**Gossip and Reputation in Childhood**

Gordon P. D. Ingram

Department of Psychology, Universidad de los Andes, Colombia

Email: gp.ingram@uniandes.edu.co

Full reference:

Ingram, G. P. D. (2019). Gossip and reputation in childhood. In F. Giardini & R. Wittek (Eds.), *The Oxford handbook of gossip and reputation*. Oxford, England: Oxford University Press, pp. 132–151.

ISBN: 9780190494087. <https://global.oup.com/academic/product/the-oxford-handbook-of-gossip-and-reputation-9780190494087?cc=us&lang=en&>

Abstract

Analysis of the development of gossip and reputation during childhood can help with understanding these processes in adulthood, as well as with understanding children’s own social worlds. Five stages of gossip-related behavior and reputation-related cognition are considered. Infants seem to be prepared for a reputational world in that they are sensitive to social stimuli; approach or avoid social agents who act positively or negatively to others, respectively; and point interaction partners toward relevant information. Young children engage in verbal signaling (normative protests and tattling) about individuals who violate social norms. In middle childhood, the development of higher-order theory of mind leads to a fully explicit awareness of reputation as something that can be linguistically transmitted. Because of this, preadolescents start to engage in increased conflict regarding others’ verbal evaluations. Finally, during adolescence and adulthood, gossip becomes more covert, more ambiguous, and less openly negative. The driving force behind all these changes is seen as children’s progressive independence from adults and dependence on peer relationships.

Keywords

child development, evolutionary developmental psychology, indirect aggression, ontogeny, Piaget, social selection, tattling, Tomasello

Introduction

This chapter attempts to show how an understanding of gossip and reputation in adults can be informed by an analysis of the growth of simpler forms of behavioral reporting and character evaluation in children. There are two key assumptions behind this approach: first, that children are not simply little adults with access to less information and a quantitatively smaller brain capacity, but beings who think in qualitatively different ways; and second, that adult ways of thinking and behaving do not simply replace children’s ways, but are in some sense constructed on top of the latter via an increase in information-processing complexity. In common with much of modern developmental psychology—and while acknowledging more recent research that has resulted in significant modifications to Piaget’s ideas—this approach is broadly Piagetian in focus, Piaget’s conception of stages being effectively levels of complexity of information-processing that serve as “building blocks” for fully adult ways of thinking.

While not all developmental psychologists share Piaget’s belief in the utility of a stage-based analysis such as this one, it should be noted that stage theory does not rest on the authority of a single theorist but also makes scientific sense from an evolutionary developmental perspective (Bjorklund and Pellegrini, [2000](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CChild#Ref7); Tomasello and Gonzalez-Cabrera, 2017). As has recently been argued (Burman, [2013](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CUpdating#Ref13); Ingram, [2013](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CPiaget#Ref53)), Piaget’s stages represent the psychological effects of underlying biological changes in the developing individual. It is thus possible to accept the utility of dividing children’s development into stages, without accepting all the details of Piaget’s theory, or regarding either the stages, or the ages at which stage transitions take place, as strictly invariant (cf. Lourenço, [2016](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CDevelopmental#Ref70)). Unlike Piaget, evolutionary developmental stage theory posits the existence of early hard-wired biases (e.g., toward social stimuli and therefore social information) that persist throughout later stages of development. And from an evolutionary point of view, the main reason for the existence of stages in the development of gossip and reputation may be a progressive lack of dependence on adult caregivers to meet one’s fitness needs and an increased interdependence with peers (paralleling the classic theory of Piaget [[1932](#Ref86)] on the transition from heteronomous to autonomous morality). Reflecting this focus on children’s needs, a more indirect aim of the chapter is to show how gossip, reputation and their developmental precursors pervade many different aspects of children’s social lives, and can therefore be useful for understanding and improving their lives.

This review of the ontogeny of gossip and reputational understanding is divided into five sections, based on five ontogenetic stages through which children and adolescents pass during development: infancy, early childhood, middle childhood, preadolescence and early adolescence, and middle to late adolescence. For each stage, I outline the characteristics of gossip production and reputational understanding in that age group. The overall intent is to provide a description of the cognitive building blocks that need to be in place for the very socially sophisticated adult behavior of gossip to be constructed. Finally, in the conclusion, I offer a tentative synthesis of the relationship between gossip and reputation through development. I argue that the ontogenies of these two phenomena are closely intertwined: changes in reputational understanding affect children’s linguistic accounts of third parties, including gossip; while their experiences of producing and consuming gossip enable the development of a more sophisticated understanding of reputation.

Infancy (0–2 years)

The stage of infancy is broadly defined, as with Piaget’s sensorimotor stage, by the absence or only rudimentary presence of language. As such, infants cannot really gossip. However, their early social interactions with others do show several interesting features that hint at a future capacity for gossip. First, from the age of 9 months, and probably earlier, children exhibit an interest in triadiccommunication with caregivers: that is, in referring to an entity outside of the communication partnership that is the object of their “joint attention” (Carpenter et al., [1998](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CSocial#Ref17)), rather than just to something in themselves or their audience. Tomasello’s early work showed that children had longer, more complex conversations with their mothers in this type of interaction than when they were only focused on each other (Tomasello and Farrar, [1986](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CJoint#Ref100)), leading to his postulation of joint attention as a key factor in the evolution of human language and cooperation (Tomasello, [1999](#Ref98); [2008](#Ref99)). Second, even very young children are sensitive to their audience’s knowledge state. Thirteen-month-old infants understand that seeing leads to knowing and that someone who has not had perceptual access to that information will not act based on that information (Surian et al., [2007](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CAttribution#Ref97)), and they can even modify their communicative behavior to take account of an interaction partner’s lack of knowledge when playing a hiding game (Bourdais et al., [2013](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CDo#Ref11)). Third, even the youngest infants are interested in the social world. They will, for example, selectively orient to human faces (Frank et al., [2014](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CVisual#Ref37); Jakobsen et al., [2016](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CEfficient#Ref58); Johnson et al., [1991](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CNewborns%E2%80%99#Ref60)), and prefer to pay attention to a strange peer than to their mother (Lewis et al., [1975](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CThe#Ref68)). Many of an infant’s first words also refer to agents—that is, to potentially social beings (Dromi, [1999](#Ref28)).

Thus, although gossip per se does not exist in infancy, putting these early characteristics of infant communication together we can see that humans are prepared for three crucial aspects of gossip right from the start of their communicative careers. Infants attempt to communicate about third-party entities of mutual interest to them and their audience; they attempt to communicate novel information; and they attempt to communicate social information. A fourth characteristic of gossip in adults is the communication of *reputationally relevant* information. Apparently no study has attempted to examine whether infants preferentially communicate such information. However, it certainly seems to be the case that infants are aware of what might be called the moral valence of an action, and react to it accordingly. Studies of selective association have shown that young children and infants as young as 5 months (Hamlin et al., [2011](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CHow#Ref46)) prefer to interact with toys or puppets that they have witnessed exhibiting prosocial rather than antisocial behavior, and expect other characters to do the same (see also Hamlin et al., [2007](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CSocial#Ref45); Kenward and Dahl, [2011](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CPreschoolers#Ref61); Meristo and Surian, [2014](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CInfants#Ref77); Vaish et al., [2010](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CYoung#Ref103); Vaish et al., [2016](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CPreschoolers#Ref104)).

Some authors (e.g., Meristo and Surian, [2013](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CDo#Ref76)) have interpreted these findings as reflecting an understanding of indirect reciprocity, which is often taken to be a foundation of reputation-based cooperation in humans (Alexander, [1987](#Ref2); Nowak and Sigmund, [1998](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CEvolution#Ref80); [2005](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CEvolution#Ref81)). However, this seems like an over-interpretation of the data, given that similar patterns of selective association are also found in dogs (if strange humans are used instead of toys/puppets; Chijiiwa et al., 2015). This suggests that the infant results may reflect a general adaptive tendency in social animals to avoid individuals who are likely to do them harm, and approach individuals who are likely to help them (sometimes known as “social selection”; Baumard et al., [2013](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CA#Ref5); Kuhlmeier et al., [2014](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CSelectivity#Ref64)), rather than a human-specific tendency to explicitly reward or punish other individuals, in line with Alexander’s ([1987](#Ref2)) theoretical conception of indirect reciprocity. More empirical work is needed in order to carefully test for differences in what might be called “implicit” indirect reciprocity at early ages, based on selective association, and “explicit” indirect reciprocity at older ages, based on attempts to punish or reward certain behaviors in other people.

Early Childhood (2–4 years)

Moving on to the development of verbal behavior, what is clear is that almost as soon as young children can speak in full sentences, they are using them to report the behavior of other people, especially siblings (den Bak and Ross, [1996](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CI%E2%80%99m#Ref26)) or peers (Ingram and Bering, [2010](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CChildren%E2%80%99s#Ref56)). Children’s third-party reporting meets a broad definition of gossip in terms of the description of other individual’s behavior to a third party, although unlike prototypical adult gossip it is often overt in that it takes place in front of the person whose behavior is being reported (Ingram, [2014](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CFrom#Ref54)). This definitional ambiguity may explain why some authors have claimed that young children gossip frequently, but in front of the target (Fine, [1977](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CSocial#Ref36)), while others have claimed, from observations of young children in a daycare center, that “It was surprisingly difficult to catch the children gossiping” (Engel and Li, [2004](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CNarratives%2C#Ref31), 160).

The overt reporting of negative (and especially counter-normative) behavior by other individuals is known as *tattling*. In children, it has been recorded observationally in homes between siblings (den Bak and Ross, [1996](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CI%E2%80%99m#Ref26); Ross and Den Bak-Lammers, [1998](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CConsistency#Ref89)), in preschools between peers (Ingram and Bering, [2010](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CChildren%E2%80%99s#Ref56)), and under controlled experimental conditions (Hardecker et al., [2016](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CYoung#Ref47); Rakoczy et al., [2008](#Ref88); Schmidt et al., [2011](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CYoung#Ref92); Vaish et al. [2011](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CThree%E2%80%90year%E2%80%90old#Ref105)), even when these involve transgressions committed by an unfamiliar adult (Heyman et al. [2016](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CChildren#Ref49)). The prevalence of negative over positive or neutral reporting was demonstrated by Ross and Den Bak-Lammers ([1998](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CConsistency#Ref89)) and by Ingram and Bering ([2010](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CChildren%E2%80%99s#Ref56)). Ingram ([2014](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CFrom#Ref54)) argued that this was due to a social pressure on young children to express aggressive impulses in more and more indirect ways, since physical violence between siblings or peers is not usually tolerated by supervising adults.

There is some disagreement over exactly when tattling starts. Tomasello and Vaish ([2013](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5COrigins#Ref102)) claimed, based mainly on the experimental results of their own research group, that “normative protest” does not become common until children reach 3 years of age. However, in naturalistic environments regular tattling of 2-year-old children on their 4-year-old siblings was observed by den Bak and Ross ([1996](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CI%E2%80%99m#Ref26)), while in audio-recordings made by Wells ([1981](#Ref108)), available in the CHILDES online corpus (MacWhinney, [2000](#Ref71)) and re-analyzed by Ingram ([2009](#Ref52)), there were also several examples of tattling by 2-year-olds. The question of whether 2-year-olds are fully aware of the existence and importance of social norms is critical to analyzing the extent of their awareness of their own and others’ reputation. This is because norm psychology is another building block of reputational understanding: the concept of reputation only really makes sense if it is placed in front of a background of social norms against which it can be measured, whether it is a bad reputation from failing to comply with norms or a good reputation from fully complying with, or even exceeding, normative expectations (Fu et al., [2016](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CYoung#Ref40)).

For reputation to be useful to others it has to be not only shared (e.g., via gossip) but an evaluation against shared standards: it is not very informative to tell someone about behavior you don’t like, unless you assume that they also wouldn’t like it. In a way, therefore, social norms represent an abstraction of shared intentionality extended to the judgment of action against (explicitly or implicitly) agreed standards (Schmidt and Rakoczy, [forthcoming](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5COn#Ref91)), rather than being simply joint attention paid to objects or actions that are immediately present. Tomasello and Vaish ([2013](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5COrigins#Ref102)) argued that this process develops in 3-year-olds based on theory-of-mind (and particularly false-belief) understanding. This does not make much sense because while often described as first appearing in 3-year-olds, explicit false-belief understanding in fact does not arrive in the majority of children until closer to 4 years (on average; see the meta-analysis of false-belief studies by Wellman et al., [2001](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CMeta-analysis#Ref107)); while other forms of explicit theory of mind, such as the understanding that individuals can have different desires, appear months earlier, and implicit theory of mind may develop as early as 15 months (Doherty, [2008](#Ref27)). A scenario that may better fit the empirical evidence is that children gradually and intuitively learn to follow social norms between 2 and 3 years of age (about the same time that they learn grammatical rules, which after all are just a form of social norms). After 3 years of age they develop more of a metacognitive, representational awareness of social norms (cf. Perner, [1991](#Ref85)), which includes the possibility of breaking them, and leads to more sophisticated forms of tattling and representational awareness. This is a related ability to false-belief understanding and develops in parallel with it, but there does not seem to be currently any direct empirical evidence that one is dependent on the other.

On the subject of normative understanding, young 3-year-olds, and indeed 2-year-olds, can also show a sophisticated understanding of the difference between “moral” norms that are universally applicable, and “conventional” norms that are restricted to a specific social context (Nucci and Turiel, [1978](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CSocial#Ref82); Smetana, [1981](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CPreschool#Ref94); but see Hardecker et al. [[2016](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CYoung#Ref47)] for evidence that in actual behavioral responses such as tattling, 3-year-olds may be less sensitive than 5-year-olds to the difference between moral and conventional norms). As we have seen, this is in line with the propensity of 2-year-olds (den Bak and Ross, [1996](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CI%E2%80%99m#Ref26)) and 3-year-olds (Ingram and Bering, [2010](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CChildren%E2%80%99s#Ref56)) to make contextually sensitive kinds of protests about siblings’ or peers’ norm violations. So, are 2-year-olds’ protests against others’ behavior truly norm-oriented, or simply advertising behavior that they don’t like (a kind of negativity bias in line with the results of work on selective association, and with work that shows a bias toward descriptions of negative events in the stories that young children tell to parents about the past; Miller and Sperry, [1988](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CEarly#Ref79))? This is a question that remains to be answered by future experimental research. If such research does show that children’s early protests are truly oriented toward violation of social norms, and that their normative awareness develops between the ages of 2 and 3 rather than afterward, then it is possible that improvements in norm-understanding actually lead to key developments in theory of mind, and particularly in false-belief understanding, rather than vice versa.

Middle Childhood (4–8 years)

Whatever the cause of the advance in theory-of-mind understanding between 3 and 4 years, it is clear that it precedes extensive changes in children’s social cognition, social relations and cooperative behavior during middle childhood (Caputi et al., [2012](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CLongitudinal#Ref15); House et al., [2013](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5COntogeny#Ref51); Slaughter et al., [2015](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CMeta%E2%80%90analysis#Ref93)), a once-neglected period of child development that is beginning to attract increased theoretical interest (Bosmans and Kerns, [2015](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CAttachment#Ref10); Del Giudice, [2014](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CMiddle#Ref25); Ingram, [2014](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CFrom#Ref54)). These changes naturally have effects on children’s communication about others’ social behavior. One such change is a drop in the relative importance of tattling: Ross and Den Bak-Lammers ([1998](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CConsistency#Ref89)) compared 4-year-old children’s tattling on their 2-year-old siblings with the same children’s levels of tattling when the former were 6 years old and their siblings 4 years old, and found that while overall rates of tattling increased (presumably reflecting an enhanced facility with narrative forms of language), it decreased as a proportion of children’s total speech during the observational period. Indeed, Engelmann and colleagues ([2016](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CPreschoolers#Ref33)) showed that in an experimental situation involving a choice of potential collaborative partners, 5-year-olds but not 3-year-olds were capable of spontaneously providing positive reputational information about others. It is noteworthy however that just because children even at the start of middle childhood are capable of talking positively about others, this does not mean that they will necessarily do so very often in their everyday lives: in Ross and Den Bak-Lammers’s ([1998](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CConsistency#Ref89)) data, 6-year-olds still spent more time tattling on their young siblings than they did describing their positive and neutral actions combined. Nevertheless, attitudes toward tattling change during middle childhood. In line with a classic experiment by Piaget ([1932](#Ref86)), a study by Chiu Loke et al. ([2011](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CChildren%E2%80%99s#Ref21)) found that while 6-year-olds believed that tattling on both major and minor transgressions was acceptable, older children found it appropriate only for serious transgressions such as cases of physical violence (see also Chiu Loke et al. [[2014](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CJapanese#Ref22)] for a replication with both American and Japanese children).

Perhaps not coincidentally, it is during middle childhood and its accompanying decline in tattling that children first begin to gossip extensively, in the normal sense of the word (i.e., covert reporting of other people’s behavior, in place of the overt reporting involved in tattling). After coding and analyzing the natural conversations of dyads of girls aged 6–7, 11–12, and 16–17 years, Mettetal ([1983](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CFantasy%2C#Ref78)) found that the frequency of gossip increased dramatically between the youngest and middle age groups, remaining at about the same level in the oldest group. A similar longitudinal pattern, for younger children, was found by Engel and Li ([2004](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CNarratives%2C#Ref31)), who asked three groups of participants—aged 4, 7, and 10 years—to tell stories about their friends in semi-structured interviews. The length, descriptiveness, and evaluative content of the stories increased significantly with age, implying that younger children’s stories were much less informative than older children’s.

If changes in children’s social communication, including gossip, are just beginning in middle childhood, there are more dramatic changes taking place simultaneously in their reputational understanding. While the capacity to comprehend social norms may have developed in early childhood, it is in middle childhood—a relatively stable period of ontogeny—that children really spend significant amounts of time learning and internalizing normative behavior. This leads to more pronounced individual differences, as well as advancement across the board, in various culturally specific technical skills (Del Giudice, [2014](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CMiddle#Ref25); Locke and Bogin, [2006](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CLanguage#Ref69)) and also in general levels of prosocial behavior (Caputi et al., [2012](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CLongitudinal#Ref15); House et al., [2013](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5COntogeny#Ref51)). Increased internalization of social norms coincides with a well-known development in moral psychology known as the outcome-to-intention shift (Cushman et al., [2013](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CThe#Ref24)). In this developmental change, first outlined by Piaget ([1932](#Ref86)), children between the ages of 4 and 8 years who are morally evaluating an action come to assign more weight to the good or bad intention behind it, rather than focusing solely on the good or bad outcome as younger children do. (It is worth noting here that at age 4, even though they can typically pass false-belief tests and realize that other people have different preferences, many children still find it difficult to accept verbally that people can have wicked intentions [Cushman et al., [2013](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CThe#Ref24)], which might seem to be another prerequisite for assigning someone a permanently bad reputation.)

Also at around this age, between about 6 and 8 years, children become aware that people can hold different but equally valid evaluations of the same stimulus, a development that has been called the beginning of the interpretive mind (Carpendale and Chandler, [1996](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5COn#Ref16)) and has consequences for children’s understanding of reputation as it may lead to the realization that an actor’s actions can be interpreted differently by witnesses (and gossip recipients) than by the actor themselves (Ross et al., [2005](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CMaking#Ref90)). The complex social cognition involved in considering the various possible interpretations in such situations may depend on the development of more complex forms of theory of mind: Fu et al. ([2014](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CMoral#Ref39)) found that second-order theory of mind (the ability to consider what another person thinks a third person is thinking) made unique contributions, on top of first-order theory of mind, to performance by 4- to 7-year-old children on moral judgement tasks.

In line with the developments that are taking place in theory of mind and related areas, children in middle childhood start to show greater sensitivity to the presence of an observer, suggesting further building blocks toward a fully developed concept of reputation. For example, Engelmann and colleagues ([2012](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CFive-year-olds%2C#Ref32); see also Engelmann et al., [2013](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CYoung#Ref34)) found that 5-year-old humans, but not chimpanzees, behaved more cooperatively when observed by a peer. Meanwhile, Piazza and colleagues ([2011](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CPrincess#Ref87)) showed that 5–6 year-old children were less likely to cheat not only in the presence of a human observer but even in the presence of an imaginary invisible princess, invented by the experimenter. These studies are more suggestive than the evidence presented in the first section of a possible sensitivity in young children to generalized, linguistically mediated indirect reciprocity: since young children are not typically punished directly by peers or invisible princesses, the implication is that they might tell someone who could punish the participant. Interestingly, children’s sensitivity to monitoring at this age may be a function of explicit (strategic) rather than implicit cognition (Leimgruber et al., [2012](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CYoung#Ref67)): an experimental study by Fujii and colleagues ([2015](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CThe#Ref41)) found that 5-year-olds’ generosity increased when they were monitored by an experimenter, but not when they were “monitored” by a picture of staring eyes on a computer (but see Manesi et al. [2016](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CEyes#Ref72)); while in Piazza and colleagues’ ([2011](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CPrincess#Ref87)) results, the level of cheating was mediated by explicitly stated belief in the invisible agent.

Even these results, however, are compatible with a picture of development in which 5-year-olds are sensitive to how they are evaluated by direct witnesses (which we might call image-scoring; cf., e.g., Wedekind and Milinski [2000](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CCooperation#Ref106)), but not to the effects of gossip on linguistically mediated reputation. This last development probably has to wait until later in middle childhood: in a pivotal study for the purposes of the current chapter, Hill and Pillow ([2006](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CChildren%E2%80%99s#Ref50)) showed that kindergarten children (aged 5–6 years) did not typically understand that an individual would have a lower opinion of a peer after learning about his or her antisocial activity indirectly, via gossip, though they did understand that direct observation of antisocial behavior would affect the witness’s opinion. Seven-to-eight-year-old children, on the other hand, did have both kinds of awareness. A recent study by Haux et al. ([2016](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CDo#Ref48)) supported this finding by showing that while 5-year-old children trusted gossip and direct observation equally, 7-year-olds gave more weight to their own observations. It remains to be investigated how this new understanding of the effects of language on reputation—and the potential of linguistic reports about others to be untrustworthy—rests upon and interacts with developments in the areas of theory of mind and morality that have also been discussed in this section.

Preadolescence and Early Adolescence (8–13 years)

The studies of Mettetal ([1983](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CFantasy%2C#Ref78)) and Engel and Li ([2004](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CNarratives%2C#Ref31)) discussed in the previous section indicate that gossip becomes more common between middle childhood and pre-adolescence. This has not gone unnoticed by researchers, so that in contrast to the paucity of studies on gossip-like behavior in young children, more research has focused directly on pre-adolescent gossip. In a vignette study, for example, Kuttler and colleagues ([2002](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CDevelopmental#Ref65)) showed that 8–12-year-old children already understood what gossip meant, considered it generally inappropriate, treated it with skepticism (surprisingly, less so in older children), and judged false gossip harshly. Despite this apparent evaluation of gossip as inappropriate, preadolescents seem to have a drive to spread social information: in an experimental “transmission chain” study in a 5th-grade classroom (10–11-year-olds), McGuigan and Cubillo ([2013](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CInformation#Ref74)) found that social information was transmitted more readily than non-social information, and (in contrast to stereotypes about gossip) that boys transmitted more social information than girls.

As well as sex differences, there may be interesting individual differences and age-related changes in gossiping within the preadolescent age range. The complex effects of gossip on personal relationships for this age group was shown by Menzer and colleagues ([2012](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CObserved#Ref75)), who found that frequent gossip in 10–12-year-old girls’ friendship dyads could lead to higher or lower levels of perceived friendship quality or friendship quality, depending on the levels of anxious withdrawal of the individuals concerned. The specific content of gossip is likely to be important for how well it is received. When McDonald and colleagues ([2007](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CGirl#Ref73)) analyzed videos of female friends’ (aged 9–10 years) conversations, they found that gossip was frequent and primarily neutral in content; popular girls however gossiped even more frequently, and more evaluatively (see Aikins et al. [[2015](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CGossiping#Ref1)] for a similar relationship between popularity and gossip frequency in 13–15-year-old girls). In contrast, working observationally with a sample of 10–14-year-olds, Eder and Enke ([1991](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CThe#Ref29)) found that negative evaluations of others in response to hearing gossip about them were more common than positive or neutral reactions, and that the first reaction from an individual within a group was important in influencing the reactions of other group members. Putting these two studies together, and assuming that popular children would be more likely both to react first and to influence other group members’ opinions, provides a potential mechanism by which gossip might evolve from a more neutral to a more evaluative and critical form of conversation.

Another possible mechanism behind this process is that at this age gossip may take on some of the negative characteristics of tattling in younger children, since at younger ages negative tattling greatly outweighs positive or neutral comments about others, but overt tattling tends to become frowned upon as children reach adolescence. Goodwin ([1990](#Ref43)), one of the few people to have studied the transition between gossip and earlier forms of discourse about others’ behavior, showed observationally that 10–11-year-old black urban American girls went through a kind of transitional phase that she labelled the “he-said-she-said” confrontation. This behavior consisted of aggressively confronting a peer who had been heard, through a third party, to have said something unpleasant about the confronter. The initial part of this activity was therefore covert, like adult gossip, but was then made overt through the tattling of the gossip recipient and the confrontational actions of the gossip target. Emphasizing, perhaps, the implicit nature of the negative evaluation involved, Goodwin ([2007](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CParticipation#Ref44)) even found that evaluations of absent peers were reflected in patterns of body language as well as in speech. Unfortunately there has been little or no research on similar kinds of transitional verbal behavior in other contexts, even within North America (though see Burdelski and Morita [[2017](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CYoung#Ref12)] for some related data from Japan), so it is hard to say how common they are.

Also worth mentioning in the context of preadolescents and adolescents is the large volume of data collected by aggression researchers on gossip in this age group. As Archer and Coyne ([2005](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CAn#Ref3)) have shown, negative gossip is one of the primary ways of operationalizing all three of the related constructs of indirect aggression (Lagerspetz et al., [1988](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CIs#Ref66)), relational aggression (Crick and Grotpeter, [1995](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CRelational#Ref23)), and social aggression (Cairns et al., [1989](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CGrowth#Ref14)). It is noticeable that in Archer and Coyne’s tabulation of the different yet similar ways in which these three forms of aggression are operationalized (Archer and Coyne, 2005, table 2), gossip is placed first in the list of type behaviors for all three forms during middle childhood and preadolescence, yet does not appear in the type behaviors for early childhood or adult forms. Since all these forms of aggression are typically defined in terms of an intent to damage someone’s reputation (for instance, Galen and Underwood [[1997](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CA#Ref42), 589] define social aggression as “directed toward damaging another's self-esteem, social status, or both”), there is a clear conceptual link in the literature between gossiping in preadolescence and reputational conflicts at the same age. The underlying evolutionary reason for this link may be a reorganization of social relationships at the start of adolescence, as mating opportunities become adaptively salient (Ingram [2014](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CFrom#Ref54); Krebs [2005](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CAn#Ref63)), leading to a new concern for teenagers about their reputation in their peers’ eyes.

Middle to Late Adolescence and Adulthood (13–19+ years)

As children pass through adolescence, norms against overt tattling become more explicit (Friman et al., [2004](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CRelationships#Ref38)). Gossip concomitantly becomes subtler and more covert: negative evaluations often become cloaked in ambiguity, allowing what is sometimes known as “plausible deniability” if the gossiper is accused of making a negative evaluation in a “he-said-she-said” type of confrontation. (At the same time, the pragmatic intent may be made quite clear to the audience, through nuances such as context or tone of voice.) This change in the nature of gossip can be seen in the changing operationalization of indirect, relational and social aggression in aggression studies with adolescents and adults. In Archer and Coyne’s tabulation of the various type behaviors of these constructs at different ages (2005, table 2), the simple terms of “Gossip,” “Spread rumors,” and “Backbite” in pre-adolescent forms of aggression are replaced by more nuanced phrasings such as “Say something hurtful that appears rational when questioned,” and “Judge others’ work in an unjust manner” in the adult forms.

This change is likely to reflect a growing understanding of the negative reputational consequences (to the gossiper) of spreading explicitly negative gossip about others. While little work exists that directly tackles the full development of an adult understanding of reputation in the teenage years, this development may be associated with several concomitant developments that have been better studied: the growth of a sense of personal identity, linked to a clearer idea of the social role that the developing adolescent is likely to play in her/his community (Nurmi, [2004](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CSocialization#Ref83)); the formal-operational understanding of hypothetical possibilities (Inhelder and Piaget, [1958](#Ref57)), which would help in modelling the likely perceptions of one’s actions by different types of onlookers (cross-sex as well as same-sex, for example); and an increased sophistication in moral reasoning, based on the idea of indirectly reciprocal rights and obligations within a community (Kohlberg, [1976](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CMoral#Ref62); Krebs, [2005](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CAn#Ref63)). Added to these developments is a considerable expansion in what counts as counter-normative behavior that might affect an adolescent’s reputation (Steinberg, [2008](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CA#Ref96)), as they are granted more freedom to take risks by adults and start to experience new desires—leading to reputational effects of licentious sexual behavior (especially for girls; Bamberg, [2004](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CSlut#Ref4)), drinking and smoking (Engels et al., [2006](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CPeer#Ref35)), drug-taking (Carroll et al., [2003](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CReputation#Ref18)), and joyriding and other delinquent behavior (Carroll et al., [2009](#Ref19)).

Summary of the Stage Model of Gossip and Reputation

It is clear from this examination of the ontogeny of gossip and reputation that children come into the world prepared to participate in both processes, but that the maturation of both is dependent on their experience of social (and in particular verbal) interactions with other individuals. Even before they can talk, infants are sensitive to social stimuli, show a tendency to approach or avoid social agents who act positively or negatively to others, and are also inclined to point their interaction partners toward relevant information. Between about 2 and 4 years, as young children become capable of grammatically structured verbal reports, these early tendencies are articulated into pragmatic phenomena such as normative protest and tattling (responses to social norm violations by others that are differentiated according to whether they are addressed to the perpetrator or to a third party, usually an authority figure who can be expected to punish the perpetrator). These linguistic practices do not seem to reflect a sophisticated concept of linguistically mediated reputation, so much as a kind of image score which is attached to individuals who behave in unwelcome ways and a drive to draw attention to their negative behavior.

A more abstract concept of reputation, as something which is understood differently by different people depending on their level of knowledge about another individual’s actions, has to wait until middle childhood, after the development of theory of mind and false-belief understanding. Even after this development, tattling continues (though it makes up a lower proportion of talk about others), but children start to understand something of the nature of gossip. Moving into preadolescence, between about 8 and 10 years, children begin to accuse each other of making negative reports to third parties—presumably influenced by their newfound awareness of the power of language to affect reputation. However, this does not seem to lead to substantial amounts of deliberately covert gossip until after 10 years of age. Finally, during adolescence—in line with a general reduction in all types of aggression—gossip becomes not only more covert but also more marked by ambiguity and thus less openly negative.

The model here proposed to account for this developmental picture is one in which there is a reciprocal interaction between gossip (and more generally, social interactions with peers that are mediated by language) and reputation awareness (more generally, a child’s socio-cognitive understanding of how their actions are perceived by others). These two processes feed back into each other as the child grows, and lead to the development of different stages of reputation at various ages. The proposed stages, and what leads to the developmental shifts between them, are outlined in Table 8.1.

Comp: Insert Table 8.1. near here

In addition to the rough correspondences between the different stages of gossip/reputation and Piaget’s classic stages of child development, the developmental progression described here has two other features in common with a Piagetian analysis: first, later stages of development are seen as constructed out of earlier stages—more complex ways of thinking are built on top of simpler ways; and second, the agent of change between successive stages is seen to be the dynamic between children’s increasingly sophisticated social cognition, and their increasingly complicated social interactions with others. More specifically, the covert, indirect behavior of adolescent and adult gossip is built on top of more direct forms of overt normative protest and tattling that are found in young children. Progression between the two types of linguistic behavior is influenced first by early interactions with peers in the preschool years, which leads to a developing understanding of the contents of other minds, which is then generalized into higher-order theory of mind and an abstract knowledge of how information is transmitted by language (as the child enters the concrete-operational stage). This complex social cognition is then reflected in a new propensity to accuse others of damaging one’s reputation, creating an inhibitory pressure against overt gossip and tattling (and eventually, for many people, even against negative gossip to some extent, except in carefully controlled circumstances).

As stated in the introduction, the underlying logic behind the existence of stages in the development of gossip and reputation may be a progressive lack of dependence on adult caregivers to meet one’s fitness needs and an increased interdependence with peers. This helps explain why one of the biggest transitions in the development of gossip and reputation—from overt tattling to covert gossip, and from identifying with an authority figure’s interests to identifying with a peer’s interests—takes place in preadolescence, as a child becomes physically capable of meeting all their own basic survival needs without adult support, and prepares for the new fitness challenges of achieving an advantageous position in a social network and finding a beneficent mate.

Conclusion and Future Directions

This account of the ontogeny of gossip and reputation is a necessarily sketchy one, especially given that little attention has been paid in the literature to the development of children’s explicit awareness of how reputation works. Therefore, several important potential research questions are raised that would help fill the gaps in our knowledge. First, despite the vast literature on theory of mind, there is a lack of a knowledge base on how theory of mind plays out in everyday social interactions. This is especially the case with higher-order theory of mind. Theoretically, children who understand better the contents of other minds, and that information can be passed between minds using language, should be able to model their own reputation better in other people’s minds, and thus behave better in order to reap the benefits of positive indirect reciprocity and avoid the consequences of negative indirect reciprocity. While the ages (between about 3 and 7 years) at which developments in first- and second-order belief understanding take place are certainly associated with general improvements in behavior, and various studies have shown negative cross-sectional associations between theory of mind and aggression, there is still little known about whether social cognitive breakthroughs at an individual level are associated longitudinally with an increase in cooperative behavior and a reduction in direct aggression, and nothing at all known about whether such an association might be mediated by an improved understanding of reputation and indirect reciprocity. Second, there is also very little known about the transitions from overt tattling to covert gossip and thence to cloaked, ambiguous gossip, during preadolescence and later adolescence. How do children come to realize that their words, not just their actions, can affect their reputations—and thus become more careful about to whom they spread gossip and how they phrase it? Why do audiences to negative gossip start to inhibit who they spread the information to—is it simply in order to avoid “he-said-she-said” types of confrontations? Or does this require an advanced level of moral reasoning based on the explicit upholding of communal norms (Kohlberg, [1976](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CMoral#Ref62)), which function to reduce intra-group conflict?

Finally, a number of important connections are suggested with other novel areas of research on gossip and reputation. A key question concerns the biological basis of the developmental changes highlighted in this chapter. It is tempting to link the timing of the shift to peer-network identification (and covert gossip) in pre-adolescence with the adrenarche—the change in hormonal balance that prepares children for adolescence—at roughly the same age. It remains to be demonstrated that hormonal changes cause the changes in behavior described here, but it is worth noting that one of the last brain areas to develop in young people, the prefrontal cortex, both starts to develop during preadolescence (apparently in response to the adrenarche; Blakemore et al., [2010](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CThe#Ref8)) and is highly activated, relative to other areas, during gossip processing (Peng et al., [2015](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CThe#Ref84); Boero, this volume). It would certainly be worth investigating the brain areas that are activated in children of various ages as they think about their own and others’ reputation.

A second question concerns the effects of online social networks on children’s gossip and reputational awareness. This is likely to have two possibly contradictory effects: at first, young children are potentially exposed to many more interaction partners (via online games) than they would have been in the past, leading to an early pressure to develop theory-of-mind processing in order to understand the varying normative behaviors and reactions of all these different partners (for gossip and reputation in offline networks of adolescents, see Kisfalusi, Takács, and Pál, this volume). However, later on during preadolescence, when older children have normally had to learn to accommodate very different points of view in their own nascent social networks, the ability to join communities of like-minded individuals online might inhibit the pressure to engage in perspective-taking toward people with very different views and interests. With the growing popularity of online games and social networks among children and young people, both these possibilities are clearly worth investigating and have important potential applications in combating cyberbullying (see Ingram [2016](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CGossip%2C#Ref55)), which is in many cases a technologically mediated form of negative gossip.

Finally, there is the question of how the ontogeny of gossip and reputation is reflected in our adult lives. According to both Piagetian theory and dual-process theories (Stanovich, et al., [2011](file:///C%3A%5CUsers%5CAdmin%5CDocuments%5CGiardini-%26-Wittek_For_Copy-editing%5CPre-edited_files%5CBatch%20I%5CGiardini-%26-Wittek%5CThe#Ref95)), earlier stages of cognitive development are not completely replaced by later ones, but instead remain in some sense submerged under later ones and can still be activated in particular situations—for example, if an individual feels stressed, powerless, or highly emotional—due to the processing that they involve being cognitively “cheaper” to perform. Knowledge of how this works might be particularly useful to researchers on gossip and reputation formation in professional settings, allowing them to identify the conditions in which normal adult injunctions against explicitly negative gossip and even overt tattling can break down, poisoning social relations in the workplace (see Beersma, van Kleef, and M. Dijkstra, this volume, and also Ellwardt, this volume, on organizational networks). One hypothesis worth investigating is that if bosses treat employees more like collegial adults and less like dependent children, they may be less likely to spread negative information about each other or compete on reputational terms in the manner of preadolescents, which could well result in more harmonious working relationships. An understanding of gossip and reputation in childhood might thus be of importance not only for improving children’s lives, for example by reducing or defusing their conflicts, but also for understanding adult cognition and improving adults’ lives.

References

Aikins, Julie Wargo, Charlene Collibee, and Jessica Cunningham. 2015. “Gossiping to the Top: Observed Differences in Popular Adolescents’ Gossip.” *Journal of Early Adolescence 37* (5): 1–20.

Alexander, Richard. 1987. *The Biology of Moral Systems*. New York: Aldine de Gruyter.

Archer, John, and Coyne, Sarah. 2005. “An Integrated Review of Indirect, Relational, and Social Aggression.” *Personality and Social Psychology Review 9* (3): 212–230.

Bamberg, Michael. 2004. “Form and Functions of ‘Slut Bashing’ in Male Identity Constructions in 15-year-olds: ‘I Know It May Sound Mean to Say This, but We Couldn’t Really Care Less About Her Anyway.’” *Human Development 47* (6): 331–353.

Baumard, Nicolas, Jean-Baptiste André, and Dan Sperber. 2013. “A Mutualistic Approach to Morality: The Evolution of Fairness by Partner Choice.” *Behavioral and Brain Sciences 36* (1): 59–78.

Beersma, Bianca, van Kleef Gerben A., Dijkstra, Maria T. M. 2019. Antecedents and Consequences of Gossip in Work Groups. In *Handbook of Gossip and Reputation*, edited by Francesca Giardini and Rafael Wittek. New York: Oxford University Press.

Bjorklund, David, and Anthony Pellegrini. 2000. “Child Development and Evolutionary Psychology.” *Child Development 71* (6): 1687–1708.

Blakemore, Sarah-Jayne, Stephanie Burnett, and Ronald Dahl. 2010. “The Role of Puberty in the Developing Adolescent Brain.” *Human Brain Mapping* *31* (6): 926–933.

Boero, Riccardo. 2019. The Neural Basis of Gossip and Reputation. In *Handbook of Gossip and Reputation*, edited by Francesca Giardini and Rafael Wittek. New York: Oxford University Press.

Bosmans, Guy, and Kathryn Kerns. 2015. “Attachment in Middle Childhood: Progress and Prospects.” *New Directions for Child and Adolescent Development 148*: 1–14.

Bourdais, Cécile, Agnès Danis, Camille Bacle, Amaud Santolini, and Charles Tijus. 2013. “Do 10- and 13-month-old Infants Provide Informative Gestures for Their Mothers in a Hiding Game?” *Infant Behavior and Development* *36* (1): 94–101.

Burdelski, Matthew, and Emi Morita. 2017. “Young Children’s Initial Assessments in Japanese.” In *Children’s Knowledge-in-Interaction: Studies in Conversation Analysis*, edited by Amanda Bateman and Amelia Church (pp. 231–255). Singapore: Springer.

Burman, Jeremy. 2013. “Updating the Baldwin Effect: The Biological Levels behind Piaget’s New Theory.” *New Ideas in Psychology* *31* (3): 363–373.

Cairns, Robert, Beverley Cairns, Holly Neckerman, Lynda Ferguson, and Jean-Louis Gariépy. 1989. “Growth and Aggression: 1. Childhood to Early Adolescence.” *Developmental Psychology 25* (2): 320–330.

Caputi, Marcella, Serena Lecce, Adriano Pagnin, and Robin Banerjee. 2012. “Longitudinal Effects of Theory of Mind on Later Peer Relations: The Role of Prosocial Behavior.” *Developmental Psychology* *48* (1): 257–270.

Carpendale, Jeremy, and Michael Chandler. 1996. “On the Distinction between False Belief Understanding and Subscribing to an Interpretive Theory of Mind.” *Child Development* *67* (4): 1686–1706.

Carpenter, Malinda, Katherine Nagell, and Michael Tomasello. 1998. “Social Cognition, Joint Attention, and Communicative Competence from 9 to 15 Months of Age.” *Monographs of the Society for Research in Child Development 63* (4): 1–143.

Carroll, Annemaree, Shauna Green, Stephen Houghton, and Robert Wood. 2003. “Reputation Enhancement and Involvement in Delinquency among High School Students.” *International Journal of Disability, Development and Education* *50* (3): 253–273.

Carroll, Annemaree, Stephen Houghton, Kevin Durkin, and John Hattie. 2009. *Adolescent Reputations and Risk: Developmental Trajectories to Delinquency*. Berlin: Springer Science+Business Media.

Chijiiwa, Hitomi, Hika Kuroshima, Yusuke Hori, James Anderson, and Kazuo Fujita. 2015. “Dogs Avoid People Who Behave Negatively to Their Owner: Third-party Affective Evaluation.” *Animal Behaviour* *106*: 123–127.

Chiu Loke, Ivy, Gail Heyman, Julia Forgie, Anjanie McCarthy, and Kang Lee. 2011. “Children’s Moral Evaluations of Reporting the Transgressions of Peers: Age Differences in Evaluations of Tattling.” *Developmental Psychology 47* (6): 1757–1762.

Chiu Loke, Ivy, Gail Heyman, Shoji Itakura, Rie Toriyama, and Kang Lee. 2014. “Japanese and American Children’s Moral Evaluations of Reporting on Transgressions.” *Developmental Psychology 50* (5): 1520–1531.

Crick, Nicki, and Jennifer Grotpeter. 1995. “Relational Aggression, Gender, and Social-psychological Adjustment.” *Child Development 66* (3): 710–722.

Cushman, Fiery, Rachel Sheketoff, Sophie Wharton, and Susan Carey. 2013. “The Development of Intent-based Moral Judgment.” *Cognition* *127* (1): 6–21.

Del Giudice, Marco. 2014. “Middle Childhood: An Evolutionary‐developmental Synthesis.” *Child Development Perspectives* *8* (4): 193–200.

den Bak, Irene, and Hildy Ross. 1996. ‘“I’m telling!’ The Content, Context, and Consequences of Children’s Tattling on Their Siblings.” *Social Development 5* (3): 292–309.

Doherty, Martin. 2008. *Theory of Mind: How Children Understand Others’ Thoughts and Feelings*. Hove, England: Psychology Press.

Dromi, E. 1999. Early lexical development. In *The Development of Language*, edited by Martyn Barrett,pp. 99–132. Hove, England: Psychology Press.

Eder, Donna, and Janet Enke. 1991. “The Structure of Gossip: Opportunities and Constraints on Collective Expression among Adolescents.” *American Sociological Review 56* (4): 494–508.

Ellwardt, Lea. 2019. “Gossip and Reputation in Social Networks.” In *Handbook of Gossip and Reputation*, edited by Francesca Giardini and Rafael Wittek. New York: Oxford University Press.

Engel, S., and Li, A. 2004. “Narratives, Gossip, and Shared Experience: How and What Young Children Know about the Lives of Others.” In *The Development of the Mediated Mind*, edited by Joan Lucariello, Judith Hudson, Robyn Fivush, and Patricia Bauer (pp. 151–174). Mahwah, NJ: Lawrence Erlbaum.

Engelmann, Jan, Esther Herrmann, and Michael Tomasello. 2012. “Five-year-olds, but Not Chimpanzees, Attempt to Manage Their Reputations.” *PLoS One*. doi: 10.1371/journal.pone.0048433.

Engelmann, Jan, Esther Herrmann, and Michael Tomasello. 2016. “Preschoolers Affect Others’ Reputations through Prosocial Gossip.” *British Journal of Developmental Psychology 34*: 447–460.

Engelmann, Jan, Harriet Over, Esther Herrmann, and Michael Tomasello. 2013. “Young Children Care More about Their Reputation with Ingroup Members and Potential Reciprocators.” *Developmental Science* *16* (6): 952–958.

Engels, Rutger, Ron Scholte, Cornelis van Lieshout, Raymond de Kemp, and Geertjan Overbeek. 2006. “Peer Group Reputation and Smoking and Alcohol Consumption in Early Adolescence.” *Addictive Behaviors* *31* (3): 440–449.

Fine, Gary. 1977. “Social Components of Children’s Gossip.” *Journal of Communication 27* (1): 181–185.

Frank, Michael, Dima Amso, and Scott Johnson. 2014. “Visual Search and Attention to Faces during Early Infancy.” *Journal of Experimental Child Psychology* *118*: 13–26.

Friman, Patrick, Douglas Woods, Kurt Freeman, Rich Gilman, Mary Short, Ann McGrath, and Michael Handwerk. 2004. “Relationships between Tattling, Likeability, and Social Classification: A Preliminary Investigation of Adolescents in Residential Care.” *Behavior Modification 28* (3): 331–348.

Fu, Genyue, Wen Xiao, Melanie Killen, and Kang Lee. 2014. “Moral Judgment and Its Relation to Second-order Theory of Mind.” *Developmental Psychology 50* (8): 2085–2092.

Fu, Genyue, Gail Heyman, Miao Qian, Tengfei Guo, and Kang Lee. 2016. “Young Children with a Positive Reputation to Maintain Are Less Likely to Cheat.” *Developmental Science 19* (2): 275–283.

Fujii, Takayuki, Haruto Takagishi, Michiko Koizumi, and Hiroyuki Okada. 2015. “The Effect of Direct and Indirect Monitoring on Generosity among Preschoolers.” *Scientific Reports 5*: 9025. doi: 10.1038/srep09025.

Galen, Britt, and Marion Underwood. 1997. “A Developmental Investigation of Social Aggression among Children.” *Developmental Psychology 33* (4): 589–600.

Goodwin, Marjorie Harness. 1990. *He-said-she-said: Talk as Social Organization among Black Children*. Bloomington: Indiana University Press.

Goodwin, Marjorie Harness. 2007. “Participation and Embodied Action in Preadolescent Girls’ Assessment Activity.” *Research on Language and Social Interaction 40* (4): 353–375.

Hamlin, Kiley, Karen Wynn, and Paul Bloom. 2007. “Social Evaluation by Preverbal Infants.” *Nature* *450*: 557–559.

Hamlin, Kiley, Karen Wynn, Paul Bloom, and Neha Mahajan. 2011. “How Infants and Toddlers React to Antisocial Others.” *Proceedings of the National Academy of Sciences* *108* (50): 19931–19936.

Hardecker, Susanne, Marco Schmidt, Meike Roden, and Michael Tomasello. 2016. “Young Children’s Behavioral and Emotional Responses to Different Social Norm Violations.” *Journal of Experimental Child Psychology 150*: 364–379.

Haux, Lou, Jan Engelmann, Esther Herrmann, and Michael Tomasello. 2016. “Do Young Children Preferentially Trust Gossip or Firsthand Observation in Choosing a Collaborative Partner?” *Social Development*, October 24, 2016. doi: 10.1111/sode.12225.

Heyman, Gail, Ivy Chiu Loke, and Kang Lee. 2016. “Children Spontaneously Police Adults’ Transgressions.” *Journal of Experimental Child Psychology 150*: 155–164.

Hill, Valerie, and Bradley Pillow. 2006. “Children’s Understanding of Reputations.” *Journal of Genetic Psychology 167* (2): 137–157.

House, Bailey, Joan Silk, Joseph Henrich, H. Clark Barrett, Brooke Scelza, Adam Boyette, et al. 2013. “Ontogeny of Prosocial Behavior across Diverse Societies.” *Proceedings of the National Academy of Sciences of the United States of America* *110* (36): 14586–14591.

Ingram, Gordon. 2009. *Young Children’s Reporting of Peers’ Behaviour*. Unpublished PhD dissertation, Queen’s University Belfast.

Ingram, Gordon. 2013. “Piaget on Moral Judgement: Towards a Reconciliation with Nativist and Socio-cultural Approaches.” In *Mental Culture: Towards a Cognitive Science of Religion*, edited by Dimitris Xygalatas and William McCorkle, Jr. (pp. 128–144). Sheffield, England: Equinox.

Ingram, Gordon. 2014. “From Hitting to Tattling to Gossip: An Evolutionary Rationale for the Development of Indirect Aggression.” *Evolutionary Psychology* *12* (2): 343–363.

Ingram, Gordon. 2016. “Gossip, Cooperation and Cyberbullying in Children’s Online Communication: Designing an Intervention Based on Original Empirical Research.” *Proceedings of the 15th International Conference on Interaction Design and Children*, Manchester, United Kingdom, June 21–24, 2016, pp. 535–540. New York: ACM.

Ingram, Gordon, and Jesse Bering. 2010. “Children’s Tattling: The Reporting of Everyday Norm Violations in Preschool Settings.” *Child Development 81* (3): 945–957.

Inhelder, Bärbel, and Jean Piaget. 1958. *The Growth of Logical Thinking from Childhood to Adolescence: An Essay on the Construction of Formal Operational Structures*. Abingdon, England: Routledge.

Jakobsen, Krisztina, Lindsay Umstead, and Elizabeth Simpson. 2016. “Efficient Human Face Detection in Infancy.” *Developmental Psychobiology 58* (1): 129–136.

Johnson, Mark, Suzanne Dziurawiec, Hadyn Ellis, and John Morton. 1991. “Newborns’ Preferential Tracking of Face-like Stimuli and Its Subsequent Decline.” *Cognition* *40* (1–2): 1–19.

Kenward, Ben, and Matilda Dahl. 2011. “Preschoolers Distribute Scarce Resources According to the Moral Valence of Recipients’ Previous Actions.” *Developmental Psychology* *47* (4): 1054–1064.

Kisfalusi, Dorottya, Takács, Károly, Pál, Judit. 2019. Gossip and Reputation in Adolescence Networks. In *Handbook of Gossip and Reputation*, edited by Francesca Giardini and Rafael Wittek, New York: Oxford University Press.

Kohlberg, Lawrence. (1976). “Moral Stages and Moralization.” In *Moral Development and Behavior: Theory, Research and Social Issues*, edited by Thomas Lickona (pp. 31–53). New York: Holt, Rinehart, and Winston.

Krebs, Dennis. 2005. “An Evolutionary Reconceptualization of Kohlberg’s Model of Moral Development.” In *Evolutionary Perspectives on Human Development*, edited by Robert Burgess and Kevin MacDonald (2nd ed., pp. 243–274). Thousand Oaks, CA: Sage.

Kuhlmeier, Valerie, Kristen Dunfield, and Amy O’Neill. 2014. “Selectivity in Early Prosocial Behavior.” *Frontiers in Psychology*, June 29, 2014. doi: 10.3389/fpsyg.2014.00836.

Kuttler, Ami Flam, Jeffrey Parker, and Annette La Greca. 2002. “Developmental and Gender Differences in Preadolescents’ Judgments of the Veracity of Gossip.” *Merrill-Palmer Quarterly 48* (2): 105–132.

Lagerspetz, Kirsti, Kaj Björkqvist, and Tarja Peltonen. 1988. “Is Indirect Aggression Typical of Females? Gender Differences in Aggressiveness in 11- to 12-year-old Children.” *Aggressive Behavior 14* (6): 403–414.

Leimgruber, Kristin, Alex Shaw, Laurie Santos, and Kristina Olson. 2012. “Young Children Are More Generous When Others Are Aware of Their Actions.” *PLoS ONE 7* (10): e48292. doi: 10.1371/journal.pone.0048292.

Lewis, M., G. Young, J. Brooks, and L. Michalson. 1975. “The Beginning of Friendship.” In *Friendship and Peer Relations*, edited by M. Lewis and L. Rosenblum (pp. 27–66)*.* Chichester, England: Wiley.

Locke, John, and Barry Bogin. 2006. “Language and Life History: A New Perspective on the Development and Evolution of Human Language.” *Behavioral and Brain Sciences* *29* (3): 259–280.

Lourenço, Orlando. 2016. “Developmental Stages, Piagetian Stages in Particular: A Critical Review.” *New Ideas in Psychology* *40* (B): 123–137.

MacWhinney, Brian. 2000. *The CHILDES Project: Tools for Analyzing Talk*. Mahwah, NJ: Lawrence Erlbaum.

Manesi, Zoi, Paul Van Lange, and Thomas Pollet. 2016. “Eyes Wide Open: Only Eyes That Pay Attention Promote Prosocial Behavior.” *Evolutionary Psychology 14* (2). doi: 10.1177/1474704916640780.

McDonald, Kristina, Martha Putallaz, Christina Grimes, Janis Kupersmidt, and John Coie. 2007. “Girl Talk: Gossip, Friendship, and Sociometric Status.” *Merrill-Palmer Quarterly 53* (3): 381–411.

McGuigan, Nicola, and Marcus Cubillo. 2013. “Information Transmission in Young Children: When Social Information is More Important than Nonsocial Information.” *Journal of Genetic Psychology 174* (6), 605–619.

Menzer, Melissa, Kristina McDonald, Kenneth Rubin, Linda Rose-Krasnor, Cathryn Booth-LaForce, and Annie Schulz. 2012. “Observed Gossip Moderates the Link between Anxious Withdrawal and Friendship Quality in Early Adolescence.” *International Journal of Developmental Science 6* (3–4): 191–202.

Meristo, Marek, and Luca Surian. 2013. “Do Infants Detect Indirect Reciprocity?” *Cognition* *129* (1): 102–113.

Meristo, Marek, and Luca Surian. 2014. “Infants Distinguish Antisocial Actions Directed towards Fair and Unfair Agents.” *PloS ONE 9*: e110553. doi: 10.1371/journal.pone.0110553.

Mettetal, Gwendolyn. 1983. “Fantasy, Gossip, and Self-Disclosure: Children’s Conversations with Friends.” *Annals of the International Communication Association 7* (1): 717–735. doi: 10.1080/23808985.1983.11678561.

Miller, Peggy, and Linda Sperry. 1988. “Early Talk about the Past: The Origins of Conversational Stories of Personal Experience.” *Journal of Child Language 15* (2): 293–315.

Nowak, Martin, and Karl Sigmund. 1998. “Evolution of Indirect Reciprocity by Image Scoring.” *Nature* *393*: 573–577.

Nowak, Martin, and Karl Sigmund. 2005. “Evolution of Indirect Reciprocity.” *Nature* *437*: 1291–1298.

Nucci, Larry, and Elliot Turiel. 1978. “Social Interactions and the Development of Social Concepts in Preschool Children.” *Child Development 49* (2): 400–407.

Nurmi, Jari-Erik. 2004. “Socialization and Self-Development.” In *Handbook of Adolescent Psychology*, edited byRichard Lerner and Laurence Steinberg (pp. 85–124). Hoboken, NJ: Wiley.

Peng, Xiaozhe, You Li, Pengfei Wang, Lei Mo, and Qi Chen. 2015. “The Ugly Truth: Negative Gossip about Celebrities and Positive Gossip about Self Entertain People in Different Ways.” *Social Neuroscience 10* (3): 320–336.

Perner, Josef. 1991. *Understanding the Representational Mind*. Cambridge, MA: MIT Press.

Piaget, Jean. 1932. *The Moral Judgment of the Child*, translated by M. Gabain. London: Paul, Trench, and Trubner.

Piazza, Jared, Jesse Bering, and Gordon Ingram. (2011). “‘Princess Alice Is Watching You’: Children’s Belief in an Invisible Person Inhibits Cheating.” *Journal of Experimental Child Psychology 109* (3), 311–320.

Rakoczy, Hannes, Felix Warneken, and Michael Tomasello. 2008. “The Sources of Normativity: Young Children’s Awareness of the Normative Structure of Games.” *Developmental Psychology 44* (3): 875–881.

Ross, Hildy, and Irene Den Bak-Lammers. 1998. “Consistency and Change in Children’s Tattling on Their Siblings: Children’s Perspectives on the Moral Rules and Procedures of Family Life.” *Social Development 7* (3): 275–300.

Ross, Hildy, Holly Recchia, and Jeremy Carpendale. 2005. “Making Sense of Divergent Interpretations of Conflict and Developing an Interpretive Understanding of Mind.” *Journal of Cognition and Development 6* (4): 571–592.

Schmidt, Marco, and Hannes Rakoczy. forthcoming. “On the Uniqueness of Human Normative Attitudes.” In *The Normative Animal? On the Anthropological Significance of Social, Moral and Linguistic Norms*, edited by K. Bayertz and N. Roughley*.* Oxford, England: Oxford University Press.

Schmidt, Marco, Hannes Rakoczy, and Michael Tomasello. 2011. “Young Children Attribute Normativity to Novel Actions without Pedagogy or Normative Language.” *Developmental Science* *14* (3): 530–539.

Slaughter, Virginia, Kana Imuta, Candida Peterson, and Julie Henry. 2015. “Meta‐analysis of Theory of Mind and Peer Popularity in the Preschool and Early School Years.” *Child Development 86* (4): 1159–1174.

Smetana, Judith. 1981. “Preschool Children’s Conceptions of Moral and Social Rules.” *Child Development 52* (4): 1333–1336.

Stanovich, Keith, Richard West, and Maggie Toplak. 2011. “The Complexity of Developmental Predictions from Dual Process Models.” *Developmental Review 31* (2–3): 103–118.

Steinberg, Laurence. 2008. “A Social Neuroscience Perspective on Adolescent Risktaking.” *Developmental Review* *28* (1): 78–106.

Surian, Luca, Stefania Caldi, and Dan Sperber. 2007. “Attribution of Beliefs by 13-month-old Infants.” *Psychological Science* *18* (7): 580–586.

Tomasello, Michael. 1999. *The Cultural Origins of Human Cognition*. Cambridge, MA: Harvard University Press.

Tomasello, Michael. 2008. *Origins of Human Communication*. Cambridge, MA: MIT Press.

Tomasello, Michael, and Michael Farrar. 1986. “Joint Attention and Early Language.” *Child Development 57* (6): 1454–1463.

Tomasello, Michael, and Ivan Gonzalez-Cabrera. 2017. “The Role of Ontogeny in the Evolution of Human Cooperation.” *Human Nature 28* (3): 274–288.

Tomasello, Michael, and Amrisha Vaish. 2013. “Origins of Human Cooperation and Morality.” *Annual Review of Psychology* *64*: 231–255.

Vaish, Amrisha, Malinda Carpenter, and Michael Tomasello. 2010. “Young Children Selectively Avoid Helping People with Harmful Intentions.” *Child Development* *81* (6): 1661–1669.

Vaish, Amrisha, Esther Herrmann, Christiane Markmann, and Michael Tomasello. 2016. “Preschoolers Value Those Who Sanction Non-cooperators.” *Cognition 153*: 43–51. doi: 10.1016/j.cognition.2016.04.011.

Vaish, Amrisha, Manuela Missana, and Michael Tomasello. 2011. “Three‐Year‐Old Children Intervene in Third‐Party Moral Transgressions.” *British Journal of Developmental Psychology 29* (1): 124–130.

Wedekind, Claus, and Manfred Milinski. 2000. “Cooperation through Image Scoring in Humans.” *Science* *288* (5467): 850–852.

Wellman, Henry, David Cross, and Julanne Watson. 2001. “Meta-analysis of Theory-of-Mind Development: The Truth about False Belief.” *Child Development 72* (3): 655–684.

Wells, Gordon. 1981. *Learning through Interaction: The Study of Language Development*. Cambridge, England: Cambridge University Press.

Table 8.1. Proposed stages in children’s development of gossip- and reputation-related behavior.

|  |  |  |
| --- | --- | --- |
| **Age in Years (and Piagetian Stage)** | **Summary of Gossip/Reputation-Related Behavior** | **What Causes This Behavior?** |
| 0–2 (sensorimotor)  | Sensitivity to social stimuli; differentiation of positive/negative behavior; attraction of audience to joint attention | Largely instinctual; perhaps reinforced by reciprocal interactions with caregivers  |
| 2–4 (pre-operational: pre-conceptual) | Protesting (either to perpetrator or to third party) about social norm violations | Development of language; learning of social rules from adults |
| 4–6 (pre-operational: intuitive)  | Peak age for tattling; development of representative theory of mind (including false-belief understanding) | Exposure to more social contact with peers, including peers with different beliefs and normative behaviors |
| 6–8 (early concrete-operational) | First understanding of nature of gossip and its effect on reputation | Development of second-order theory of mind (essential for understanding how information flows between minds); experience with how tattling affects audience’s behavior? |
| 8–10 (mid concrete-operational) | “He-said-she-said” confrontations; continued development in awareness of gossip and reputation | Knowledge of how gossip affects reputation means children become more concerned about what other people are saying about them |
| 10–12 (late concrete-operational) | Increase in covert gossip; tattling starts to become derogated, except in cases of serious harm | He-said-she-said confrontations inhibit tendency to gossip openly; affiliation starts to shift toward peer group instead of adult authority figures |
| 12–14 (concrete-operational to formal-operational transition)  | Peak age for negative gossip; tattling becomes almost universally proscribed, even in cases of quite serious harm | Hormonal and brain changes and reorganization of social relationships leads to spike in conflict (including indirect aggression) and also drive to affiliate with peer social networks |
| 14+ (formal-operational) | Negative gossip becomes increasingly covert and cloaked in ambiguity; positive gossip may also become more common | Increased sophistication in thinking about hypothetical effects on reputation (formal-operational reasoning) leads to more care about what is said about others; understanding that benefits to social partners also benefit the self |