biais de mémoire) utilisées dans plusieurs études sur l'état d'esprit H-I, et considérant l'importance de cette variable dans la compréhension de l'état d'esprit H-I, Buyn et al. (2016) proposent de répliquer les résultats des études en utilisant des mesures prospectives des expériences de maltraitance. Le recours à une approche multi-méthodes est aussi recommandé étant donné que les adultes ayant un état d'esprit H-I (surtout de prédominance hostile) peuvent avoir tendance à sous-estimer leurs symptômes ou à minimiser leurs expériences traumatiques en se montrant « invulnérables » (Byun et al., 2016). D'autres études sont aussi nécessaires pour documenter la variance expliquée par

l'état d'esprit H-I une fois les expériences de maltraitance prises en considération, puis sa validité discriminante relativement à certains troubles et concepts (p. ex., trouble dissociatif, trauma complexe, mentalisation).

Sur le plan clinique, il est essentiel d'offrir des formations aux cliniciens afin de les soutenir dans une meilleure compréhension des facteurs relationnels en cause dans la formation de l'attachement désorganisé, de la petite enfance à l'âge adulte. Sensibiliser les cliniciens aux caractéristiques des différents états d'esprit à l'âge adulte leur permettrait de préciser leurs hypothèses cliniques et d'orienter leurs interventions auprès des personnes qui semblent, dans une certaine mesure, répondre aux critères de la classification désorganisée. Cette formation est d'autant plus importante considérant la subtilité de certaines manifestations cliniques associées à l'état d'esprit H-I et leurs conséquences néfastes pour la relation parent-enfant.

## **Conclusion**

Cet article avait pour objectif de présenter une description conceptuelle de l'état d'esprit H-I et de ses contributions sur les plans clinique et scientifique. Les données présentées permettent de mieux comprendre les représentations mentales d'attachement des adultes ayant vécu des traumatismes relationnels chroniques durant l'enfance. Ces adultes peinent à intégrer leurs expériences d'attachement de manière cohérente, ce qui se traduit par des contradictions et des incohérences lorsqu'ils discutent des relations avec leurs figures d'attachement. Les résultats d'études empiriques révèlent qu'une proportion

importante de personnes issues de populations cliniques et à risque présentent un état d'esprit H-I. Ces données appuient la pertinence de reconnaître l'état d'esprit H-I comme une forme distincte d'attachement désorganisé et soutiennent l'importance d'intervenir auprès des adultes présentant les caractéristiques d'un état d'esprit H-I afin de les aider à réviser leurs représentations mentales et réduire le risque de transmission intergénérationnelle de la désorganisation de l'attachement.

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## **Article scientifique 2**

Hostile-Helpless States of Mind: A scoping review of risk factors, correlates, and consequences

# **Hostile-helpless states of mind: a scoping review of risk factors, correlates, and consequences<sup>3</sup>**

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### **Abstract**

Chronic relational trauma can lead to the formation of pervasively unintegrated attachment representations in adulthood, referred to as Hostile-Helpless states of mind. Individuals with this type of attachment disorganization evidence conflicting evaluations of caregivers and have difficulty reflecting on their traumatic childhood experiences. This scoping review is the first to systematically integrate the results of all empirical studies on Hostile-Helpless states of mind in an effort to highlight the scientific and clinical contributions of the concept and guide future research. Following Arksey and O'Malley's (2005) Methodological Framework, cross-reference keywords were searched in three databases (PsycArticles, Psychology and Behavioral Sciences Collection, ProQuest). In total, 19 studies met inclusion criteria and were included in the synthesis. Results suggest that prevalence rates of Hostile-Helpless states of mind increase as a function of adults' psychosocial risk status. Findings also reveal that the long-term consequences of early trauma are greater in the presence of a Hostile-Helpless state of mind, whereas the absence of a Hostile-Helpless state of mind acts as a protective factor against the intergenerational transmission of maladaptation. Finally, results support the discriminant validity of the Hostile-Helpless classification against other forms of attachment disorganization in adulthood. Research gaps and future research directions are discussed.

Keywords: attachment disorganization; Hostile-Helpless states of mind; Adult Attachment Interview; intergenerational transmission; scoping review

## Introduction

Adults' childhood attachment experiences are evaluated and organized into a state of mind, one that affects how they will perceive and respond to interpersonal relationships, especially the parent-child relationship (Main et al., 1985; van IJzendoorn, 1995). The results of different meta-analyses reveal that parents' attachment state of mind (or attachment representations) influence both parental caregiving behaviors and the quality of parent-child interactions (Madigan et al., 2006a; van IJzendoorn, 1995; Verhage et al., 2016, 2018). Parents with a secure/autonomous state of mind are generally more sensitive and responsive to their child's signals and needs, which promotes child attachment security (Main et al., 1985; van IJzendoorn, 1995; Verhage et al., 2016). However, not all adults are able to provide a balanced and coherent narrative of their attachment experiences, to reflect on these experiences, and to attribute value to attachment relationships (Crowell et al., 2008; Hesse, 2016), resulting in either an insecure or disorganized adult attachment state of mind.

Disorganized attachment states of mind originate from unresolved past traumatic events or interpersonal experiences (Bailey et al., 2007; Main & Hesse, 1990) and increase the risk of having children with a disorganized attachment (van IJzendoorn, 1995; Madigan et al., 2006a). Researchers investigating the intergenerational transmission of attachment disorganization have provided a theoretical model based on attachment theory, in which dysregulated parenting behaviors are proposed as the explanatory mechanism (Main & Hesse, 1990; Hesse & Main, 2006). The hypothesis is that parents' unresolved

traumatic experiences impede their ability to respond to their child's emotional cues, resulting in frightened or frightening or extremely insensitive behaviors toward the child (Hesse & Main, 2006; Main & Hesse, 1990). When children perceive their caregivers as frightened or frightening, it places them in an unsolvable dilemma of whether to approach or move away from their caregiver perceived as both a threat and a source of protection (Main & Hesse, 1990). The exposure to frightened or frightening parenting behaviors as well as the failure of the parent to terminate the child's activation of the attachment system contribute to create a chronic hyperarousal of the attachment system that leads to attachment disorganization (Cyr et al., 2010). The results of several studies support this theoretical model, showing significant associations between unresolved trauma/disorganized attachment states of mind, frightened/frightening or dysregulated caregiving behaviors and infant/child attachment disorganization (Jacobvitz et al., 2006, 2011; Lyons-Ruth et al., 1999; Madigan et al., 2006a, 2006b; Schuengel et al., 1999).

To date, studies investigating disorganized attachment representations in adulthood have primarily considered unresolved (U) states of mind in relation to loss or trauma, either alone or in combination with the Cannot Classify (CC) classification<sup>4</sup>. The U classification is assigned to adults who show lapses in reasoning or discourse when discussing specific experiences of abuse and/or loss (Hesse, 2016). Although indicators of disorganization can be identified through the analysis of discourse regarding these

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<sup>4</sup> The CC state of mind classification is used in cases where individuals present contradictory strategies but fail to meet the requirements of a single classification (Main et al., 2002). Due to the low coherence of these protocols, they are considered insecure (Hesse, 2016).

specific experiences, this conceptualization of attachment disorganization might be less effective in identifying the more global representational distortions seen in individuals who have experienced chronic relational trauma in childhood (Lyons-Ruth, Yellin, et al., 2005). The use of the U classification has also failed to fully explain the correspondence between parental state of mind and child attachment disorganization, which van IJzendoorn refers to as the “transmission gap” (van IJzendoorn, 1995). As a result, a second conceptualization of disorganized states of mind was proposed as a means of identifying variations in the mental representations of high-risk and clinical populations, with the potential to further explain the relation between parental attachment and child disorganization (Lyons-Ruth, Yellin, et al., 2005). Through a comprehensive analysis of the psychological characteristics of clinical populations, Lyons-Ruth and colleagues developed the Hostile-Helpless (HH) coding system that is “designed to detect more pervasively unintegrated states of mind that accompany experiences of relational trauma, including the cumulative traumas of consistently hostile or withdrawn parenting, as well as the episodic traumas of abuse events” (Lyons-Ruth, Yellin, et al., 2005, p.19). Although both classification schemes are applied to the Adult Attachment Interview (AAI; George et al., 1985/1996), and despite the complementary nature of the U and HH classifications, there are important conceptual differences to consider. In contrast to the U coding system, the HH coding system incorporates several psychological processes observed in clinical populations. The defensive functions covered (e.g., splitting) make it a particularly suitable system for identifying the mental representations of individuals who have experienced chronic relational trauma (Lyons-Ruth, Yellin et al., 2005). Another distinct

feature of the HH coding system is that it considers all parts of the interview, as opposed to specific portions relating to past experiences of loss or abuse. This allows the identification of more global and pervasive representational distortions that appear throughout the individual's entire narrative. Moreover, by considering both episodic and pervasive cumulative traumas, the HH coding system offers the advantage of capturing distorted mental representations that arise from repeated patterns of disruptive parent-child interactions during childhood. It may therefore be helpful in identifying individuals at risk of experiencing pervasive parenting difficulties (Finger, 2006; Melnick et al., 2008). Finally, as suggested by Bernier and Meins (2008), the HH classification may be more reflective of a characteristic trait of the person as it captures a pervasive lack of integration in the adults' representations of attachment experiences, whereas the U classification may capture a more temporary state of unintegration that arises strictly when the person discusses past events of abuse and/or loss. Further studies are needed to understand how these two classification systems contribute to our understanding of attachment disorganization in adulthood, particularly in high-risk populations. The purpose of this paper is to systematically review the current body of knowledge on HH states of mind, both independently and in relation to U or U/CC states of mind.

### **Hostile-Helpless States of Mind**

Individuals with a HH state of mind have unintegrated representations of their attachment figures and demonstrate conflicting mental contents during the AAI (Lyons-Ruth et al., 1995/2006/2011). These adults describe traumatic childhood experiences, but

have difficulty reflecting and elaborating on the emotions accompanying these experiences (Lyons-Ruth, Yellin, et al., 2005). Another distinctive feature of adults with a HH state of mind is the tendency to describe a caregiver in a devaluating or derogatory manner, either as globally malevolent or fearful and abdicating in their parental role, while also identifying with this caregiver by adopting similar attitudes and/or behaviors or stating being very close to this caregiver (Lyons-Ruth & Jacobvitz, 2016). These individuals fail to address these contradictions and often remain trapped in very intense feelings of fear, rage, or guilt towards their attachment figures. Although transcripts may contain a combination of hostile and helpless indicators, some transcripts are more consistent with the characteristics of a single stance (either hostile or helpless; Lyons-Ruth & Jacobvitz, 2016).

Adults with a predominantly hostile state of mind represent at least one of their attachment figures in globally devaluating terms, while at the same time presenting some positive evaluations of their caregiver, without acknowledging these contradictions (Lyons-Ruth et al., 1995/2006/2011). They also tend to portray themselves as being tough, invulnerable or aggressive and describe a similar pattern of behaviors in their attachment figure with whom they identify (Lyons-Ruth, Yellin, et al., 2005). Signs of minimization and/or dissociation may also be evident when discussing attachment-related experiences (Lyons-Ruth et al., 1995/2006/2011). In contrast, adults with a predominantly helpless state of mind tend to identify with an abdicating parental figure, often portrayed as helpless and/or fearful (Lyons-Ruth & Jacobvitz, 2016). They differ from adults in the hostile

subtype in their ability to speak openly about their feelings, while struggling to make sense of past experiences and cope with intense feelings of shame, guilt, or a sense of badness or unworthiness (Lyons-Ruth, Yellin, et al., 2005). Their narratives are often infused with feelings of fear, and some describe engaging in a protective or caregiving role toward their parent as children (Lyons-Ruth et al., 1995/2006/2011). A mixed subcategory is assigned to individuals who exhibit characteristics of both a hostile and helpless state of mind. However, most studies use the HH scaled score or the dichotomous HH/non-HH score in their analyses, without considering subcategories.

A series of studies on HH states of mind have been published in recent years and reveal the discriminating power of this new coding system as a means of identifying those who have experienced severe forms of relational trauma in childhood and who show signs of global representational distortions when discussing past and current attachment relationships. Results from studies investigating child attachment disorganization, parent-child interactions, and parenting behaviors in association with HH states of mind suggest that this form of attachment disorganization may be involved in the intergenerational transmission of maladaptation. However, these results have yet to be systematically reviewed before general conclusions can be drawn. Mapping the evidence and integrating findings will not only inform future research in the field of attachment disorganization but also provide guidelines for clinical interventions.

## **Objectives**

The purpose of this paper is to 1) synthesize and disseminate research findings on HH states of mind, 2) identify research gaps, and 3) make recommendations for future research. Specifically, this review aims to map the extent of research on HH states of mind by extracting prevalence data as well as information on precursors of HH states of mind. Another aim is to understand how HH states of mind may interfere with adults' psychological functioning and social relationships, particularly the parent-child relationship, and how it may have implications for the next generation. Finally, this paper seeks to explore the distinct contributions of HH and U or U/CC states of mind in understanding attachment disorganization in adulthood.

## **Methods**

Given the heterogeneous nature of studies on HH states of mind, the scope of research questions that have been examined thus far, and the absence of a comprehensive review of this body of literature, a scoping review is the most appropriate study design. This type of review seeks to provide an overview of the available literature and to identify research gaps in order to suggest future research directions (Peters et al., 2015).

This scoping review was conducted in accordance to Arksey and O'Malley's (2005) Methodological Framework, which has been cited more than 9,000 times. This framework is divided into five stages, namely 1) identifying the research question; 2) identifying relevant studies; 3) study selection; 4) charting the data; and 5) collating, summarizing,

and reporting the results (Arksey & O'Malley, 2005). We used Endnote and Covidence for screening and selecting articles. The latter is an online tool that can be used for a variety of reviews and is based on Cochrane Community standards.

### **Search Methods**

The search was conducted through several databases to identify empirical studies and doctoral dissertations. An e-mail was also sent to each author who had published a doctoral dissertation to verify if the results had been published (or were in the process of being published) in a scientific journal. Had the results been published in both a doctoral dissertation and a scientific article, only the data from the article were considered. Finally, reference lists of included articles were screened to ensure that all relevant studies were identified. We used the following keywords and search strategy: (hostile-helpless OR hostile/helpless) AND (adult\* OR mother\* OR parent\* OR women OR maternal OR men OR father\* OR paternal) AND (attachment OR disorgani\* OR Adult Attachment Interview OR AAI). All searches were run on December 31, 2020. The search protocol was peer reviewed by two judges (TM/DSL) prior to conducting the search. Keywords were adapted according to the recommendations made by both judges and consultations were held throughout the entire review process to ensure consistency. The revised search strategy was then applied to three databases, from their inception to the end of 2020: 1) PsycArticles, 2) Psychology and Behavioral Sciences Collection; and 3) ProQuest. These databases were selected because they cover empirical research in the field of attachment.

### **Inclusion and Exclusion Criteria**

The most important criterion for inclusion of studies was the presence and use of the HH coding system developed by Lyons-Ruth and colleagues (1995/2006/2011). Because this system is strictly used in conjunction with the AAI, and in order to maintain consistency among the studies selected for the scoping review, we rejected studies that used other coding systems to screen for hostile-helpless behaviors, such as the Assessment of Representational Risk (ARR) Coding System (Sleed, 2014). Whether researchers studied predictors of HH states of mind, correlates, or consequences, whether they used the HH concept as a dependent, independent, or mediator/moderator variable, and whether they measured HH states of mind categorically (HH vs. non-HH) or continuously (scaled score from 1 to 9)<sup>5</sup>, all variations were accepted. The findings, however, are interpreted in light of these differences.

Empirical studies with a peer review process and doctoral dissertations were included in three languages (i.e., English, French and Italian), given that research teams in Canada, the United States, the United Kingdom, and Italy have been trained by Lyons-Ruth and colleagues in using the HH coding system. All study designs were accepted, apart from case studies, as the grids used for quality assessment and data extraction were not applicable to this type of design. This resulted in the exclusion of two studies (Isosävi et al., 2019; Lyons-Ruth & Spielman, 2004).

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<sup>5</sup> A person with a score of 5 or above is considered to have a Hostile-Helpless state of mind.

We decided to include original studies only, and therefore excluded book chapters in which results from empirical studies were reported. Nevertheless, these book chapters were used to extend the search of studies and were helpful in describing the HH concept in a more comprehensive manner. Full texts published or in press before January 1, 2021 were included in this review. Since the HH concept was first developed in the 1990's, all publications included in the synthesis exceed this date. Only studies with a rigorous methodology were retained, and therefore, opinion texts and conference papers were not considered.

## Screening

The initial search yielded 284 results. Three hand-searched references and one in-press article (now published) shared by one of the doctoral dissertation authors were added to this count. All references were downloaded into Endnote and imported to Covidence for screening. Duplicate references were removed ( $k = 8$ ) and two judges (JT/CU) independently screened the remaining 280 articles based on titles and abstracts. Disagreements ( $k = 6$ ) were resolved by discussion. In case of uncertainty, studies were included for full-text screening.

Based on inclusion and exclusion criteria, 251 studies were excluded and considered irrelevant to the review, six were included due to uncertainty and the remaining 23 studies were included given their relevance to the review. Interrater agreement was  $\kappa = .87$ . Full-text assessments were conducted for the remaining 29 references. Three disagreements

were resolved after discussion ( $\kappa = .77$ ), resulting in the inclusion of 17 relevant references. Reference screening was also conducted to verify if any articles had been missed during the screening process. Two additional references were identified, both of which were published in Italian (Barone & Frigerio, 2009; Guarino et al., 2011). The results of these studies were discussed in one of the authors' subsequent papers (Frigerio et al., 2013) and summarized in each paper's Abstract. Certain sections of these studies were also translated for data extraction and quality assessment purposes, since the authors of this paper do not speak Italian. In total, 19 references were included in the synthesis (see Figure 1 for PRISMA flow diagram and reasons for exclusion).

## **Data Extraction**

In an effort to systematically extract the data, an Excel spreadsheet was created by the team, which was inspired by other spreadsheets used in recent Scoping Reviews. The Excel spreadsheet included 14 categories and was used to extract information related to study aims and design, setting, participants/groups, measures, statistical analyses, as well as relevant findings related to both HH and U or U/CC states of mind. A final category was used to describe the study according to the following classifications: 1) predictor of HH; 2) consequence of HH (for the child or the parent-child relationship); or 3) correlate of HH (i.e., the direction of the relation was unknown). These three categories were used for the HH states of mind but also in relation to the U or U/CC states of mind when available in the selected studies. Data extraction was completed independently by the same two judges (JT/CU). Interrater agreement was assessed on almost half of the articles

( $k = 9$ ), and the remaining ten were divided between both judges. Interrater agreement was calculated on all 114 completed cells and revealed a high level of agreement (94.74%). In case of uncertainty, the data were reviewed by two independent judges (TM/DSL).

### **Quality Assessment**

Quality assessment of studies was conducted using the AXIS appraisal tool (Downes et al., 2016), which consists of 20 questions and is specifically designed to identify potential biases in cross-sectional studies. As with data extraction, almost half of the articles ( $k = 9$ ) were evaluated by two independent judges (JT/CU), while the ten remaining articles were evenly divided between judges and assessed independently. Disagreements were discussed until consensus was reached. Interrater agreement was calculated on all 180 completed cells and revealed a high level of agreement (95.56%).

## **Results**

### **Description of Included Studies**

A summary of the characteristics (aims, setting and design, sample, measures) and main findings of each study ( $k = 19$ ) can be found in Table 1. Although there are 19 studies included in the review, some were published as part of the same research project, resulting in the inclusion of nine independent samples. Most studies included in the synthesis were conducted in the United States ( $k = 10$ ; 53%). The remaining studies were conducted in Italy (26%), Canada (10,5%), and the United Kingdom (10,5%). In addition, most studies were cross-sectional in design (84%), apart from one longitudinal study (6-month interval;

Table 1  
*Data Extraction of studies included in the synthesis*

| Authors & year                          | Setting And design     | Aim(s) of study   | Sample  | Measures related to HH variable   | Relevant findings (HH)   | Relevant findings (U)  | <u>#Study classification</u>   |
|---|------------------------|---|---|---|--|--|--|
| Barone et al. (2014) <sup>1</sup>       | Italy, cross-sectional | Examine the effect of descriptive and attachment derived risk factors in predicting filicide.         | <ul style="list-style-type: none"> <li>- N=23 Filicidal mothers</li> <li>- Mean age: 34.13</li> <li>- HH: 65.2%; U/CC: 60.9%</li> <li>- SES: 39.1% low; 56.5% moderate; 4.3% high.</li> <li>- N=37 Mentally ill mothers</li> <li>- Mean age: 33.54</li> <li>- HH: 27%; U/CC: 27%</li> <li>- SES: 27% low, 64.9% moderate, 8.1% high.</li> <li>- N=61 Normative population</li> <li>- Mean age: 34.11</li> <li>- HH: 6.6%; U/CC: 14.8%</li> <li>- SES: 8.2% low, 75.4% moderate, 16.4% high</li> </ul> | <ul style="list-style-type: none"> <li>- Structural Clinical Interview for DSM-IV Axis I Disorders.</li> <li>- Traumatic events derived from clinical reports and AAI transcripts.</li> <li>- AAI: traditional coding system and HH coding system.</li> </ul>   | <ul style="list-style-type: none"> <li>- HH states of mind were found to contribute significantly to the distinction between the mentally ill and filicide groups, after controlling for descriptive and attachment-based risk factors.</li> <li>- HH states of mind significantly contributed to the prediction of filicide.</li> </ul> | <ul style="list-style-type: none"> <li>- U/CC did not contribute significantly to the prediction of filicide.</li> </ul>                 | <ul style="list-style-type: none"> <li>- Consequence for the parent-child relationship</li> </ul>                      |
| Barone and Carone (2020) <sup>1</sup>   | Italy, cross-sectional | Examine the effects of HH states of mind and RF in the relation between CA&N and filicide likelihood. | <ul style="list-style-type: none"> <li>- N=23 Filicidal mothers</li> <li>- Mean age: 34.13</li> <li>- HH: 65.2%</li> <li>- SES: 39.1% low; 56.5% moderate; 4.5% high.</li> <li>N=23 Non-Filicidal mothers</li> <li>- Mean age: 35.82</li> <li>- HH: 21.7%</li> <li>- SES status: 30.4% low; 56.5% medium; and 13.1% high.</li> </ul>  | <ul style="list-style-type: none"> <li>- Structural Clinical Interview for DSM-IV Axis I Disorders.</li> <li>- Severity of childhood abuse (7-point scale derived from CTS-2, TSS and CTES-R).</li> <li>- Maternal childhood history of separation or loss (3-point scale).</li> <li>- AAI: HH coding system and RF coding system.</li> </ul> | <ul style="list-style-type: none"> <li>- Higher HH scores mediated the relation between CA&amp;N and filicide likelihood. This relation was further moderated by lower levels of RF.</li> </ul>  | <ul style="list-style-type: none"> <li>N/A</li> </ul>  | <ul style="list-style-type: none"> <li>- Consequence for the parent-child relationship</li> <li>- Predictor</li> </ul> |
| Barone and Frigerio (2009) <sup>2</sup> | Italy, cross-sectional | Investigate disorganized attachment as a potential risk factor for parental maltreatment.             | <ul style="list-style-type: none"> <li>- N=10 maltreating mothers</li> <li>- Mean age: 27.4</li> <li>- HH: 70%; U/CC: 40%</li> <li>- SES: 20% no occupation; 60% low; 20% moderate</li> <li>- N=10 non-maltreating mothers</li> <li>- Mean age: 35.1</li> <li>- HH: 10%; U/CC: 20%</li> <li>- SES status: 40% low; 60% moderate</li> </ul>  | <ul style="list-style-type: none"> <li>- AAI: traditional coding system and HH coding system.</li> </ul>  | <ul style="list-style-type: none"> <li>- Mothers in the maltreating group had higher proportions of HH states of mind compared to mothers in the control group.</li> </ul>   | <ul style="list-style-type: none"> <li>- Both groups did not differ according to the U/CC vs. <u>non</u> U/CC classification.</li> </ul> | <ul style="list-style-type: none"> <li>- Consequence for the parent-child relationship</li> </ul>                      |

Table 1  
*Data Extraction of studies included in the synthesis (continued)*

| Authors & year                       | Setting And design   | Aim(s) of study   | Sample  | Measures related to HH variable  | Relevant findings (HH)   | Relevant findings (U)   | *Study classification                                     |
|--------------------------------------|----------------------|---|---|--|--|---|---|
| Brumari u et al. (2013) <sup>3</sup> | USA, cross-sectional | Examine the association between anxiety disorders and quality of attachment and peer relationships.                           | - N=109 young adults and their mothers (30 had no Axis I diagnostic; 44 anxiety disorder; 35 Axis I disorder other than anxiety).<br>- Mean age: 19.9<br>- Female (young adults): 60.55%<br>- Young adults' mean HH scaled score: 4.07 to 5.29<br>- Mean overall insecure/disorganization scaled score (scaled score from 1 (autonomous/secure) to 3 (U/CC): 1.53 to 1.95<br>- SES: low to moderate | - Structural Clinical Interview for DSM-IV Axis I Disorders.<br>- Goal-Corrected Partnership in Adolescence Coding System.<br>- AAI: traditional coding system and HH coding system.   | - Young adults with anxiety disorders had higher levels of HH states of mind compared to young adults with no Axis I diagnosis. This relation was non-significant for young adults with other Axis I disorders, but no anxiety.  | - Young adults with anxiety disorders had higher levels of overall insecurity/disorganization compared to young adults with no Axis I diagnosis. This relation was non-significant for young adults with other Axis I disorders but no anxiety. | - Correlate   |
| Byun et al. (2016) <sup>3</sup>      | USA, cross-sectional | Investigate if attachment disorganization mediates the relation between childhood trauma and dissociation in young adulthood. | - N=112 young adults<br>- Mean age: 20<br>- Female: 60%<br>- HH: 50.9%; U: 19.6%<br>- SES: low to moderate  | - Socioeconomic risk (score from 0-3)<br>- Dissociative Experiences Scale.<br>- Severity of childhood abuse (7-point scale derived from CTS-2, TSS and CTES-R).<br>- AAI: traditional coding system and HH coding system.  | - Higher levels of HH states of mind were associated with higher levels of socioeconomic risk, lower education level, and higher levels of dissociative symptoms.<br>- HH states of mind were associated with severity of abuse.<br>- HH states of mind did not mediate the relation between childhood trauma and dissociation.  | - Higher levels of U loss or trauma were not related to dissociative symptoms.<br>- Only U trauma was associated with severity of abuse.<br>- U trauma did not mediate the link between childhood trauma and dissociation.                      | - Correlate<br>- Predictor                                |
| Finger (2006) <sup>4</sup>           | USA, cross-sectional | Examine if attachment representations and psychopathological symptoms are related to infant attachment disorganization.       | - N= 62 mothers in methadone treatment<br>- Mean age: 32.36<br>- HH: 56%; U: 50%<br>- SES: low<br><br>- N=87 mothers from the community<br>- Mean age: 26.82<br>- HH: 39%; U: 50%<br>- SES: low   | - Ainsworth Strange Situation procedure.<br>- The Millon Clinical Multiaxial Inventory-III.<br>- The Dissociative Experiences Scale.<br>- History of trauma (11 trauma categories assessed by five trauma questionnaires).<br>- AAI: traditional coding system and HH coding system. | - HH states of mind were significantly associated with infant disorganization and cumulative child and adult trauma.<br>- Child trauma was a better predictor of HH states of mind than adult trauma.<br>- Methadone using mothers had higher proportions of HH states of mind compared to mothers in the comparison group.<br>- HH states of mind were significantly related to Antisocial, Sadistic, Masochistic, Schizotypal, and Borderline personality disorder scales. | - U was not significantly associated with infant disorganization.<br>- Only U Abuse (and not U Loss) was significantly associated with maternal HH states of mind.<br>- Methadone using mothers had higher mean U scores.                       | - Correlate<br>- Predictor<br>- Consequence for the child |

Table 1  
*Data Extraction of studies included in the synthesis (continued)*

| Authors & year                      | Setting And design     | Aim(s) of study   | Sample   | Measures related to HH variable   | Relevant findings (HH)   | Relevant findings (U)  | *Study classification  |
|-------------------------------------|------------------------|---|--|---|--|--|--|
| Finger et al. (2015) <sup>3</sup>   | USA, cross-sectional   | Examine the relation between attachment disorganization in adulthood and BPD and ASPD features. | - N=103 young adults<br>- Mean age: 19.9<br>- Female: 67%<br>- Mean HH scaled score: 4.72<br>- Mean U scaled score: 2.44<br>- SES: low to moderate   | - Structural Clinical Interview for DSM-IV Axis II Disorders.<br>- Socioeconomic risk (score from 0-3)<br>- Severity of childhood abuse (7-point scale derived from CTS-2, TSS and CTES-R).<br>- AAI: traditional coding system and HH coding system. | - HH states of mind were associated with severity of abuse, BPD and ASPD symptoms, the presence of an anxiety disorder, and demographic risk.<br>- HH states of mind mediated the relation between severity of abuse and BPD or ASPD features.   | - Only U trauma (not U loss) was related to HH states of mind.<br>- Only U trauma was associated with BPD features. U was not associated with ASPD features nor other disorders (e.g., anxiety, depression, substance abuse).<br>- U did not mediate the relation between severity of abuse and BPD/ASPD features. | - Correlate<br>- Predictor                                     |
| Frigerio et al. (2013) <sup>2</sup> | Italy, cross-sectional | Investigate HH states of mind among a low-risk sample and two at-risk samples of women.         | - N=67 Low-risk sample<br>- Mean age: 35.5<br>- Female: 100%<br>- HH: 9%; U/CC: 15%<br>- SES: middle-high<br><br>- N=20 Poverty sample<br>- Female: 100%<br>- HH: 20%; U/CC: 10%<br>- SES: low<br><br>- N=15 Maltreatment risk sample<br>- Female: 100%<br>- HH: 60%; U/CC: 33%  | - AAI: traditional coding system and HH coding system.  | - Mothers from the maltreatment risk sample had higher levels of HH states of mind compared to the low-risk sample and poverty sample.<br>- The following codes distinguished women with a HH state of mind from women without a HH state of mind: <i>Global Devaluation of a Hostile Caregiver</i> ; <i>Identification with a Hostile Caregiver</i> ; <i>Identification with a Helpless Caregiver</i> ; <i>Ruptured Attachments in Adulthood</i> ; <i>Affect Driven Confused Speech</i> , <i>Blocking out</i> . | - HH and U classifications were only moderately associated.<br>- The three samples did not significantly differ in terms of the U/CC classification.   | - Consequence for the parent-child relationship                |
| Guarino et al. (2011) <sup>4</sup>  | Italy, cross-sectional | Evaluate the effect of maternal HH states of mind on the quality of mother-child interactions.  | N=20 mother-child dyads at risk for maltreatment<br>- Mean age (mothers): 27.6 years<br>- Mean age (children): 24.7 months<br>- Female (children): 45%<br>- HH (mothers): 40%; U/CC (mothers): 35%<br>- SES: 60% of women unemployed, 25% of the sample reported 7 to 8 risk factors, 50% had between 5 and 6, and one person (10%) had 3 risk factors | - Feeding Scale-Observational Scale for mother-infant interaction during feeding.<br>- AAI: traditional coding system and HH coding system.   | - HH mothers demonstrated more difficulty during interactions with their child and more negative affects.<br>- Most women with a HH state of mind had several concomitant risk factors (between 6 and 7).<br>- HH mothers vs. non-HH mothers differed in terms of <i>Interactive conflict</i> and <i>Affective state of the dyad</i> , whereas no significant differences emerged in the <i>Maternal affective state</i> and <i>Behaviors of child food refusal scales</i> .                                     | - Of the eight women classified as HH, three were rated U/CC with respect to attachment.   | - Consequence for the parent-child relationship<br>- Correlate |

Table 1  
*Data Extraction of studies included in the synthesis (continued)*

| Authors & year                        | Setting And design   | Aim(s) of study  | Sample   | Measures related to HH variable  | Relevant findings (HH)  | Relevant findings (U)  | *Study classification  |
|---------------------------------------|----------------------|--|--|--|---|--|--|
| Honde (2007) <sup>4</sup>             | USA, cross-sectional | Investigate if disrupted maternal affective communication is related to maternal HH states of mind and infant disorganization. | - N=149 mother/infant dyads.<br>- Mothers mean age: 29.12<br>- HH: 45%<br>- U: 44%   | - Disrupted maternal affective communication with infant: coded using the AMBIANCE coding system.<br>- Cumulative risk (5 risk factors).<br>- AAI: traditional coding system and HH coding system.   | - Mothers with a HH state of mind had higher levels of disrupted maternal affective communication compared to non-HH mothers, evidenced by more affective communication errors, role-boundary confusion, disorientation, and intrusiveness/negativity.<br>- Mothers in the Hostile subtype showed more intrusiveness/negativity. Mothers in the Mixed or Helpless subtypes showed more role boundary confusion and disoriented behavior.<br>- HH states of mind were associated with infant disorganization even after controlling for contextual risk factors. | - U states of mind were not related to higher levels of disrupted affective communication.   | - Consequence for the child<br>- Consequence for the parent-child relationship |
| Lyons-Ruth et al. (2007) <sup>6</sup> | UK, cross-sectional  | Examine if women with BPD differ from women with dysthymia in terms of HH states of mind.                                      | - N=12 borderline patients<br>- Mean age: 35.2<br>- Female: 100%<br>- HH: 100%; U: 75%<br>- SES: social class 1 to 5<br><br>- N=11 dysthymic patients<br>- Mean age: 32.4<br>- Female: 100%<br>- HH: 55%; U: 17%<br>- SES: social class 1 to 5 | - Occurrence of physical or sexual abuse to age 16 (coded from the AAI).<br>- AAI: traditional coding system and HH coding system.   | - Three HH indicator codes (i.e., <i>globally devaluing representations, Identification with a hostile caregiver, Punitive or caregiving stance towards parents in childhood</i> ) were more frequent among BPD patients compared to dysthymic patients.  | - A moderate association was found between the HH and U classifications.<br>- Only one HH indicator code (i.e., <i>sense of self as bad</i> ) was associated with the U classification.  | - Correlate  |
| Lyons-Ruth et al. (2003) <sup>3</sup> | USA, longitudinal    | Examine the relations between childhood trauma, maternal states of mind and infant disorganization.                            | - N=45 mothers and their children<br>- Female (children): 38%<br>- HH (mothers): 51%<br>- SES: low   | - Demographic risk (sum of six factors).<br>- Ainsworth Strange Situation procedure (at 12 and 18 months).<br>- Severity of childhood trauma (5-point scale).<br>- Maternal history of separation or loss (4-point scale).<br>- AAI: traditional coding system and HH coding system. | - HH levels were not significantly associated with demographic risk factors but were related to the severity of mothers' childhood trauma.<br>- Mothers exposed to violence and sexually abused mothers differed significantly from those not exposed to violence in overall HH status.<br>- HH state of mind was the only significant predictor of infant disorganization at 18 months, which was not the case at 12 months.   | - The HH and U classifications were not related.<br>- Only severity of parental U loss (not U trauma) was associated with HH states of mind.<br>- Maternal U state of mind significantly contributed to infant disorganization at 12 months, but not at 18 months. | - Consequence for the child<br>- Predictor<br>- Correlate                      |

Table 1  
*Data Extraction of studies included in the synthesis (continued)*

| Authors & year                        | Setting And design      | Aim(s) of study  | Sample  | Measures related to HH variable  | Relevant findings (HH)   | Relevant findings (U)  | *Study classification   |
|---------------------------------------|-------------------------|--|---|--|--|--|---|
| Lyons-Ruth et al. (2005) <sup>3</sup> | USA, cross-sectional    | Develop and validate the HH coding system in the hopes of identifying additional predictors of infant disorganization.   | - N=45 mothers and their children<br>- Female (mothers): 100%<br>- Female (children): 38%<br>- HH (mothers): 51%; U (mothers): 29%; CC (mothers): 13%<br>- SES: low                             | - Demographic risk (sum of five factors).<br>- Ainsworth Strange Situation procedure.<br>- Disrupted maternal affective communication with infant: coded using the AMBIANCE coding system.<br>- AAI: traditional coding system and HH coding system. | - HH levels were not significantly associated with demographic risk factors.<br>- HH states of mind were significantly associated with infant disorganization and maternal disrupted affective communication with the infant. The relation between HH states of mind and infant disorganization was non-significant after controlling for disrupted communication.   | - The HH and U or U/CC classifications were not related.<br>- Maternal U states of mind were not significantly associated with the level of infant disorganized attachment behavior but were marginally associated with disrupted affective communication. | - Consequence for the child<br>- Consequence for the parent-child relationship<br>- Correlate |
| Milot et al. (2014) <sup>7</sup>      | Canada, cross-sectional | Examine HH states of mind among neglecting and at-risk of neglecting mothers.  | - N=70 neglecting mothers and at-risk of neglecting mothers.<br>- Mean age: 29<br>- HH: 64% (mean scaled score: 6.7)<br>- SES: low  | - The Childhood Trauma Questionnaire - short version.<br>- AAI: HH coding system.  | - Neglecting mothers and at-risk of neglecting mothers did not differ in terms of HH states of mind.<br>- Childhood trauma was more prevalent among HH mothers than non-HH mothers. Mothers who experienced more forms of maltreatment had higher HH scores.<br>- HH mothers reported significantly more childhood abuse (emotional, sexual, physical) and neglect (physical) than non-HH mothers.   | N/A  | - Predictor   |
| Obsuth et al. (2014) <sup>3</sup>     | USA, cross-sectional    | Examine the link between disorganized states of mind and young adults' behaviors during interactions with their mothers. | - N=120 young adults and their mothers<br>- Mean age: 19.9<br>- Female (young adults): 57.5%<br>- HH (young adults): not specified; U (young adults): 16.7% (n=114)<br>- SES: predominantly low | - Goal-Corrected Partnership in Adolescence Coding System.<br>- AAI: traditional coding system and HH coding system.   | - Young adults' HH states of mind were significantly related to collaboration and young adults' punitive behavior toward the parent, which was not the case for Disorientation or Caregiving/Role Confusion.<br>- After controlling for punitive interaction, collaboration was not a significant predictor of HH states of mind.<br>- After controlling for collaboration, punitive interaction was not a significant predictor of HH states of mind. | - Young adults' U states of mind were significantly related to collaboration.<br>- U states of mind were not significantly associated with punitive control or Caregiving/Role Confusion.  | - Correlate   |

Table 1  
*Data Extraction of studies included in the synthesis (continued)*

| Authors & year                           | Setting And design      | Aim(s) of study  | Sample  | Measures related to HH variable  | Relevant findings (HH)  | Relevant findings (U)  | *Study classification                           |
|--|-------------------------|--|---|--|---|--|---|
| Sauvé et al. (2021) <sup>8</sup>         | Canada, cross-sectional | Investigate whether HH states of mind moderate the association between parents' past trauma and child behavior problems.   | - N=61 parent-child dyads whose child was maltreated or at high-risk of maltreatment<br>- Child mean age: 41.7 months<br>- Parental mean age: 27 years<br>- Female (children): 36%<br>- Female (parents): 95%<br>- HH (parents): 66%<br>- SES: 68% below 25,000\$/year, 24% between 25,000 and 50,000\$/year, 8% at or above 50,000\$/year.       | - Child Behavior Checklist questionnaire.<br>- Childhood Trauma Questionnaire-short version.<br>- AAI: HH coding system. | - Severe childhood trauma was more prevalent among parents with a HH state of mind compared to parents without a HH state of mind.<br>- HH states of mind significantly predicted externalizing child behaviors, which was not the case for internalizing problems.<br>- Parental HH states of mind moderated the relation between parents' history of trauma and child behavior problems (both externalizing and internalizing).<br>- The severity of parents' childhood trauma was associated with the extent of child behavior problems, but only for parents in the HH group. | N/A  | - Consequence for the child<br>- Predictor      |
| Terry et al. (2021) <sup>9</sup>         | UK, cross-sectional     | Examine the link between maternal HH states of mind assessed during pregnancy and child removal status before age 2 due to maltreatment or risk of maltreatment. | - N= 13 mothers whose infants were removed by social care before the age of 2<br>- Mean age: 19.8<br>- Infant age at time of removal: 7.17 months<br>- Mean HH scaled score: 5.7<br>- SES: low<br><br>- N=13 mothers whose infants remained in their care throughout the course of the intervention.<br>- Mean HH scaled score: 3.5<br>- SES: low | - Pregnancy Interview—Revised.<br>- AAI: HH coding system (adapted for the Pregnancy Interview).                         | - Higher HH scores were found among mothers whose infant was removed from their custody between the ages of 0 and 2.<br>- Mothers' HH classification was significantly associated with child removal status.  | N/A  | - Consequence for the parent-child relationship |
| Vulliez-Coady et al. (2013) <sup>1</sup> | USA, prospective        | Examine the association between parental disorganized states of mind and role confusion.   | - N=51 mothers and their young adult child.<br>- Parental mean age: 45.<br>- Young adults' mean age: 19.9.<br>- Female (young adults): 37.25%.<br>- HH (mothers): 61.8%; U (mothers): 35.3%<br>- SES: low-income  | - The Parental Assessment of Role Confusion Scale.<br>- AAI: traditional coding system and HH coding system.             | - HH states of mind were significantly associated with PARC role confusion: HH mothers had a mean PARC score of 3.99 whereas non-HH mothers had a mean score of 2.18.<br>- PARC role confusion was significantly associated with Caregiving/Role confusion during mother-child interactions.  | - PARC role confusion was not associated with maternal U state of mind.<br>- Higher levels of U loss (not U abuse) were significantly related to more PARC role confusion. | - Consequence for the parent-child relationship |

Table 1  
*Data Extraction of studies included in the synthesis (continued)*

| Authors & year             | Setting And design | Aim(s) of study   | Sample   | Measures related to HH variable   | Relevant findings (HH)  | Relevant findings (U)  | *Study classification   |
|----------------------------|--------------------|---|--|---|---|--|---|
| Yellin (2001) <sup>3</sup> | USA, prospective   | Examine the relation between parental disorganized states of mind and infant disorganized attachment behaviors. | - N= 35 mothers and infants.<br>- Mothers mean age at the time of birth of their first child: 21.4.<br>- SES: low-income.<br>- Female (infants): 45.7%.<br>- Mean HH scaled score (mothers): 5.4.<br>- Mean U scaled score (mothers): 2.9. | - Ainsworth Strange Situation procedure (at 18 months).<br>- Frightened/Frightening maternal behavior.<br>- Disrupted maternal affective communication with infant: coded using the AMBIANCE coding system.<br>- Demographic risk (sum of six factors).<br>- Center for Epidemiological Studies Depression scale.<br>- AAI: traditional coding system and HH coding system. | - HH levels were not significantly associated with infant disorganization.<br>- HH levels did not differ between the disorganized and organized groups of children.<br>- There was no significant relation between HH levels and maternal behavior on either of the coding systems.<br>- The four groups of mothers (U, not HH; HH, not U; U and HH; neither U nor HH) did not differ significantly in levels of risk, depression, or infant disorganization. | - U state of mind was not significantly related to infant disorganization.<br>- Mothers classified differently in terms of U states of mind did not differ significantly in levels of risk, depression, or infant disorganization. | - Consequence for the parent-child relationship<br>- Consequence for the child<br>- Correlate |

5%) and two prospective studies (11%). Most studies were conducted with at-risk populations. Eight studies included a comparison group (42%), although one of them did not analyze groups separately. Furthermore, a majority of studies (84%) used both the HH State of Mind Coding System and the Adult Attachment Scoring and Classification System (Main et al., 2002) to assess disorganized attachment (HH and U or U/CC states of mind) in adulthood. In terms of sample size, eight studies (42%) had 50 or fewer individuals or parent-child dyads, three had between 51 and 100 (16%), and eight had more than 100 (42%). HH states of mind were assessed in predominantly female adult samples (> 50% of participants), apart from one study in which the participants were predominantly male. Finally, most of the studies were conducted with Caucasian participants (two were conducted with predominantly African American participants). In terms of study classification, seven studies investigated predictors of HH states of mind, such as childhood trauma, 16 investigated the effect of HH states of mind on the child ( $k = 6$ ) or the parent-child relationship ( $k = 10$ ) and ten investigated correlates of HH states of mind, such as mental health problems or level of sociodemographic risk.

In terms of the methodological quality of the reviewed studies ( $k = 19$ ), all were considered reliable as minimal bias was detected. Of the 20 questions included in the AXIS tool, each study scored 16 or higher, representing at least 16 correct answers (e.g., the reference population was clearly defined, the measures used were validated). Information regarding the quality assessment of studies is presented in Supplemental Materials, Table S1.

### **Hostile-Helpless States of Mind and Level of Psychosocial Risk**

Based on the analysis of descriptive data, HH prevalence rates appear to increase as the level of risk in populations increases. In normative samples, the proportion of HH states of mind is below 10% (Barone et al. 2014 [ $n = 61$ ]; Frigerio et al. 2013 [ $n = 67$ ]), while it rises to 27% in adults diagnosed with an anxiety or mood disorder (Barone et al. 2014 [ $n = 37$ ]), and to 51% and 100% in adults with personality disorder features (Finger et al. 2015 [ $n = 52$ ]) or a personality disorder diagnosis (Lyons-Ruth et al. 2007 [ $n = 12$ ] ). Among maltreating mothers or mothers at risk of child maltreatment [ $n$  from 10 to 70], prevalence rates range from 40% to 75% (Barone & Frigero, 2009; Barone & Carone, 2020; Frigerio et al. 2013; Guarino et al., 2011; Milot et al. 2014; Terry et al., 2021).

### **Hostile-Helpless States of Mind and Sociodemographic Risk**

As part of a longitudinal project involving mother-child dyads ( $N = 76$ ), a total of four studies documented the relation between HH states of mind and sociodemographic risk variables. Families were followed from infancy (18 months) to late adolescence/young adulthood<sup>6</sup>. Yellin (2001) initially found that there was no link between the level of sociodemographic risk ( $N = 35$ ) and mothers' HH state of mind, which was also observed when the sample included 10 additional participants (Lyons-Ruth et al., 2003;  $N = 45$ ). In both studies, sociodemographic risk was composed of six factors: 1) African-American or Hispanic mother; 2) no high-school diploma; 3) single parent; 4) parenthood before age 20; 5) government assistance; and 6) multiple children under the age of six. Almost 20

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<sup>6</sup> For ease of reading, these participants are referred to as "young adults" in the remainder of the article.

years later, children from the original sample ( $N = 76$ ) were contacted and asked to participate in the follow-up phase of the longitudinal study. Approximately 50 young adults (mean age: 19.9 years) agreed to participate and were matched to other individuals to expand the sample size to over 100 participants (Byun et al., 2016; Finger et al., 2015). These last two studies, using this sample of over 100 young adults, revealed a significant association between young adults' HH state of mind and the level of sociodemographic risk of the family of origin, assessed according to 3 factors (annual household income below \$40 000, mother had no live-in partner, mother had no post-secondary education). Considering that all the studies on sociodemographic risk were based on the same original sample, it is likely that the first two studies (Yellin, 2001; Lyons-Ruth et al., 2003) lacked the statistical power to reveal a significant association.

### **Hostile-Helpless States of Mind and Adult Psychological Functioning**

Given that HH states of mind involve a disruption in the subject's mental representations, several researchers examined this variable in relation to adult psychological functioning ( $k = 7$ ). A number of studies found an association between HH states of mind and anxiety/mood disorders. For instance, Barone et al. (2014) revealed that HH states of mind were more prevalent among mentally ill mothers (27%;  $n = 37$ ) than mothers from the normative population (6.6%;  $n = 61$ ). Higher HH indices were also found in young adults who suffer from an anxiety disorder compared to those without any Axis I diagnosis (Brumariu et al., 2013). Yellin (2001), on the other hand, found no relation between low-income mothers' HH states of mind and their levels of depression

( $N = 35$ ). Other studies found that HH scores and indicators were related to Borderline Personality Disorder (BPD; Finger et al., 2015; Lyons-Ruth et al., 2007) and Antisocial Personality Disorder features (ASPD; Finger et al., 2015), as well as to sadistic, masochistic and schizotypal personality disorder traits (Finger, 2006). Interestingly, no significant association was found with ASPD when U indicators were considered instead of the HH scaled scores, and only Unresolved trauma (not Unresolved loss) was related to BPD features (Finger et al., 2015). Lastly, significant associations were found between HH states of mind and dissociative symptoms (Byun et al., 2016) as well as substance abuse (Finger, 2006). Considering the cross-sectional design of these studies, it is not clear whether HH is a precursor or a consequence of these symptoms. Nevertheless, these findings suggest that having a HH state of mind is significantly related to psychological disorders.

### **Hostile-Helpless States of Mind and the Intergenerational Transmission of Trauma**

The results of several studies show associations between HH states of mind and childhood trauma ( $k = 7$ ), dysfunctional parent-child interactions ( $k = 5$ ), maltreating parenting behaviors towards the child ( $k = 5$ ), infant/child disorganization ( $k = 4$ ) and child behavior problems ( $k = 1$ ), supporting the hypothesis that HH states of mind may play a role in the intergenerational transmission of maladaptation. These studies represent 84% (16/19) of the references included in the review.

### ***Hostile-Helpless States of Mind and Childhood Trauma***

Whether researchers derived a score of childhood trauma from clinical reports, AAI transcripts, multiple self-reported questionnaires or a single self-reported questionnaire, and whether they used a dichotomous trauma score (absence vs. presence) or a severity score on a continuous scale, childhood traumatic experiences were significantly associated with HH states of mind in all studies ( $k = 7$ ) investigating this relation. Specifically, HH states of mind have been associated with overall severity of violence, abuse and neglect (Barone & Carone, 2020; Byun et al., 2016, Finger et al., 2015; Lyons-Ruth et al., 2003; Sauvé et al., 2021), as well as with maternal abuse alone (Finger et al., 2015). Milot and colleagues (2014) examined the differential effects of five types of maltreatment in a sample of low-income mothers ( $N = 70$ ) reported for physical neglect (or risk of neglect). Those with higher HH scores more frequently reported experiences of physical neglect and abuse (physical, emotional, and sexual) in their childhood than mothers with lower HH scores. Additionally, more various types of maltreatment were reported in the HH group compared to non-HH mothers. The results of another study found that childhood trauma is a better predictor of HH states of mind than adult trauma, and that childhood family violence is a better predictor of HH classification than childhood physical abuse (Finger, 2006). Finally, in a study by Lyons-Ruth and colleagues (2003), childhood trauma was significantly associated with four HH indicators, that is, *Identification with a Hostile Caregiver, Laughter at Pain, Global Devaluation of a Caregiver and Sense of Self as Bad.*

### ***Hostile-Helpless States of Mind and Parent-Child Interactions***

Several studies have investigated whether HH states of mind interfere with parent-child interactions ( $k = 6$ ). Although most of these studies ( $k = 4$ ) analyzed data from the same longitudinal sample at different points in time, the measures used to assess the quality of interactions vary from one study to another and show the extent to which HH states of mind can be related to various dimensions of the parent-child relationship. In a study by Lyons-Ruth, Yellin, et al. (2005), mothers' HH states of mind were significantly related to disrupted parent-infant communications ( $N = 45$ ), a finding that did not reach significance when the sample size was smaller ( $N = 35$ ; Yellin, 2001). Interactions were coded using the Atypical Maternal Behavior Instrument for Assessment and Classification observation grid (AMBIANCE; Bronfman et al., 1999), which is used to screen for disturbances in parent-child emotional communication. The scale includes five dimensions: 1) errors in affective communication; 2) role confusion; 3) intrusiveness; 4) frightened/disoriented behaviors; and 5) withdrawal behaviors. In Lyons-Ruth, Yellin, et al.'s study (2005) study, only a marginal association was found between disrupted affective parent-infant communications and mothers' U states of mind. This relation decreased when both U and CC were considered. Participants in these studies were followed longitudinally to replicate the findings once they had reached young adulthood (mean age: 19.9). In one study, mothers in the HH group had scores almost twice as high as mothers in the non-HH group on a representational measure of parental role confusion which, in turn, was associated with caregiving/role-confusion behaviors during dyadic young adult-mother interactions (Vulliez-Coady et al., 2013). Conversely, the association

between role confusion and mother's U state of mind was non-significant (Vulliez-Coady et al., 2013). In another study, Obsuth et al. (2014) examined the association between young adults' HH states of mind and how they engage in interactions with their mother in a non-structured task as well as when discussing a topic of disagreement. Interactions were coded using the Goal-Corrected Partnership in Adolescence Coding System (GPACS; Lyons-Ruth, Hennighausen, et al., 2005), which measures the young adult's punitive and caregiving control towards the parent. Results showed that young adults in the HH group displayed significantly less collaboration and more punitive control when interacting with their mother compared to non-HH participants.

In another study, Honde (2007) examined the quality of interactions in a high-risk sample of 149 mother-infant dyads who were predominantly African American. Findings also revealed that mothers in the HH group had higher scores for disrupted affective communications on the AMBIANCE measure, evidenced by more affective communication errors, role-boundary confusion, disorientation, and intrusiveness/negativity when interacting with their child. These findings did not reach significance in relation to U states of mind. Additional analyses revealed that the hostile subtype was associated with greater intrusiveness/negativity, whereas the mixed/helpless subtype was associated with greater role/boundary confusion and dissociative/disorganized behavior during mother-infant interactions (Honde, 2007). Finally, a study conducted with 20 Italian mother-child dyads revealed that mothers with

a HH state of mind exhibited more difficulties and negative affects during interactions with their child (mean child age: 24 months; Guarino et al. 2011).

### ***Hostile-Helpless States of Mind and Maltreating Parenting Behaviors***

Given that HH states of mind have been linked to both traumatic childhood experiences and disrupted parent-child interactions, researchers examined whether they might also be implicated in child maltreating behaviors. Frigerio et al. (2013) investigated the prevalence of HH states of mind in a low-risk sample and two at-risk samples and found that women in the maltreatment risk group had higher levels of HH states of mind than women from both the poverty sample and the low-risk sample. Women in the maltreatment risk group were also more likely to be classified as HH than women in the other two groups, a finding that was found to be non-significant using the U/CC classification. Higher proportions of HH states of mind were also found in a sample of mothers ( $n = 10$ ) monitored by child protection services compared to mothers ( $n = 10$ ) in the control group (Barone & Frigerio, 2009). Another study reported high prevalence rates in neglecting mothers and mothers at-risk of neglect (Milot et al., 2014 [ $N = 70$ ]). More recently, Terry et al. (2021) examined the relation between HH states of mind and the removal from home of children monitored by Child Protection Services. Mothers' HH state of mind was coded from the Pregnancy Interview (Slade, 2011), using an adapted version of the HH coding system. The authors found that mothers' HH status, assessed during pregnancy, was significantly associated with child removal prior to age 2. These results were significant whether the HH variable was measured continuously or

categorically. In another cross-sectional study conducted in Italy, Barone et al. (2014) examined the contribution of different risk factors in the study of filicide, the homicide of a child by a parent. The sample of 121 women included three groups: women from the general population, women with a mental health diagnosis, and women who had committed a filicide. Results showed a higher proportion of HH states of mind in the filicidal and mental illness groups. In the filicidal group, HH states of mind were identified in 65.2% of mothers. Findings reveal that the combination of HH states of mind and risk factors (e.g., low socioeconomic status, past traumatic events, mental health diagnosis) significantly contributed to predicting filicide, whereas the combination of mothers' U/CC states of mind and risk factors did not. More recently, Barone and Carone (2020) used a subsample of this first study to examine the mediating effects of HH states of mind and reflective functioning in the relation between childhood maltreatment and the risk of filicide. They found that mothers' HH states of mind mediated this relation, which was further amplified by lower levels of reflective functioning.

### ***Hostile-Helpless States of Mind and Child Attachment and Adaptation***

Five studies have examined the intergenerational transmission of disorganized attachment from the perspective of HH states of mind, three of which were conducted with the same sample (Lyons-Ruth et al., 2003; Lyons-Ruth, Yellin, et al., 2005; Yellin, 2001). Lyons-Ruth and colleagues (2003 [ $N = 45$ ], 2005 [ $N = 45$ ]) found that only mothers' HH states of mind, as opposed to U states of mind, were a significant predictor of child disorganization at 18 months. The study revealed that this relation was partly mediated by

a disturbed affective communication between the mother and her child (Lyons-Ruth, Yellin, et al., 2005). When the sample size was smaller ( $N = 35$ ) no significant results were found (Yellin, 2001).

The relation between maternal HH states of mind and child/infant attachment disorganization was also found to be significant in at-risk and ethnic-minority samples (Finger, 2006; Honde 2007). Conversely, the relation between mothers' U states of mind and disorganized infant attachment was non-significant (Finger, 2006). This study also investigated the association between maternal HH subtypes (hostile vs. mixed/helpless) and disorganized infant attachment subtypes, but found no significant relation (Finger, 2006). In a recent Canadian study, Sauvé et al. (2021) examined the relation between parental childhood trauma, HH states of mind, and child behavior problems. In total, 61 parents (95% mothers) of predominantly low socioeconomic status and their child (mean age: 41 months) participated in the study, most of whom ( $n = 50$ ) were recruited through Child Protection Services. Results revealed that the HH classification was a significant predictor of externalizing problems, but not internalizing problems. Furthermore, the HH classification was found to be a significant moderator of the relation between parents' past trauma and child internalizing and externalizing problems: among parents with a HH state of mind, more severe childhood maltreatment exposure was related to higher levels of child behavior problems, which was not the case among non-HH parents (Sauvé et al., 2021).

## Discussion

This review aimed to provide a summary of evidence related to HH states of mind and to identify future areas of research. A total of 19 studies conducted in four different countries were included in the review, all of which provide empirical evidence to support the validity of the HH classification system in capturing disorganized attachment representations among various at-risk populations. Individuals with a HH state of mind have difficulty integrating their negative childhood attachment experiences in a coherent manner, resulting in contradictory evaluations of attachment figures during the AAI (Lyons-Ruth & Jacobvitz, 2016). For example, a person may report being very close to an attachment figure that is described as globally malevolent/hostile or helpless/abdicating. These individuals are unable to reflect on these pervasive contradictions and maintain representations of themselves and others that are tainted by their negative childhood experiences (Lyons-Ruth et al., 1995/2006/2011).

Results from this scoping review reveal that the HH coding system is particularly effective in detecting disorganized attachment representations among people who have experienced episodes of maltreatment. The HH coding system seems especially adapted to capture the mental representations of individuals from high-risk and clinical samples who are most at risk of perpetuating the intergenerational cycle of trauma, beyond what is being captured by the U and/or CC classifications (Lyons-Ruth, Yellin, et al., 2005). With the integration of defensive features (e.g., splitting, laughter at pain) observed in clinical populations, the consideration of both episodic and pervasive cumulative traumas, and the

evaluation of the individual's entire narrative rather than specific events of abuse and/or loss, the HH coding system offers the potential to capture features of adult disorganization that have not previously been addressed by other AAI disorganized classifications.

Taken together, findings suggest that severe experiences of childhood abuse and neglect are related to HH states of mind and that the consequences of early relational trauma are most important when combined with HH attachment representations. Indeed, results indicate that HH states of mind most strongly predict parental violence when combined with other risk factors such as low socioeconomic status, mental illness and prior trauma (Barone et al., 2014). A recent study also found that only among parents with a HH state of mind were parents' severe childhood maltreatment experiences related to internalizing and externalizing problems in children (Sauvé et al., 2021). Other researchers found a mediating effect of HH states of mind on the relation between childhood abuse and psychopathology traits in adulthood (Finger et al., 2015) as well as between trauma exposure and the likelihood of committing filicide (Barone & Carone, 2020), suggesting that interpersonal difficulties cannot be attributed solely to childhood maltreatment experiences, and may be best understood through the way these childhood experiences affect a person's attachment representations. Several other studies have found that a HH state of mind is predictive of infant attachment disorganization (Finger, 2006; Honde, 2007; Lyons-Ruth et al., 2003), infant removal from the family by Child Protection Services (Terry et al., 2021), disrupted mother-infant affective communication (Lyons-Ruth, Yellin, et al., 2005), as well as maternal role confusion in mothers' representations

of their relationship with their adult child (Vulliez-Coady et al., 2013). HH states of mind have also been associated with mental health problems, including personality disorder features (Finger et al., 2015), anxiety disorders (Brumariu et al., 2013), and dissociative symptoms (Byun et al., 2016). Results from this scoping review therefore suggest that HH states of mind do not simply reflect a symptom or outcome of early traumatic experiences, but also constitute a mechanism by which early trauma leads to important consequences for the adults themselves, their children, and the parent-child relationship. Conversely, researchers found that the absence of a HH state of mind in parents with a history of trauma constitutes a protective factor for children's social development and can lower the risk of intergenerational continuity of risk (Sauvé et al., 2021), which stresses the importance of early interventions.

### **Research Gaps and Future Directions**

Although there has been an expansion of knowledge associated with HH states of mind in recent years, more longitudinal studies are needed to fully understand the factors, alongside early trauma, that may lead to its development, such as dysfunctional parent-child interactions, child attachment disorganization and exposure to parental psychological distress. In addition to replicating current findings with larger samples, studies using an ecological approach are particularly critical to further our understanding of the precursors, consequences and correlates of HH states of mind. Identifying risk factors at different levels of the family ecology could result in new attachment-based interventions aimed at promoting the positive developmental trajectory of children

exposed to problematic parenting behaviors. Given the relation between parental HH states of mind and child attachment disorganization, it is important to examine how certain factors such as the quality of the parent-child relationship may influence the transmission process. Understanding through which mechanisms attachment disorganization is transmitted from one generation to the next may increase the potential of interventions to act on these factors in the hopes of breaking the intergenerational cycle of risk and maladaptation. Interventions should include components that address HH features, and future studies should investigate whether HH states of mind influence the effectiveness of interventions, as has been found for U states of mind (Moran et al., 2008).

Considering the link between parental HH states of mind and difficulties in parent-child interactions, another avenue of research is to investigate how parents with HH states of mind understand and represent their child's needs. In this regard, it would be relevant to adapt the HH coding system for interviews that focus on parents' representations of their children, such as the *Parent Development Interview* (Slade et al., 2004). This would provide insight as to how these representations relate to the parent's ability to care for the child. Future studies should also expand their focus to include school-aged children and adolescents, as all studies on HH states of mind so far have been conducted with parents and young children ( $\leq 7$  years old) or adults ( $\geq 19$  years old). Given that children's attachment representations can be assessed in middle childhood, these studies could investigate how attachment is transmitted on a representational level. Similarly, considering the small number of studies on HH states of mind with male participants ( $k =$

5/19; 26.3%), more research involving men and fathers is needed, as evidence suggests they influence children's development differently from mothers (Cabrera et al., 2014).

Given that most studies investigating HH states of mind used a cross-sectional design ( $k = 16$ ), future studies should favor a prospective approach. Studies should also pursue the investigation of the differential effects of HH classification subtypes, that is, whether hostile states of mind lead to different outcomes compared to helpless states of mind. This line of research should be pursued given that most studies investigating HH states of mind in relation to childhood maltreatment experiences, filicide, and child behavior problems in at-risk populations have reported higher proportions of parents with a Helpless stance compared to a Hostile stance (Barone & Carone, 2020; Milot et al., 2014; Sauvé et al., 2021). Finally, it would be interesting to explore the stability of HH indicators across generations, as well as whether the transmission process occurs according to the same subtype (e.g., hostile to hostile) or a different subtype (e.g., hostile to helpless).

### **Implications for Theory and Practice**

The results of this review have important implications for theory and research, as they provide additional evidence of how chronic relational trauma during childhood contributes etiologically to the development of adult HH states of mind, and how parental HH states of mind further predict child attachment disorganization. Moreover, findings reveal that attachment disorganization in adulthood not only occurs in the form of Unresolved Loss and/or Trauma but may also take the form of unintegrated attachment representations

characterized by incompatible and contradictory evaluations of attachment-related experiences (Lyons-Ruth, Yellin, et al., 2005).

The results of this review also provide insight into the contribution of adult attachment representations to adaptive functioning. Specifically, they highlight attachment disorganization, in the form of HH states of mind, as a determinant factor of psychosocial maladjustment and dysfunctional parent-child interactions. Parents who have experienced chronic relational trauma and have not yet reflected on these emotional experiences and their potential consequences may be more likely to engage in hostile and/or helpless behaviors toward their child, as the child's needs and distress signals may reactivate their own traumatic memories (Hesse and Main, 2006; Terry et al., 2021). The establishment of a hostile-helpless dyadic parent-child relational model may, in turn, interfere with the development of the child's self-regulation abilities and lead to disruptions in child adaptive functioning (Sauvé et al., 2021) and the continuity of attachment disorganization across generations (Lyons-Ruth et al., 1999).

Regarding implications for practice, results from this review provide additional evidence of the significant impacts of childhood relational trauma and reinforce the importance of early detection and intervention. Specifically, they support the need of 1) identifying individuals with a history of relational trauma, 2) screening for HH mental representations in young adulthood, and 3) implementing preventive interventions in order to foster positive developmental trajectories among vulnerable youth and reduce the

intergenerational transmission of maladaptation. Interventions should especially target adolescents and adults prior to their transition to parenthood, as well as expecting parents and young parents. As explained by Lyons-Ruth and colleagues (2004), the transition into parenthood can be challenging and overwhelming for adults who have experienced relational traumas in their past, as they must set aside their own needs to meet those of their child and are exposed to their child's daily distress signals which may cause them to relive past traumas. For this reason, interventions should focus on giving adults the opportunity to reflect on their childhood experiences, recognize the emotions associated with past trauma and address inconsistencies in their internal working models (Lyons-Ruth et al., 2007). Once they become parents, emphasis should be placed on helping parents recognize how their past experiences and current state of mind may influence the quality of the relationship with their child (Berthelot et al., 2015; Milot et al., 2014; Sauvé et al., 2021). Interventions should aim to strengthen this relationship and promote the development of sensitive parenting behaviors. Many researchers recommend using attachment-based intervention programs such as STEEP (Steps Toward Effective, Enjoyable Parenting; Egeland & Erickson, 2004), the Parallel Parent and Child Therapy (PPACT; Chambers et al., 2006) or the Attachment Video-feedback intervention (AVI; Dubois-Comtois et al., 2017; Moss, et al., 2011), which have been shown to be effective among high-risk populations.

Furthermore, results from this review support the need to invest in the development of instruments designed to capture HH indicators and screen for HH attachment

representations (Finger et al., 2015). Although the AAI is an effective screening instrument, the costs associated with training (both in regard to administrating and coding) limit its use during or prior to psychotherapy. Additional measures such as short clinical interviews with adapted assessment guidelines are needed to support clinicians in identifying patterns of disorganized attachment representations. Clinical indicators of a HH state of mind can be difficult to identify and require careful attention on behalf of the clinician in order to identify inconsistencies and contradictions in the individual's discourse that may be unacknowledged or dismissed. As a note of caution, it is also important to mention that, although HH indicators can be used as a proxy to assess parenting abilities, researchers emphasize that the purpose of screening is not to inform child welfare services about whether or not children should be removed from their family, but rather to intervene in order to optimize the quality of parent-child interactions (Terry et al., 2021).

## **Limitations**

This paper is the first to systematically review and integrate findings related to HH states of mind. This scoping review makes significant contributions to our understanding of this form of adult attachment disorganization by providing a synthesis of research on HH states of mind as a consequence of childhood relational trauma, a risk factor for maladaptive psychological functioning and a potential mediating factor in the intergenerational transmission of maladaptation, while highlighting the unique contributions of the HH construct compared to other forms of attachment disorganization.

Nonetheless, findings must be interpreted in light of certain limitations. First, although 19 studies were included in the synthesis, a number of these publications were conducted with the same sample at different points in time, resulting in the inclusion of data from only nine independent samples across articles. Second, the limited number of studies and the large scope of research questions examined in these studies resulted in the prioritization of a scoping review, which does not allow for statistical analyses. However, it is widely recognized that scoping reviews are a preliminary step to a systematic literature review and/or meta-analysis (Arksey & O'Malley, 2005). Caution should also be exercised in generalizing the results as the review includes multiple study designs and methods, most papers were based on small sample sizes, and less than half of studies included a comparison group. Finally, the current literature on HH states of mind focuses primarily on past relational traumas and does not consider all types of traumas, such as those perpetuated by systems (e.g., discrimination, structural racism, implicit bias). It is important to examine the ways in which such traumatic experiences in adulthood may play a role in perpetuating the intergenerational cycle of trauma.

## **Conclusion**

Interpersonal trauma is a critical social and public health issue that increases the risk of disorganized attachment which, in turn, is associated with psychosocial maladjustment. Findings from this scoping review support the predictive validity of the HH coding system in detecting adult disorganized attachment representations in clinical and high-risk populations. Results suggest that HH states of mind are related to many dimensions of the

family ecology and are implicated in the intergenerational transmission of maladaptation. They highlight the need to identify individuals who are at risk or already present HH characteristics to help them revise their mental representations. Future studies are needed to explore mechanisms potentially involved in the development of HH states of mind and the intergenerational transmission of maladaptation, as well as to document the effectiveness of interventions in reducing the severity of symptoms, revising and possibly reversing disorganized attachment representations in adulthood, and preventing the transmission of risk from one generation to the next.

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*References marked with an asterisk are those included in the synthesis.*

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### **Article scientifique 3**

Association between childhood maltreatment and attachment disorganization in young adulthood:  
The protective role of early mother-child interaction

## **Association between childhood maltreatment and attachment disorganization in young adulthood: the protective role of early mother-child interactions**

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### Abstract

Individuals who experience chronic relational trauma within the parent-child relationship are at risk of developing disorganized representations of attachment relationships in the form of Hostile-Helpless (HH) states of mind. While several studies have examined the correlates of HH states of mind (e.g., maltreating parenting behaviors, offspring adjustment difficulties), few studies to date have investigated potential predictors. The purpose of this study was to examine whether childhood maltreatment and the quality of mother-child affective communication are significant predictors of HH states of mind in young adulthood. The sample was composed of 66 young adults from a low-income community sample, who had been taking part in a longitudinal project since they were preschoolers. Childhood maltreatment experiences were assessed through retrospective self-reports with the Childhood Trauma Questionnaire, and HH states of mind were coded from Adult Attachment Interview transcripts. The quality of mother-child affective communication was observed 15 years earlier (when children were aged 4 to 6) during a lab visit. Results indicate that childhood maltreatment experiences significantly predict HH states of mind and that the quality of mother-child affective communication serves a protective role in the association between childhood maltreatment severity and adult attachment disorganization. This study is one of the first to prospectively examine how the quality of mother-child affective communication in childhood relates to attachment disorganization in young adulthood. Our results highlight the importance of providing support to families in which the child is at risk of experiencing relational trauma, with a particular focus on improving the quality of parent-child interactions.

**Keywords:** Hostile-Helpless States of Mind; Attachment Disorganization; Childhood Maltreatment; Mother-Child Interactions

## Introduction

Research on attachment disorganization in adulthood using the Adult Attachment Interview (AAI; George et al., 1996) has expanded in the last decades to capture representational distortions that arise from chronic relational trauma experienced within the parent-child relationship (Melnick et al., 2008). Specifically, the Hostile-Helpless (HH) states of mind classification was introduced to identify individuals with pervasive representational distortions of attachment relationships resulting from childhood trauma (Lyons-Ruth et al., 2005). According to a recent scoping review (Turgeon et al., 2022), HH states of mind are highly prevalent among high-risk and clinical samples and are a predictor of infant disorganization, disrupted mother-infant interactions, dissociative symptoms in young adulthood and filicide risk. This concept has provided useful insight into the psychological functioning of adults with a history of relational trauma and the effects of unintegrated traumatic experiences on parental behaviors and child functioning. Conversely, research is still limited regarding predictors of HH states of mind, although on a conceptual level, HH states of mind are believed to occur as a result of important disturbances in early attachment relationships (Lyons-Ruth et al., 2011). Furthermore, little is known about HH states of mind in non-clinical samples, as most studies have investigated HH states of mind in high-risk or clinical samples. Considering that more than one-third of adults in the general population report having experienced some form of childhood trauma (Afifi et al., 2014), it is important to document the distribution of HH states of mind in lower risk samples. Accordingly, the aim of the current study is twofold: 1) to document the prevalence of HH states of mind in a low-income community sample

of young adults and 2) to examine the contributions of early mother-child affective communication and childhood maltreatment in predicting HH representations of attachment in young adulthood.

### **Representations of Attachment Relationships**

According to attachment theory, individuals develop representations of attachment relationships based on repeated patterns of interactions with primary caregivers (Bowlby, 1982). These mental representations of attachment relationships structure individuals' perceptions of themselves and others, which, in turn, guide their social behavior and expectations of others' responsiveness. When children fail to obtain comfort from primary caregivers who may be struggling with "unresolved fears about intimate relationships, and fears of being retraumatized by infant distress" (Beebe et al., 2012, p.360), they may feel that they are not worthy of love and/or expect to experience intense emotional distress in the presence of their attachment figure (Beebe et al., 2012). These negative representations of self and others, which tend to endure and extend to other relationships, have been found to interfere with parent-child interactions in the next generation, once the individual becomes a parent (Bowlby, 1980; Bretherton & Munholland, 2016). Specifically, meta-analytic studies examining the association between parents' attachment representations and the quality of the relationship they develop with their child reveal that children of parents with disorganized attachment representations are at greater risk of experiencing attachment disorganization themselves (Madigan et al., 2006; van IJzendoorn, 1995; Verhage et al., 2016).

Main and colleagues (1985) discovered that representations of attachment relationships are apparent when individuals discuss past and current relationships with their primary caregivers. They developed the AAI, a standardized interview that is designed to capture the level of organization (or disorganization) in adults' attachment representations (George et al., 1996). AAI transcripts are often analyzed and coded using the Adult Attachment Scoring and Classification System (Main et al., 2003), which allows the identification of five different types of attachment states of mind. At one end of the spectrum, attachment representations are considered secure-autonomous, as the individual provides a coherent discourse when discussing childhood attachment experiences and appears to value attachment relationships. At the other end of the spectrum, attachment representations are considered insecure/dismissing if the individual actively minimizes vulnerability and the importance of attachment relationships or insecure/preoccupied if the individual displays signs of involved anger or passivity and has difficulty remaining on the topic when reflecting on attachment experiences (Main et al., 2003). A fourth Unresolved-disorganized (U/d) classification can be assigned if the individual shows lapses in reasoning or discourse during discussions of potentially traumatic events (Hesse, 2016). These indicators of disorganization, however, do not generalize to other parts of the interview: they are strictly noticeable during discussions of loss and/or trauma. Lyons-Ruth et al. (2005) discovered that some individuals, in contrast, show signs of disorganization throughout the entire interview, which reflects more severe/pervasive representational distortions of attachment relationships. These authors developed the HH

States of Mind Classification and Coding System to identify individuals with such pervasive representational distortions, particularly among at-risk and clinical samples.

On a representational level, individuals with HH states of mind provide opposing evaluations of their primary caregivers (Lyons-Ruth et al., 2005). A key indicator is when individuals identify with a caregiver whom they also describe in globally devaluating terms, either as hostile/malevolent or helpless/victimized. For instance, stating that a caregiver was “horrible” or “useless”, while also stating having a close relationship with this caregiver, admiring them or engaging in similar patterns of behaviors with their own child. These inconsistencies within individuals’ discourse, that are not discussed nor recognized, provide evidence of unintegrated childhood attachment experiences. Due to this lack of integration, individuals with HH states of mind have difficulty providing nuanced statements during the AAI and fail to revisit the negative representations of self and others formed in childhood (Lyons-Ruth et al., 2011). These HH representations of attachment relationships, however, may place them at greater risk of perpetuating disrupted patterns of interactions with their children, as demonstrated in various studies (e.g., Guarino et al., 2011; Lyons-Ruth et al., 2003; Vulliez-Coady et al., 2013).

Although HH states of mind are indicative of impaired psychological and social functioning, this classification of disorganized attachment should be understood as a form of psychological adaptation to repeated episodes of early relational trauma. As suggested by Herman (2015), when children grow up in abusive environments, they must “find a

way to preserve a sense of trust in people who are untrustworthy, safety in a situation that is unsafe, control in a situation that is terrifyingly unpredictable, power in a situation of helplessness" (p.96). Coping mechanisms may include the idealization of a malevolent caregiver, the denial of episodes of abuse, or the tendency to blame oneself to preserve a good image of others (Herman, 2015; Lyons-Ruth et al., 2005). Thus, when an individual displays such signs of disorganization, it is important to investigate whether they experienced disrupted parent-child relationship patterns in early childhood and how these disruptions may have led to attachment disorganization.

### **Disruptions in the parent-child relationship and attachment disorganization**

It has been hypothesized that parents' failure to come to terms with past traumatic experiences places them at greater risk of engaging in frightened, frightening, or extremely insensitive behaviors towards the child, as they may be triggered by their child's behavior and/or distress (Hesse & Main, 2006; Main & Hesse, 1990). These behaviors, along with the parent's inability to terminate the activation of their child's attachment system, have been proposed as potential pathways to infant attachment disorganization (Cyr et al., 2010). Meta-analytic results provide support for this hypothesis, showing that infants exposed to anomalous parenting behaviors are at greater risk of attachment disorganization (Madigan et al., 2006), perhaps as they fear their parent's inability to soothe their distress (Hesse & Main, 2006).

Studies conducted with children in the preschool/early school-age period have also established a relation between disruptions in the parent-child relationship and attachment disorganization. In Moss et al.'s (2004) study, dyads involving disorganized children had the highest levels of dysfunctional interactions at ages 5 and 7, evidenced by mother-child conflict and low levels of reciprocity. Researchers examining mother-child interactions in a playful setting also found that disorganized preschool children had poorer quality interactions with their mothers compared to children with secure attachment relationships (Bureau et al., 2014). In O'Conner et al.'s (2011) study, which included more than 1000 children, dyads involving children with disorganized attachment patterns at 36 months had the highest scores for maternal hostility as well as the lowest scores for maternal respect for child autonomy, maternal support, mother-child cooperation, and child affection. Finally, a longitudinal study by Dubois-Comtois et al. (2008) revealed that children with secure attachment representations at ages 8-9 had higher-quality mother-child interactions at ages 5-6, whereas children with disorganized attachment representations at ages 8-9 had lower-quality mother-child interactions at ages 5-6.

Another particularly severe disruption in the parent-child relationship that has been associated with attachment disorganization is maltreating parenting behaviors towards the child. In Cyr et al.'s (2010) meta-analysis, which included data from 55 studies with a combined sample of nearly 5 000 children, it was revealed that maltreated children are more likely to develop disorganized attachment relationships compared to high-risk non-maltreated children. The authors suggest that the pathway to attachment disorganization

is not limited to abusive/hostile behaviors, but may also involve parental neglect or a lack of parental response when the child is in need of care/protection (Cyr et al., 2010; Lyons-Ruth et al., 1999).

Lyons-Ruth and colleagues (2005) developed the concept of HH states of mind according to this premise. Specifically, the authors conceptualize HH states of mind as reflecting severe psychological disturbances (e.g., splitting) that arise in the context of repeated and prolonged relational trauma, such as being afraid of a hostile caregiver or having an emotionally distanced/helpless caregiver (Lyons-Ruth et al., 2005). Several empirical studies support this conceptualization, showing that childhood relational trauma is an important predictor of later HH states of mind. For instance, a study by Lyons-Ruth et al. (2003) revealed that mothers' severity scores of childhood trauma was significantly associated with their HH scaled scores, with higher trauma scores indicating more extensive and chronic experiences of abuse, neglect, or exposure to violence. The same association was found for these mothers' children when they reached young adulthood (Byun et al., 2016; Finger et al., 2015). Of note, childhood maltreatment was measured retrospectively in both of these studies. In another study, Sauvé et al. (2021) found that parents with a HH state of mind reported having experienced more severe childhood maltreatment compared to parents without a HH state of mind. Finally, a study by Milot et al. (2014) found a significant and positive association between the number of forms of maltreatment experienced in childhood and mothers' HH scaled scores in adulthood.

Whereas the association between childhood maltreatment and HH states of mind is well documented, there are currently no studies on the association between other disruptions in the parent-child relationship (such as affective communication errors) and attachment disorganization in adulthood in the form of HH states of mind. Although parental maltreatment is often associated with more negative and fewer positive parenting behaviors during parent-child interactions (Wilson et al., 2008), these two concepts represent distinct “facets of severely dysfunctional caregiving environments” (Shi et al., 2012, p.56). In fact, a study by Shi et al. (2012) concluded that measures of childhood maltreatment do not adequately reflect the quality of parent-child interactions, as dysfunctional parent-child interactions can occur in non-maltreating environments. Other studies have found that high-quality parent-child interactions can protect children against the negative effects of childhood maltreatment (Bannink et al. 2013; Shan et al., 2019). Therefore, it is recommended that both concepts be measured separately (Shi et al., 2012). Investigating the interplay of childhood maltreatment and early mother-child interactions is an important step towards identifying mechanisms associated with adult HH states of mind.

## **Objectives and Hypotheses**

The current study explored the contributions of the quality of mother-child affective communication (measured when participants were aged four to six) and childhood maltreatment in the prediction of HH states of mind in young adulthood. Based on empirical literature, we expected that more childhood maltreatment experiences would be

associated with higher HH scaled scores<sup>7</sup> and increased odds of presenting a HH state of mind, whereas higher quality mother-child communication in the preschool/early school-age period would be associated with lower HH scaled scores and reduced odds of presenting a HH state of mind in young adulthood. Based on the findings from Banninck et al. (2013) and Shan et al. (2019), we expected that higher quality mother-child communication in the preschool/early school-age period would moderate the association between childhood maltreatment and HH states of mind. Given that previous studies on HH states of mind have focused almost exclusively on clinical or high-risk populations, another aim of this study was to document the prevalence of HH states of mind in a community sample of young adults at socioeconomic risk.

## Method

### Participants and Procedure

The final sample included 66 mother-offspring dyads who participated in a longitudinal research project on child development among socioeconomically disadvantaged families. The data presented here were collected at two time points: in the preschool/early school-age period and in early adulthood. The sample for the childhood assessment consisted of 139 mothers and their child (71 girls, 68 boys) aged between 4 and 6 years ( $M = 61.5$  months;  $SD = 7.5$ ) living in the province of Quebec, Canada. All mother-child dyads were low-income families recruited from the community (lists of

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<sup>7</sup> The HH states of mind numerical scale ranges from 1 to 9 (HH scaled score). These scaled scores are also used to establish a dichotomous classification (i.e., individuals with a score below 5 are classified as non HH, while those with a score of 5 or above are classified as HH).

families receiving social welfare, schools/preschools, Community Health and Social Services). The childhood assessment included a lab visit during which mothers completed questionnaires and mother-child dyads participated in a filmed snack-time period.

Approximatively 15 years later, a follow-up assessment was conducted in early adulthood with the subsample of children who were 18 years and older (a potential subsample of 123 participants). Young adults were contacted by phone or email and invited to participate in the adulthood assessment, which included two lab visits: the first one involved the completion of questionnaires with the help of a research assistant, and the second one consisted of the administration of the Adult Attachment Interview (AAI; George et al., 1996). Of the 123 eligible participants, 63% ( $n = 78$ ) agreed to participate in the first lab visit. Among those who participated in the first lab visit, 67 young adults also participated in the second lab visit. The remaining participants either could not be reached or refused to participate in the adulthood assessment, resulting in a retention rate of 54.5% from childhood to adulthood.

The adulthood assessment was conducted both before and during the COVID-19 pandemic. Due to the public health measures related to the pandemic, certain visits were conducted remotely via zoom. The inability to transcribe one AAI due to technical problems led to the exclusion of one participant, resulting in a final sample of 66 young adults (35 girls, 31 boys). At the adulthood assessment, participants had a mean age of 19.58 years ( $SD = 0.95$ ). Almost half of the participants (47%) were full-time students,

6% were part-time students, and 47% were not enrolled in school. Forty-nine of the 66 participants (74%) were employed, three (4.5%) were parents, and 39 (59%) were living at home with their parents and/or other family members such as siblings or grandparents. Attrition was significantly associated with sociodemographic data obtained in the childhood assessment. The results of a *t*-test analysis,  $t(137) = -2.35, p = .02$ , revealed that participants lost to attrition had higher sociodemographic risk scores<sup>8</sup> ( $M = 1.95, SD = 1.12$ ) compared to those who took part in both the childhood and adulthood assessments ( $M = 1.48, SD = 1.19$ ). In contrast, child sex,  $\chi^2(1, N = 139) = 0.191, p = .66$ , was not significantly related to attrition.

## Measures

### *Sociodemographic Questionnaire*

At both time points, participants (mothers at the childhood assessment, and young adults at the adulthood assessment) were asked to complete a sociodemographic questionnaire in which they provided information about their age, their highest level of education, their primary occupation, and their current living situation.

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<sup>8</sup> The sociodemographic risk index obtained in the childhood assessment was calculated according to the presence (score of 1) or absence (score of 0) of the following four risk factors: mother with no high school diploma, single-parent status, adolescent motherhood (being under age 20 at birth of first child), and mother receiving social welfare. Total scores ranged from 0 to 4.

### ***Quality of Mother-Child Affective Communication***

During the childhood assessment lab visit, mother-child dyads were invited to share a snack provided by the research team (juice, coffee, cookies, and granola bars). The dyad was left alone during the 10-minute videotaped snack-time period. A magnetic board (for writing and drawing) was available during this time, but no instructions were given to the dyads to ensure that their exchange was representative of everyday interactions. Interactions were coded using an observation coding system that assesses the quality of mother-child affective communication: the Mother–Child Communication Coding System by Moss and colleagues (Moss et al., 1998; Moss et al., 2000). This coding system is used to capture the emotional openness, reciprocity, and fluidity in the socio-emotional exchanges between the mother and her child. The quality of emotional exchanges is assessed along the following dimensions: 1) coordination; 2) communication; 3) partner roles; 4) emotional expression; 5) responsivity/sensitivity; 6) tension; 7) mood; 8) enjoyment; 9) overall quality. Each dimension is rated on a 7-point scale (a score of 7 indicates optimal relational quality, a score of 4 refers to moderate quality and a score of 1 corresponds to poor quality). Scores on the overall quality scale range from 1-conflicting interactions lacking reciprocity and synchrony and including parent-child role reversal to 7- pleasant, harmonious, reciprocal interactions. Scores between 1 and 3 are considered below the clinical threshold and indicate a disruptive interactive pattern, whereas scores between 4 and 7 indicate acceptable to optimal mother-child interactions. These scales have been used with children aged between the ages of three and seven from diverse socioeconomic backgrounds. They have been proven effective in distinguishing

mother-child interactive patterns (both at home and in the lab) among children with different types of attachment relationships and have been associated with behavioral problems, both concurrently and longitudinally (Dubois-Comtois & Moss, 2004; Dubois-Comtois et al., 2013; Moss et al., 1998, 2004). For this study, only the overall quality score was used. Mother-child interactions were coded by three trained coders who were unaware of any information about the dyads. Inter-rater agreement (intra-class correlation) was calculated on 20% of the sample and ranged from .78 to .88 for all dimensions.

### ***Childhood Maltreatment***

During the adulthood assessment, young adults completed the 28-item version of the Childhood Trauma Questionnaire (CTQ; Bernstein et al., 2003), which has strong psychometric properties in both clinical and non-clinical samples (Bernstein & Fink, 1998; Scher et al., 2001). This retrospective self-reported questionnaire consists of five subscales, each relating to a different form of childhood maltreatment: physical abuse, emotional abuse, sexual abuse, physical neglect, and emotional neglect. For each item, participants must rate the statement (e.g., “I felt that someone in my family hated me”) on a 5-point scale, ranging from 1 (never true) to 5 (very often true). The values of the five items composing each subscale are then summed, with scores ranging from 5 to 25. These scores, in turn, can be used to assess the level of exposure to each form of maltreatment: 0) none to minimal, 1) low to moderate, 2) moderate to severe, 3) severe to extreme. In the current study, we examined young adults’ childhood maltreatment experiences according to the absence (level 0 exposure) or presence (level 1 exposure or higher) of

each form of maltreatment. We chose to examine the number of forms of childhood maltreatment as this is the construct that was primarily used in studies investigating the association between retrospective measures of childhood maltreatment and HH states of mind (e.g., Barone & Carone, 2020; Byun et al., 2016; Finger et al., 2015; Lyons-Ruth et al., 2003; Milot et al., 2014). In the current study, maltreatment scores varied from 0 to 5: participants with a score of 0 reported no exposure or minimal exposure to all forms of maltreatment, whereas participants with a score of 5 reported low to extreme exposure to all forms of maltreatment under study.

### ***Hostile-Helpless States of Mind***

During the adulthood assessment, young adults were administered the AAI (George et al., 1996), a semi-structured interview consisting of approximately 20 questions. During this interview (45 to 90 minutes), participants are questioned about their childhood experiences with their attachment figures. Other questions focus on potentially traumatic childhood events, such as experiences of loss and/or abuse. Participants are asked to describe how their childhood experiences may have affected their adult personality, why they believe their attachment figures behaved the way they did, and the nature of their current relationships with their caregivers (George et al., 1996).

The AAI's were recorded and transcribed verbatim for coding purposes. The Hostile/Helpless State of Mind Coding System (Lyons-Ruth et al., 2011) was used to assess young adults' Hostile-Helpless representations of attachment. During the AAI,

individuals with HH attachment representations struggle to maintain a coherent narrative, resulting in opposing statements about their relationships with their attachment figures and/or childhood experiences (e.g., “my parents were never threatening” vs. “my parents would hit me”). Primary HH indicators include 1) the global devaluation of an attachment figure (e.g., “I hate her”) combined with a positive identification of this same attachment figure (e.g., “We are very close”); 2) negative statements about oneself; and 3) the use of defensive strategies during discussions of painful experiences (e.g., laughter, denial). Although contradictory statements can be identified throughout the interview, they are not discussed or resolved by the individual, suggesting that past traumatic experiences remain pervasively unintegrated.

The overall coherence of the individual’s narrative as well as the indicators identified throughout the interview are used to determine the individual’s score on a scale from 1 to 9, with higher scores indicating more severe HH representations of attachment. Individuals with a score of 5 or above are classified as having a HH state of mind. To date, the HH State of Mind Coding System has been used in approximately 20 empirical studies, including samples of young adults (e.g., Brumariu et al., 2013; Byun et al., 2015; Finger et al., 2015; Obsuth et al., 2014; Vulliez-Coady et al. 2013). AAI transcripts were coded by three independent reliable coders trained by a certified trainer. All coders were blind to other data. Interrater agreement was calculated on 35% of the sample ( $n = 23$  AAI’s), with a reliability coefficient of  $K = 1.0$  for the dichotomous classification (HH vs. non HH) and an intra-class correlation of  $r_{icc} = .94$  for HH scaled scores.

## Statistical Analyses

Preliminary analyses (correlations and t-test) were conducted to (a) identify potential covariates for inclusion in the main analyses and b) examine bidirectional associations between variables of interest without taking the covariates into account. Second, a multiple regression analysis was performed to examine the contributions of childhood maltreatment, the quality of mother-child affective communication, and their interaction in predicting the severity of HH representations of attachment (scaled score from 1 to 9). Third, a logistic regression analysis was performed to test whether the two predictors individually and interactively predicted individuals' HH classification (presence or absence). Both predictors were mean centered prior to all analyses and all assumptions were met. An a-priori power analysis with an alpha of .05, a power of .80 and an effect size of .20 indicated that a minimum sample size of 65 participants was required for the multiple regression analyses. All analyses were performed using the SPSS software (version 27).

## Results

### Descriptive Statistics

Participants' mean HH scaled score was 3.64 ( $SD = 1.39$ ; range: 1-7). Among the 66 young adults, 15 (23%) were classified as having a HH state of mind (i.e., score of 5 or above). Regarding the quality of mother-child affective communication, participants had an average score of 4.09 ( $SD = 1.24$ ; range: 1-7), with 29% of dyads meeting the clinical threshold (i.e., score of 3 or less). With respect to childhood maltreatment experiences,

participants' scores were as follows: 42% reported no maltreatment experiences ( $n = 28$ ); 21% reported having experienced one form of maltreatment ( $n = 14$ ); 12% two forms ( $n = 8$ ); 14% three forms ( $n = 9$ ); 8% four forms ( $n = 5$ ); and 3% reported having experienced all five forms of maltreatment ( $n = 2$ ). Approximately 26% ( $n=17$ ) of the sample indicated that they had experienced at least low levels of emotional abuse, 17% ( $n=11$ ) for physical abuse, 18% ( $n=12$ ) for sexual abuse, 42% ( $n=28$ ) for emotional neglect and 29% ( $n=19$ ) for physical neglect.

## Preliminary Analyses

### *Potential Covariates*

Bivariate correlations, t-tests and chi-square tests were conducted to verify if young adults' HH scaled scores or HH classification were associated with sociodemographic variables at both time points. At the childhood assessment, results revealed no significant association with single-parent status,  $t(64) = -1.16, p = .25; \chi^2(1, N = 66) = 0.886, p = .35$ , nor young motherhood,  $t(64) = -.44, p = .66; \chi^2(1, N = 66) = 0.337, p = .56$ . However, young adults' HH scaled scores and HH classification were significantly associated with mothers' last completed degree,  $r = -.352, p = .004; t(64) = 2.18, p = .036$ . HH scaled scores were also significantly associated with mothers' social welfare status,  $t(64) = -2.08, p = .042$ , whereas this was not the case for the dichotomous HH classification,  $\chi^2(1, N = 66) = .1.97, p = .16$ . At the adulthood assessment, results revealed no significant association with participants' sex,  $t(64) = -.305, p = .762; \chi^2(1, N = 66) = .001, p = .98$ , nor their last completed degree,  $r = -.118, p = .359; t(61) = -.059, p = .953$ . Consequently,

we controlled for mothers' last completed degree and social welfare status (presence or absence) in the multiple regression analyses, and for mothers' last completed degree in the logistic regression analysis.

### ***Variables of Interest***

Bivariate correlations revealed a significant and negative association between the quality of mother-child affective communication in childhood and participants' severity of HH attachment representations in adulthood ( $r = -.27, p = .03$ ), indicating that lower quality of mother-child affective communication was associated with higher scores on the HH scale. However, a *t*-test revealed no significant difference on the quality of mother-child affective communication between young adults with a HH state of mind ( $M = 3.73, SD = 1.53$ ) and those without a HH state of mind ( $M = 4.2, SD = 1.13; t(64) = 1.28, p = .21$ ).

The correlation between childhood maltreatment and HH scaled scores was also significant and positive ( $r = .65, p < .001$ ). More childhood maltreatment experiences were associated with higher scores on the HH scale. A *t*-test revealed that young adults with a HH state of mind had higher childhood maltreatment scores ( $M = 3.00, SD = 1.51$ ) than those without a HH state of mind ( $M = .82, SD = 1.05; t(64) = -6.34, p < .001$ ).

## Main Analyses

### *Multiple Regression on HH Scaled Scores*

A multiple regression was performed using the young adults' HH scaled scores as the dependent variable. The first model included mothers' level of education and social welfare status at the childhood assessment as covariates. In the second model, we added the quality of mother-child affective communication as well as young adults' childhood maltreatment experiences. The third and final model included the interaction term between the quality of mother-child affective communication and childhood maltreatment.

As presented in Table 2, the first model (covariates) accounted for significant variation in young adults' HH scaled scores ( $\Delta R^2 = .14$ ,  $F(2, 63) = 5.3$ ,  $p = .007$ ). There was a significant negative association between mothers' level of education and young adults' HH scaled scores and a non-significant association between mothers' social welfare status and young adults' HH scaled scores. Adding the quality of mother-child affective communication and young adults' childhood maltreatment experiences in the model resulted in a significant increase in the amount of variance explained ( $\Delta R^2 = .39$ ,  $F(2, 61) = 25.58$ ,  $p < .001$ ). Childhood maltreatment was a significant predictor of young adults' HH scaled score ; higher scores of childhood maltreatment predicted higher HH scaled scores. Conversely, the quality of mother-child affective communication was not a significant predictor of young adults' HH scaled score . The final model, which included the interaction term between the quality of mother-child affective communication and childhood maltreatment, also resulted in a significant increase of explained variance in

young adults' HH scaled scores ( $\Delta R^2 = .03$ ,  $F(1, 60) = 4.14$ ,  $p = .046$ ). The interaction term was a significant predictor of young adults' HH scaled scores. Post hoc analyses were performed to determine the meaning of the interaction. As shown in Figure 1, there was a significant association between childhood maltreatment and young adults' HH scaled scores. This association was stronger in dyads with lower-quality mother-child interactions and weaker in dyads with higher-quality mother-child interactions.

**Table 2**

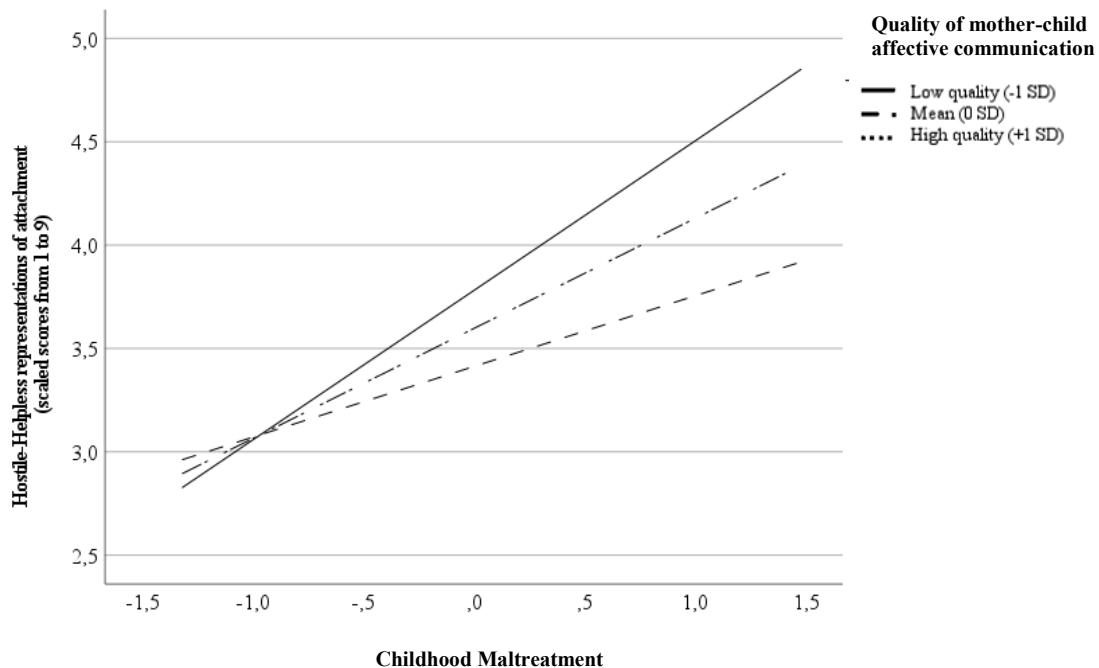
*Results of the multiple regression predicting HH scaled scores from childhood maltreatment and quality of mother-child affective communication*

| Predictor variables  | $\Delta R^2$ | $\Delta F$ | df      | $\beta$ |
|--|--------------|------------|---------|---------|
| Model 1  | .14          | 5.30**     | (2, 63) |         |
| Mothers' education level   |              |            |         | -.30**  |
| Mothers' social welfare status   |              |            |         | .15     |
| Model 2  | .39          | 25.58***   | (2, 61) |         |
| Childhood maltreatment   |              |            |         | .61***  |
| Quality of mother-child affective communication                          |              |            |         | -.16    |
| Model 3  | .03          | 4.14*      | (1, 60) |         |
| Childhood maltreatment X quality of mother-child affective communication |              |            |         | -.65*   |

\* $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

**Figure 1**

*Interactive effect between childhood maltreatment and the quality of mother-child affective communication in predicting young adults' HH scaled scores*



### ***Logistic Regression on the HH classification***

A logistic regression was performed to examine whether childhood maltreatment, quality of mother-child affective communication and their interactive term were significant predictors of young adults' HH classification (HH or non HH). The regression model included mothers' level of education at Step 1, childhood maltreatment and the quality of mother-child affective communication at Step 2, and their interaction term at Step 3 (see Table 3). Results indicated that mothers' level of education accounted for 6.9% of the variance (according to Nagelkerke's  $R^2$ ) and had a non-significant effect on young adults' HH classification,  $\text{Wald } \chi^2(1) = 2.7, p = .10$ . At Step 2, Nagelkerke's  $R^2$  reached

50.4%, indicating that childhood maltreatment and the quality of mother-child affective communication explained an additional 43.5% of the variance. Whereas childhood maltreatment had a significant effect on young adults' HH classification, Wald  $\chi^2(1) = 14.24, p < .001$ , the effect of the quality of mother-child affective communication was nonsignificant, Wald  $\chi^2(1) = .36, p = .55$ . Results revealed that as childhood maltreatment increased by one unit, the odds of young adults being classified as presenting a HH (rather than non HH) state of mind increased by 6.15. The final model, which included the interactive term between childhood maltreatment and the quality of mother-child affective communication, led to an increase of 13.9% of the variance explained (Nagelkerke's  $R^2 = 64.3\%$ ). Results revealed that the interactive term entered at Step 3 had a significant effect on young adults' HH classification, Wald  $\chi^2(1) = 5.74, p = .017$ , leading to a correct classification of 90.9% of the participants (50/51 non HH; 10/15 HH).

**Table 3**

*Results from the logistic regression predicting HH states of mind from childhood maltreatment and quality of mother-child affective communication*

|   | $\chi^2(df)$ | Nagelkerke<br>$R^2$ | B(SE)      | Wald(df)    | OR<br>[95% CI]       |
|---|--------------|---------------------|------------|-------------|----------------------|
| Step 1  | 3.07(1)      | .069                |            |             |                      |
| Mothers'<br>education level   |              |                     | -.47(.29)  | 2.7(1)      | 0.63<br>[0.36, 1.09] |
| Step 2  | 23.53(2)***  | .504                |            |             |                      |
| Childhood<br>maltreatment   |              |                     | 1.82(.48)  | 14.24(1)*** | 6.15<br>[2.4, 15.81] |
| Quality of<br>mother-child<br>affective<br>communication                                |              |                     | -.23(.38)  | .36(1)      | 0.79<br>[0.38, 1.68] |
| Step 3  | 9.69(1)**    | .643                |            |             |                      |
| Childhood<br>maltreatment X<br>quality of<br>mother-child<br>affective<br>communication |              |                     | -2.27(.95) | 5.74(1)*    | .103<br>[0.02, 0.66] |

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

## Discussion

This study aimed to document the proportion of HH states of mind in a low-income community sample and to explore whether childhood maltreatment, the quality of mother-child affective communication, and their interaction, are significant predictors of HH attachment representations in young adulthood. This study is the first to prospectively examine the association between the quality of early mother-child interactions and HH states of mind in young adulthood. Study results showed that 23% of participants displayed a HH state of mind, indicating that almost a quarter of young adults in our

sample characterized by low-socioeconomic backgrounds identified with a hostile or helpless attachment figure, and displayed pervasive difficulties reflecting on and integrating their early attachment experiences. These results suggest that HH states of mind are not only relevant in clinical and high-risk populations, but are also evident in non-clinical populations with a low socioeconomic status. Of note, the proportion of young adults with a HH state of mind in the current study is lower than that found in previous studies conducted with a sample of young adults (51%; Byun et al., 2016; Finger et al., 2015). These studies, however, included participants with anxiety disorders and/or personality disorder features, which may explain the higher prevalence given the strong association between HH states of mind and psychopathology found in earlier studies (e.g., Lyons-Ruth et al., 2007). Another possible explanation is that participants lost to attrition in the current study were those at higher risk, perhaps resulting in a smaller proportion of individuals with disorganized states of mind. Nonetheless, our results are consistent with those from a systematic review of the distributions of attachment representations, in which adolescents/young adults (< 21 years) had lower prevalence rates of disorganized attachment representations in the form of U/d states of mind as opposed to older clinical samples (Bakermans-Kranenburg & van IJzendoorn, 2009). Researchers argue that few adolescents/young adults may have experienced the loss of an attachment figure, thus limiting the likelihood of a U/d classification (Bakermans-Kranenburg & van IJzendoorn, 2009). Similarly, it may be more difficult to assign a HH state of mind classification to young adults, as most have not yet transitioned to parenthood. In this context, there may be limited evidence of a positive identification with a hostile or helpless caregiver, as this

indicator is often captured when individuals report perpetuating with their own children the hostile or helpless behaviors they experienced from their caregivers.

### **Predictors of Hostile-Helpless States of Mind**

Our results further indicate that childhood maltreatment, as measured by the number of forms of maltreatment experienced in childhood, is a significant predictor of young adults' HH states of mind, both with respect to the severity of HH attachment representations (scale from 1 to 9) and the presence (versus the absence) of a HH state of mind. These results are consistent with those from previous studies (e.g., Byun et al., 2016; Lyons-Ruth et al., 2003; Milot et al., 2014; Sauvé et al., 2021), suggesting that individuals who experience multiple forms of childhood maltreatment are at greater risk of pervasive, unintegrated attachment states of mind in young adulthood. A growing body of research suggests that being exposed to multiple forms of maltreatment in childhood leads to more negative consequences than being exposed to a single form of maltreatment or having no childhood maltreatment experiences. For instance, a study by Cloitre et al. (2009) revealed that as the number of forms of childhood maltreatment increased by one unit, the level of symptom complexity increased by approximately 17%. More recently, Garon-Bissonnette et al. (2022) found that future parents who report having experienced cumulative childhood maltreatment are at greater risk of experiencing complex psychiatric symptoms during pregnancy compared to those who experienced a single form of maltreatment or no maltreatment in childhood. In addition, St-Laurent et al. (2019) found that the accumulation of multiple forms of childhood maltreatment is associated with an increased

risk of perpetuating the intergenerational cycle of maltreatment. In light of these findings, researchers should continue to explore the cumulative effect of multiples forms of maltreatment experienced in childhood, particularly as various forms of interpersonal trauma often co-occur rather than occur alone (Kim et al., 2017; Larrivée et al., 2007).

Our results reveal that the interaction between childhood maltreatment and the quality of mother-child affective communication significantly predicted young adults' level of HH states of mind as well as their HH classification. According to post hoc analyses, the relation between childhood maltreatment and HH states of mind is the strongest among participants with lower quality of mother-child affective communication, and it diminishes as the quality of mother-child affective communication increases. These results suggest that a high-quality mother-child relationship plays a protective role by reducing the negative impact of childhood maltreatment on the development of disorganized attachment representations in adulthood. This is consistent with other research highlighting the protective role of caring attachment figures (other than the maltreating parent) in the context of maltreatment. In their study on the intergenerational continuity of maltreatment, Egeland et al. (1988) showed that maltreated mothers who had developed a positive relationship with at least one caregiver in childhood were more likely to break the cycle of maltreatment than mothers without such a relationship. The quality of parent-child interactions (i.e., maternal warmth) with a non-abusive caregiver has also been found to protect children exposed to intimate partner violence (Fogarty et al., 2019). Considering that less than 30% of dyads in our low-income community sample met the

clinical threshold for problematic parent-child interactions, the current study's findings warrant replication among higher risk samples.

### **Study Contributions and Clinical Implications**

This research makes several contributions to the study of adult disorganized attachment states of mind. First, findings further contribute to the validation of both the HH construct and coding system by highlighting their value and relevance in populations other than the clinical and high-risk samples who have been the main focus of past research on HH states of mind. Second, this study extended previous research by prospectively examining the association between the quality of mother-child affective communication in early childhood and offspring's disorganized attachment representations in young adulthood, and by evaluating the contributions of two relational risk factors in predicting HH attachment representations. The interactive effect between childhood maltreatment and the quality of mother-child affective communication suggests that HH states of mind are influenced by relational processes within the family that are not limited to episodes of abuse and neglect, but also include disruptions in daily parent-child interactions, including when parents and their child share a snack. The results of the study indicate that these interactional patterns, while they may not be as salient, obvious, or intense as maltreatment episodes, play a significant role in mitigating the influence of maltreatment on representations of self and others.

Early interventions should be implemented to enhance the quality of the parent-child relationship and prevent the emergence of HH states of mind and their negative consequences. Several studies show that parental HH states of mind are associated with disrupted affective communications (Lyons-Ruth et al., 2005) and more negative affects (Guarino et al., 2011) during parent-child interactions, whereas young adults with a HH state of mind demonstrate less collaboration and more punitive control during a conflict discussion with their mother (Obsuth et al., 2014). Results from these studies, along with those from the current study, indicate that relational trauma experienced within the parent-child relationship is predictive of later HH states of mind and that HH states of mind, in turn, are associated with disrupted patterns of parent-child interactions in the next generation (Guarino et al., 2011; Honde, 2007; Lyons-Ruth et al., 2005; Vulliez-Coady et al., 2013). Parental HH states of mind have also been found to predict child attachment disorganization (Finger, 2006; Honde, 2007; Lyons-Ruth et al., 2003; 2005), child removal by child protection services (Terry et al., 2021) and child externalizing behavior problems (Sauvé et al., 2021). The consequences associated with HH states of mind, both in relation to parenting and offspring adaptation, support the need to help individuals resolve their unintegrated childhood attachment experiences prior to their transition to parenthood.

### **Limitations and Future Directions**

While this study has many notable strengths, such as the inclusion of a variety of data collection methods (i.e., observation, self-reported questionnaire, interview), the

following limitations must be considered when interpreting the findings. First, young adults' HH states of mind were assessed approximately 15 years after the evaluation of mother-child interactions, which led to an attrition of 45.5% of the sample. Given that families were recruited from the community and that participants lost to attrition were at higher sociodemographic risk, results from the current study cannot be generalized to higher risk or clinical samples. Second, although the quality of mother-child affective communication was assessed by independent observers, mother-child dyads were observed in a lab setting on a single occasion. Future studies should assess the dyad's interactions in their natural environment and/or in a variety of contexts (e.g., playful interactions, stressful situation, free play vs. structured task) to increase validity. Third, this study assessed childhood maltreatment according to the presence or absence of each form of maltreatment, irrespective of whether these experiences occurred within or outside the family environment. Future studies should favor a more comprehensive approach by collecting information on the chronicity of maltreatment experiences, the nature of the relationship with the perpetrator, and the individual's age at onset, as these factors are known to influence long-term outcomes (Kaplow & Widom, 2007). In light of studies showing that chronic maltreatment and maltreatment perpetrated by a primary caregiver increase the risk for insecure attachment states of mind in adolescence (Haltigan et al., 2019) and in adulthood (Raby et al., 2017; Roisman et al., 2017), it would be interesting to verify whether these findings also apply to attachment disorganization in the form of HH states of mind. These results could potentially provide insight into which features of the trauma (e.g., chronicity, identity of the perpetrator, type of maltreatment) are most

likely to lead to HH states of mind. They could also help clarify whether a maltreating caregiver who, at times, is sensitive decreases or rather increases the risk for attachment disorganization as their behavior is inconsistent/unpredictable as opposed to being persistently appropriate or harmful.

Despite these limitations, results of the current study indicate that young adults who have experienced both low-quality mother-child affective communication and childhood maltreatment are at increased risk of disorganized attachment representations in young adulthood. This study is the first to investigate how early mother-child relational patterns interact with childhood maltreatment experiences in predicting later HH states of mind. More longitudinal studies are needed to investigate early predictors of HH states of mind, such as child attachment disorganization or early dissociative symptoms. Researchers should also examine whether other family subsystems (e.g., father-child or sibling relationships) may play a protective role in the development of HH states of mind.

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## **Discussion générale**

La présente thèse doctorale avait pour objectif général d'examiner l'apport de l'esprit H-I pour mieux comprendre l'attachement des personnes ayant vécu des traumatismes relationnels durant l'enfance et de documenter son étiologie et ses conséquences. Le concept d'état d'esprit H-I est de plus en plus reconnu comme un facteur explicatif du lien entre les expériences relationnelles traumatisques vécues durant l'enfance et les difficultés d'adaptation psychosociale à l'âge adulte. Bien qu'il gagne en popularité, le nombre d'études demeure restreint, limitant, par le fait même, la reconnaissance du concept. Ainsi, la présente thèse comprenait trois articles distincts visant respectivement à : (a) circonscrire les aspects conceptuels de l'état d'esprit H-I et leur implication pour la pratique; (b) synthétiser l'état des connaissances empiriques sur l'état d'esprit H-I, identifier des lacunes dans la littérature et proposer des pistes de recherche futures; puis (c) examiner la contribution individuelle de deux facteurs relationnels dans le développement de l'état d'esprit H-I à l'âge adulte (i.e., les expériences de maltraitance vécues durant l'enfance et la qualité des interactions mère-enfant) et leur effet d'interaction.

Les résultats de ces trois articles indiquent d'abord que le concept d'état d'esprit H-I est utile pour comprendre l'effet des interactions parent-enfant problématiques sur l'adaptation psychosociale ultérieure de la personne. Ils soutiennent le constat qu'une exposition répétée à des traumatismes de nature interpersonnelle impliquant les principaux

donneurs de soins peut conduire à une forme de désorganisation invasive de l'attachement, celle-ci s'étalant à l'ensemble du discours et des processus de pensée lorsque la personne discute de son histoire d'attachement. Plus spécifiquement, le premier article permet une meilleure compréhension des stratégies défensives développées par les personnes ayant un état d'esprit H-I et les implications pour l'évaluation et l'intervention clinique. Les résultats du deuxième article révèlent que l'état d'esprit H-I constitue un déterminant important du fonctionnement psychologique de la personne et de la transmission intergénérationnelle du risque. Ils indiquent, plus précisément, que l'état d'esprit H-I du parent est associé à des comportements parentaux maltraitants à l'égard de l'enfant (Frigerio et al., 2013), des difficultés dans les interactions parent-enfant (Guarino et al., 2011; Honde, 2007; Lyons-Ruth et al., 2005) et parent-adolescent (Vulliez-Coady et al., 2013), un attachement de type insécurisant-désorganisé chez l'enfant (Lyons-Ruth et al., 2003) et la présence de comportements extériorisés chez ce dernier (Sauvé et al., 2021).

Les résultats de ce deuxième article ont aussi permis d'identifier des lacunes dans la documentation scientifique, l'une d'entre elles étant le manque d'études prospectives ou longitudinales visant à examiner les processus développementaux associés à l'état d'esprit H-I. L'objectif du troisième article de cette thèse doctorale était de pallier en partie cette lacune en évaluant la contribution de deux facteurs relationnels: 1) les expériences de maltraitance vécues durant l'enfance et 2) la qualité des interactions mère-enfant en bas âge (4-6 ans). Cet article vient aussi pallier certaines limites énoncées dans les premiers articles, en proposant une approche multi-méthodes. Les résultats révèlent que l'état

d'esprit H-I au début de l'âge adulte est prédict à la fois par les expériences de maltraitance vécues durant l'enfance et l'effet d'interaction entre les expériences de maltraitance et la qualité des interactions mère-enfant. Des analyses supplémentaires ont permis d'observer qu'une meilleure qualité des interactions mère-enfant atténue les effets de la maltraitance sur les représentations d'attachement désorganisées au début de l'âge adulte. Bien que cette étude soit la première à documenter de manière prospective l'association entre la qualité des interactions mère-enfant en bas âge et l'état d'esprit H-I à l'âge adulte, les résultats appuient ceux d'autres études montrant que la qualité des interactions parent-enfant joue un rôle protecteur auprès des personnes ayant subi de la maltraitance durant l'enfance (Bannink et al., 2013; Shan et al., 2019) ou ayant été exposées à la violence conjugale (Cohodes et al., 2017; Fogarty et al., 2019).

Ensemble, les résultats de la présente thèse doctorale mettent en évidence la forte prévalence de l'état d'esprit d'attachement H-I chez une variété de groupes d'âge et de populations cliniques et à risque. Cette forme de désorganisation de l'attachement a notamment été observée chez des jeunes adultes (Byun et al., 2016; Finger et al., 2015), des parents de jeunes enfants (Barone et al., 2014; Barone & Carone, 2020; Milot et al., 2014; Sauvé et al., 2021), des parents d'adolescents (Vulliez-Coady et al., 2013), des adultes ayant un trouble de la personnalité limite (Lyons-Ruth et al., 2007) et des mères ayant commis un filicide (Barone & Carone, 2020). Bien que l'état d'esprit H-I puisse être observé chez des populations normatives et à faible risque socioéconomique (Frigerio et al., 2013), l'opérationnalisation de cette forme de désorganisation de l'attachement semble

particulièrement correspondre aux caractéristiques des personnes présentant des signes psychopathologiques ou étant à risque d'adopter des comportements maltraitants à l'égard de l'enfant. Chez ces personnes, on observe des taux de prévalence plus élevés pour la classification H-I comparativement à d'autres classifications désorganisées telles les classification U ou U/CC (Barone et al. 2014, Barone & Carone, 2020; Finger et al., 2015; Frigerio et al., 2013; Lyons-Ruth et al., 2005). Ces résultats appuient la pertinence du concept pour comprendre l'adaptation des adultes ayant vécu des traumas relationnels durant l'enfance. Ils suggèrent que des signes de désorganisation peuvent traverser le discours de la personne même lorsque des événements spécifiques comme des abus (physiques, sexuels, émotionnels) ou des deuils (p.ex., décès d'un proche) ne sont pas évoqués. D'autres études sont toutefois nécessaires pour clarifier les liens directs entre 1) la nature des expériences traumatiques vécues durant l'enfance (p.ex., abus spécifiques, interactions dysfonctionnelles répétées et prolongées entre l'enfant et son parent, exposition à la violence conjugale); 2) les caractéristiques du trauma (sévérité, chronicité, intra/extrfafamilial); et 3) l'état d'esprit H-I.

Les résultats de cette thèse doctorale révèlent, par ailleurs, que les traumas relationnels vécus en bas âge peuvent conduire à des représentations d'attachement désorganisées bien au-delà des périodes préscolaire (Moss et al., 2004) et scolaire (Dubois-Comtois et al., 2008). Lorsqu'elles ne font pas l'objet d'une intervention adéquate, ces représentations d'attachement désorganisées chez un parent peuvent interférer avec les interactions parent-enfant et le fonctionnement adaptatif de l'enfant.

L'hypothèse émise par Main et Hesse (1990) est que les interactions parent-enfant peuvent réactiver des souvenirs traumatisques chez le parent, le confrontant à d'intenses sentiments de vulnérabilité. Le parent, cherchant à maîtriser (profil hostile) ou à minimiser (profil impuissant) ces sentiments intolérables, peut adopter une position hostile (p.ex., rire de l'enfant en détresse) ou impuissante à l'égard de l'enfant (p.ex., s'éloigner de l'enfant; Lyons-Ruth & Spielman, 2004; Main & Hesse, 1990; Melnick et al., 2008). Devant ces comportements, l'enfant peut à son tour devenir désorganisé (p.ex., apparaître désorienté ou apeuré, ou émettre des comportements contradictoires d'approche et d'évitement; Hesse et Main, 2006), augmentant le sentiment de vulnérabilité éprouvé par le parent et instaurant, par le fait même, un véritable cercle vicieux (Berthelot & Garon-Bissonnette, 2022). La complexité de ce processus, de même que les résultats de la troisième étude, renforcent le constat émis par Berthelot et Garon-Bissonnette (2022) qui affirment que « les difficultés des parents ne sont pas uniquement le reflet d'un manque de connaissance des pratiques parentales positives et qu'elles s'inscrivent dans une perspective développementale » (p.83).

### **Implications pour les politiques, la pratique et la recherche**

Les résultats de cette thèse doctorale peuvent éventuellement avoir d'importantes retombées pour les politiques, la pratique et la recherche. Sur le plan des politiques, les connaissances présentées dans cette thèse ont le potentiel de soutenir les réflexions sur les meilleurs services de dépistage, d'évaluation et d'intervention auprès des familles dont un parent a vécu des expériences relationnelles difficiles durant l'enfance. Elles rappellent

l'importance de considérer l'histoire d'attachement de la personne et l'influence que celle-ci peut avoir sur ses pensées, son discours et ses comportements. Elles soulignent aussi l'importance d'investir dans la formation des intervenants afin qu'ils puissent comprendre les manifestations possibles des traumas et proposer des interventions susceptibles de favoriser la résolution des expériences traumatiques.

Sur le plan de la pratique, les résultats de cette thèse offrent des pistes à l'accompagnement des personnes en difficulté en soulevant l'importance d'examiner les difficiles expériences relationnelles vécues par l'adulte/le parent durant son enfance. Ainsi, lorsqu'un adulte/parent a des représentations négatives de soi et des autres ou qu'il présente des signes caractéristiques d'une position d'hostilité ou d'impuissance, il importe de vérifier si son propre besoin de sécurité a été comblé dans l'enfance. Une attention particulière devrait aussi être accordée aux représentations que se fait la personne des relations intimes/d'attachement, lesquelles peuvent teinter son comportement relationnel, notamment dans l'exercice de son rôle parental.

En raison de la subtilité de certains indicateurs H-I et de la présence de propos contradictoires dans le discours de la personne, il peut être particulièrement difficile de dépister la présence d'un état d'esprit H-I en contexte d'intervention. Or, les conséquences associées à cette forme de désorganisation de l'attachement à l'âge adulte soulèvent l'importance de mettre en place des pratiques d'évaluation et d'intervention auprès des personnes qui présentent les caractéristiques d'un état d'esprit H-I. Parallèlement, il est

important de s'assurer que les cliniciens qui accompagnent les personnes ayant vécu des expériences relationnelles traumatisques au sein de la relation parent-enfant durant l'enfance aient une compréhension juste de l'état d'esprit H-I, de ses manifestations cliniques et de ses conséquences pour l'adulte lui-même et pour la génération suivante (pour l'enfant et pour la relation parent-enfant). Ceci contribuerait à 1) dépister la présence de distorsions dans les représentations mentales d'attachement de la personne et 2) mieux comprendre les besoins des personnes ayant un état d'esprit d'attachement H-I et les stratégies de défense qu'elles utilisent pour minimiser l'impact de leurs traumatismes passés. Sans ce dépistage, la démarche de résolution des traumas ne peut être envisagée et les cliniciens risquent d'intervenir sur les symptômes du trauma plutôt que sur l'expérience traumatisante à l'origine des difficultés d'adaptation.

Dans la mesure du possible, les interventions auprès des personnes ayant vécu des expériences relationnelles traumatisques durant l'enfance devraient avoir pour objectif de « réorganiser » les représentations d'attachement de la personne (Iyengar et al., 2019) afin de favoriser la résolution des traumas et réduire le risque de transmission intergénérationnelle des expériences traumatisques (Berthelot & Garon-Bissonnette, 2022). Le sentiment de sécurité dans la relation thérapeutique est une condition essentielle au rétablissement de ces personnes (Herman, 1992). Tel que souligné par Lyons-Ruth et Spielman (2004), ces dernières doivent vivre une expérience relationnelle positive qui les incitent à remettre en question leurs modèles internes opérants. Elles doivent pouvoir ressentir que leurs émotions et leurs souvenirs sont accueillis avec ouverture, c'est-à-dire

en l'absence de jugement et de reproches, puis sans risque d'abandon. Le clinicien doit ainsi osciller entre le fait de valider, d'une part, les réactions émotionnelles de la personne en réponse aux événements passés, puis lui refléter, d'autre part, que ces réactions peuvent être inadaptées dans le moment présent (Herman, 1992).

Ces recommandations s'inscrivent d'ailleurs très bien dans le courant des approches thérapeutiques centrées sur les traumas. Ces approches ont comme particularité de considérer les expériences relationnelles vécues durant l'enfance et leurs conséquences, et cela, aux différentes étapes de l'intervention auprès des personnes en difficulté, que cela concerne le dépistage, l'évaluation ou l'intervention (Harris & Fallot, 2001; Milot, Lemieux, et al., 2018). En ouvrant le dialogue sur les traumatismes relationnels que les personnes ont vécus durant l'enfance, il devient possible de les aider à reconnaître la nature traumatique de leurs expériences passées et les symptômes traumatisques qui en découlent (Iyengar et al., 2019). Plus spécifiquement, des interventions concrètes devraient être mises en place pour aider ces personnes à développer un récit cohérent et nuancé de leur histoire d'attachement (i.e., en l'absence de propos contradictoires et/ou incompatibles; Iyengar et al., 2019). Il est aussi important de les aider à lier leurs expériences relationnelles passées et leurs besoins socio-affectifs présents (p.ex., besoins de contrôle, besoin d'être valorisé; Berthelot et al., 2018). D'autres stratégies d'intervention consistent à aider ces personnes à identifier ce qui déclenche leurs signaux de détresse émotionnelle/psychologique, puis à remplacer les stratégies inadaptées qu'elles utilisent pour réguler leurs émotions (p.ex., évitement, suppression expressive)

par des stratégies plus adaptées telles que la réévaluation cognitive, l'acceptation et/ou la résolution de problèmes.

Dans la mesure du possible, ces interventions devraient précéder la transition à la parentalité (Berthelot & Garon-Bissonnette, 2022; Terry et al., 2021) afin de prévenir les difficultés dans la relation parent-enfant et dans la trajectoire développementale de l'enfant. Des études montrent notamment que la grossesse est un moment opportun pour intervenir, car les représentations d'attachement du parent sont activées durant cette période (Slade et al., 2009). Cette transition à la parentalité peut aussi réactiver certains souvenirs traumatisques, lesquels sont susceptibles d'influencer les représentations que se fait le parent de son propre enfant et de son rôle parental. En intervenant avant l'arrivée du bébé, il est possible de soutenir le parent à travers les changements qui accompagnent ce nouveau rôle et de discuter des impacts potentiels que peuvent avoir les traumas relationnels sur la parentalité et la relation parent-enfant (Berthelot et al., 2018).

Si on reconnaît l'importance des interventions, il demeure que la psychothérapie auprès d'adultes exposant des manifestations de désorganisation importantes présente des défis de taille. Des études révèlent, entre autres, que la psychothérapie auprès de ces personnes affiche un taux de succès modéré (Moran et al., 2005; Steele et al., 2019; van der Asdonk et al., 2021). Les mécanismes de défense (p.ex., déni, dissociation, idéalisation) qu'ont développées ces personnes pour limiter l'accès au contenu ségrégué et s'en protéger peuvent notamment faire obstacle aux interventions (van der Asdonk et

al., 2021). Ces personnes peuvent également avoir tendance à moins s'engager dans le processus afin de se protéger contre un traumatisme répété (van der Asdonk et al., 2021). On observe aussi chez ces personnes des échecs de mentalisation du trauma, ce qui peut interférer avec le processus thérapeutique (Berthelot et al., 2014). Ces données soulignent l'importance d'intervenir tôt et d'offrir à ces personnes des services thérapeutiques centrés sur les traumas.

Sur le plan de la recherche, les résultats de cette thèse doctorale offrent une compréhension plus complète des facteurs contribuant au processus de développement et de transmission de la désorganisation de l'attachement. À l'instar d'autres études (e.g., Lyons-Ruth, 2008; Lyons-Ruth et al., 2013; Shi et al., 2012), ils appuient le constat que les interactions dysfonctionnelles au sein de la relation parent-enfant et les expériences de maltraitance sont des déterminants importants du fonctionnement psychologique ultérieur de la personne. Ces expériences relationnelles traumatisques peuvent conduire à des représentations d'attachement désorganisées, lesquelles augmentent le risque qu'une personne présente des symptômes de psychopathologie et reproduisent des dynamiques interactionnelles problématiques au sein de la prochaine génération.

### **Limites de l'étude doctorale et directions futures**

Les résultats présentés dans le cadre de cette thèse doctorale doivent être interprétés à la lumière de certaines limites. D'abord, cette thèse met en évidence une association entre les expériences de maltraitance vécues durant l'enfance et l'état d'esprit H-I. Or, les

expériences de maltraitance ont principalement été documentées à partir de mesures auto-rapportées et/ou rétrospectives. Bien que ces mesures aient des appuis empiriques importants, tel le *Childhood Trauma Questionnaire* (CTQ; Bernstein et al., 2003), elles sont sujettes à certains biais comme la mémoire et l'effet de la désirabilité sociale. Le CTQ demeure toutefois un outil largement utilisé pour documenter les expériences de maltraitance vécues durant l'enfance, tel que soutenu par plus de 4000 citations. Il est important de noter qu'une étude menée par Najman et al. (2020) ayant suivi des enfants sur une période de 30 ans a permis d'identifier que seulement 17% des enfants qui avaient un dossier en protection de la jeunesse ont rapporté avoir vécu des expériences de maltraitance sur cette mesure rétrospective. Plusieurs auteurs évoquent qu'il est particulièrement difficile d'estimer les expériences de maltraitance vécues durant l'enfance et que les proportions varient en fonction de la manière dont elles sont opérationnalisées. Dans leur étude, Madigan et al. (2012) ont pour leur part trouvé que le pourcentage de correspondance entre les données recueillies par l'entremise du CTQ et celles recueillies par l'AAI était significatif, variant de 53% à 82% selon les formes de maltraitance. Des protocoles longitudinaux sont ainsi nécessaires afin de contrer les limites associées aux mesures rétrospectives. Une solution alternative consiste à utiliser une approche multi-répondants (p.ex., enfant, parent, intervenant) ou multimodale (questionnaire, entrevue) afin d'accroître la validité des données collectées par une triangulation de l'information. Néanmoins, il peut être plus facile pour une personne de rapporter des événements traumatisques via un questionnaire comparativement à une entrevue de recherche, qui elle, peut être perçue comme étant davantage intrusive et freiner

le discours de la personne, notamment une personne qui présente les caractéristiques d'un état d'esprit H-I.

Ensuite, comme la totalité des études (y compris la nôtre dans le troisième article) ont été réalisées auprès d'échantillons cliniques et à risque, il n'est pas possible de généraliser les résultats auprès d'échantillons normatifs. Les taux d'attrition rapportés dans les études longitudinales (variant de 20% à 40% selon les études; Byun et al., 2016; Finger et al., 2015; Lyons-Ruth et al., 2003; 2005; Milot et al., 2014; Obsuth et al., 2014; Vulliez-Coady et al., 2013) incitent aussi à une prudence dans la généralisation des résultats auprès de populations à haut niveau de risque. En effet, tel que soulevé dans la troisième étude incluse dans cette thèse doctorale, les personnes n'ayant *pas* complété les mesures à l'âge adulte ont un niveau de risque sociodémographique plus élevé (et donc davantage de facteurs de risque) comparativement aux personnes ayant complété l'ensemble des mesures. Différents facteurs peuvent expliquer cette attrition de près de la moitié de l'échantillon, notamment le nombre d'années séparant les deux temps de mesure (environ 15 ans) et les nombreux obstacles à la participation auxquels sont confrontées les populations vulnérables (p. ex., besoins de base non-comblés, problèmes de santé mentale; Ginn et al., 2017).

Une dernière limite se rapporte au manque d'analyses comparatives entre les personnes ayant un état d'esprit principalement hostile, les personnes ayant un état d'esprit principalement impuissant et les personnes ayant un état d'esprit mixte (hostile et

impuissant). Alors que la position d'hostilité se caractérise par l'identification à au moins une figure d'attachement malveillante et des attitudes d'invulnérabilité, la position d'impuissance, elle, renvoie à l'identification à au moins une figure d'attachement victimisée/impuissante et des sentiments de vulnérabilité ou de dévalorisation de soi (Lyons-Ruth et al., 2005). Les résultats d'une étude précédente révèlent que ces groupes diffèrent sur le plan des interactions parent-enfant (Vulliez-Coady et al., 2013). À l'inverse, Finger (2006) n'a pas repéré de différence entre les groupes quant au type d'attachement observé chez l'enfant. Comme l'état d'esprit H-I a été conceptualisé selon ces deux pôles distincts, chacun avec ses particularités, les interventions devraient elles aussi être planifiées en tenant compte de ces différences. Il est donc important de poursuivre ces analyses différentielles, car elles pourraient orienter l'intervention auprès des personnes ayant un profil dominant de type hostile, celles ayant un profil dominant de type impuissant et celles ayant un profil dominant de type mixte. Plus précisément, des recherches devraient examiner si certains profils sont plus résistants au traitement ou encore, si l'étiologie diffère sur les plans des types de traumas vécus ou de la qualité des interactions avec le parent non-maltraitant.

## **Conclusion générale**

Le concept de trauma a grandement évolué au cours des dernières décennies et plusieurs auteurs y intègrent désormais la nature traumatique des interactions dysfonctionnelles répétées et prolongées au sein de la relation parent-enfant. Ce type de traumatisme ne dépend pas de la présence d'un événement isolé, mais s'inscrit plutôt dans un contexte relationnel au sein duquel l'enfant est dépendant de son parent. Ces traumatismes sont considérés « complexes » en raison de leur nature chronique et du fait qu'ils s'inscrivent au sein de relations problématiques, pourtant censées être sécurisantes, et en raison de la complexité des conséquences qui en découlent tout au long de la vie (Milot et al., 2018).

Selon Herman (1992), l'une des premières conséquences des traumatismes relationnels se rapporte à une perturbation importante du rapport à soi et aux autres. Entre autres, les traumas relationnels chroniques subis durant l'enfance augmentent le risque qu'une personne présente des incohérences importantes dans les représentations mentales qu'elle se fait de son histoire d'attachement. Ces distorsions représentationnelles, lorsqu'elles sont invasives, sont qualifiées comme étant hostiles ou impuissantes et peuvent faire obstacle à l'établissement d'une relation d'attachement sécurisante avec l'enfant (Finger et al., 2006; Lyons-Ruth et al., 2005). Le concept d'état d'esprit H-I proposé par Lyons-Ruth et al. (2005) se caractérise, plus spécifiquement, par l'absence d'intégration cohérente des expériences négatives vécues durant l'enfance (Lyons-Ruth et

al., 2011), pouvant se traduire par des indices de clivage ou de dissociation, puis des contradictions ou des incohérences dans le discours et le raisonnement de l'adulte lorsqu'il discute de son histoire d'attachement (Melnick et al., 2008). Les résultats de plusieurs études révèlent que les personnes dont l'état d'esprit est hostile ou impuissant ont un risque plus élevé d'adopter des comportements parentaux problématiques (Lyons-Ruth et al., 2005; Obsuth et al., 2014) et de présenter divers symptômes psychopathologiques (Finger et al., 2015; Lyons-Ruth et al. 2007). Il est important d'intervenir auprès de ces personnes afin de guérir leurs blessures relationnelles passées et prévenir la transmission intergénérationnelle des expériences traumatisques. Des interventions axées sur la qualité des interactions parent-enfant et qui s'inscrivent dans une approche sensible aux traumas ont notamment été proposées par différents auteurs (Blaustein & Kinniburgh, 2017; Tarabulsky et al., 2008). Tel que précisé par Godbout et al. (2018) :

Des intervenants qui offriront de façon constante un contact empathique, de la validation, ainsi qu'un environnement sécurisant pourraient promouvoir le développement de modèles de soi et des autres positifs et auxquels l'enfant ne pouvait avoir accès en raison d'une hypervigilance post-traumatique ou d'un évitement dysfonctionnel des relations interpersonnelles (Briere et al., 2010; Briere et Scott, 2014). Un tel contexte peut permettre aux victimes de graduellement redéfinir leurs représentations internes d'elles-mêmes, favoriser la reprise du développement identitaire et apporter un contact expérientiel bénéfique à leur épanouissement. (p.79)

Ce type d'intervention est important pour éviter, d'une part, que les enfants victimes de traumas relationnels développent un état d'esprit H-I et, d'autre part, que les parents ayant des représentations d'attachement désorganisées adoptent des comportements problématiques à l'égard de leur enfant. Or, il importe de rappeler que d'intervenir efficacement auprès des personnes ayant vécu des traumas relationnels est une tâche

complexe. Les manifestations des traumas peuvent faire obstacle aux interventions et provoquer des réactions contre-transférrentielles de la part des intervenants, les amenant à adopter des modes relationnels s'approchant des expériences relationnelles hostiles ou impuissantes vécues dans l'enfance. Ces réactions peuvent, en retour, déclencher ou activer une réaction traumatique et conduire à une re-traumatisation de la personne. Il est donc essentiel d'accompagner les intervenants et de leur offrir de la supervision clinique afin qu'ils puissent saisir ces enjeux et proposer des interventions favorables au développement d'une bonne alliance thérapeutique et à la résolution des traumas.

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