

Keeping secrets from parents: on galloping horses, prancing ponies and pink unicorns

Tom Frijns¹, Loes Keijsers² and Catrin Finkenauer¹

We identify the need for a new wave of research on adolescent secrecy in their relationship with parents that relinquishes the focus on the nomothetic objective of finding general principles. This third wave builds on novel insights on three fallacies committed in previous waves of research: (1) between-person effects do not necessarily provide insights into within-family processes (the *ecological fallacy*), (2) within-family processes are not necessarily homogeneous across adolescents and families (the *one size fits all fallacy*), and (3) longer-term effects are not necessarily identical to short-term processes (the *galloping horse fallacy*). This approach promises to provide us with a more person-specific understanding of adolescent secrecy from parents, which enables more tailored insights as to when and for whom secrecy is bad versus good.

Addresses

¹ Utrecht University, Netherlands

² Tilburg University, Netherlands

Corresponding author: Frijns, Tom (t.frijns@uu.nl)

Current Opinion in Psychology 2020, 31:49–54

This review comes from a themed issue on **Privacy and disclosure, online and in social interactions**

Edited by **Leslie K John, Michael Slepian, and Diana Tamir**

For a complete overview see the [Issue](#) and the [Editorial](#)

Available online 1st August 2019

<https://doi.org/10.1016/j.copsyc.2019.07.041>

2352-250X/© 2019 Published by Elsevier Ltd.

Adolescents' secret-keeping in their relationships with parents has been the subject of a steadily expanding body of research in the new millennium. Kerr and Stattin's seminal reinterpretation of monitoring [1^{*},2], hitherto construed as the essential parenting skill of tracking and surveillance of children's behaviour that yields well-adjusted adolescents, ignited a *first wave* of research into adolescents' active role in parent-child communication. Their research showed that adolescent voluntary disclosure, rather than parental monitoring attempts such as asking about or demanding to know a child's whereabouts and activities, was both the main source of parental knowledge and the single most powerful predictor of adolescent adjustment. The resulting line of research consolidated their initial findings [3–6], linking disclosure with a wide

variety of indicators of adjustment, such as norm-breaking, (minor) delinquency, school problems, adolescent-parent relational quality, loneliness, depressed mood and self-esteem. It intersected with research on adolescent secrecy from parents when secrecy researchers noted that the prevalent measure of adolescent disclosure confounded it with secrecy [7^{*},8]. Although disclosure and secrecy are related, they are distinct information management strategies [7^{*},8–10]. Crucially, secrecy is a stronger predictor of (mal)adjustment than disclosure, and is consistently associated with poor psychosocial adjustment, including depressive symptoms and loneliness [11,12].

A *second wave* of research on adolescent information management, defined as adolescents' strategic regulation of parental access to information [13,14], has refined our knowledge by delving into the (bi)directionality of the web of longitudinal interrelations among secrecy, disclosure, privacy and autonomy concerns [15,16,17^{**}], parental monitoring practices [18–20], adolescent-parent relationship quality [19,21,22] and adolescent adjustment [23–26], as well as the reasons and motivations underlying secrecy and other information management strategies [27–29]. These efforts have yielded a complex picture of increasing levels of secrecy over the course of adolescence that are associated with decreases in disclosure and predictive of adolescent maladjustment. Adolescent secrecy is closely tied to the relationship with parents and parental monitoring behaviour, especially with the perception of parental privacy invasion, and seems to be an attempt at gaining or restoring autonomy. As much as we know about the general long-term linear associations of secrecy with markers of adjustment and indicators of relationship quality, the open question remains to what extent such findings are also informative regarding the real-time processes of secret keeping within unique families that ultimately explain why some youths thrive and others don't. In other words, we know a lot about the overall relational processes (macro-processes), but we know little about how secrecy unfolds within families in everyday interactions between parents and children (micro-processes).

In this paper, we identify a promising development in the recent literature on parent-child communication that we believe will greatly advance our understanding of the development, workings and consequences of secrecy from parents in adolescence. In a nutshell, this development, which we will follow others in calling a third wave of research on parent-child communication [30^{*}],

relinquishes the focus on homogeneity inherent in the nomothetic ideal of identifying general principles of development to give way to heterogeneity and uniqueness [31]. We will explain and illustrate the potential of this more person-specific or family-specific approach for the study of secrecy from parents — and in the process clarify the metaphorical subtitle of this paper — by applying it to a straightforward question: Is keeping secrets from parents bad while disclosure is good?

Keeping secrets from parents: good or bad?

Folk wisdom and empirical evidence alike suggest that keeping secrets is bad while sharing is good, and adolescent secrecy from parents is no exception. It has been linked both concurrently and longitudinally with poor adolescent psychosocial and behavioural adjustment, lower adolescent-parent relationship quality, more negative parenting practices and parental invasion of adolescent privacy [11,12,16,32]. Although it has been suggested that secrecy from parents may serve important developmental functions in adolescence such as facilitating the attainment of autonomy and independence from parents [8,11,28], researchers have been hard-pressed to find evidence of these advantages of secret-keeping [24]. Although findings on the reasons and motivations underlying decisions to conceal or reveal information to parents suggest quite complex processes, the overall picture that emerges from the first two waves of cross-sectional and longitudinal research seems quite straightforward: With few exceptions, secrecy is bad while disclosure is good. But is that really the complete picture?

The third wave: a threefold approach

The third wave of research on parent-child communication, as we see it, is inspired by a strong trend in psychology that highlights that each person (and each family) is a unique dynamic system that goes through person-specific underlying micro-mechanisms of development [33], and that complementary methods are therefore needed to understand such uniqueness [34–36]. With regard to information management, this means that each adolescent responds in a unique manner to his or her parents. Such within-family dynamic processes, operationalized as the real time exchange of information and interaction patterns of members of a family, differ between families. Ultimately, this diversity of dynamic family processes can crystalize and unfold into longer-term developmental outcomes for the individual adolescent and the parent-child relationship [18].

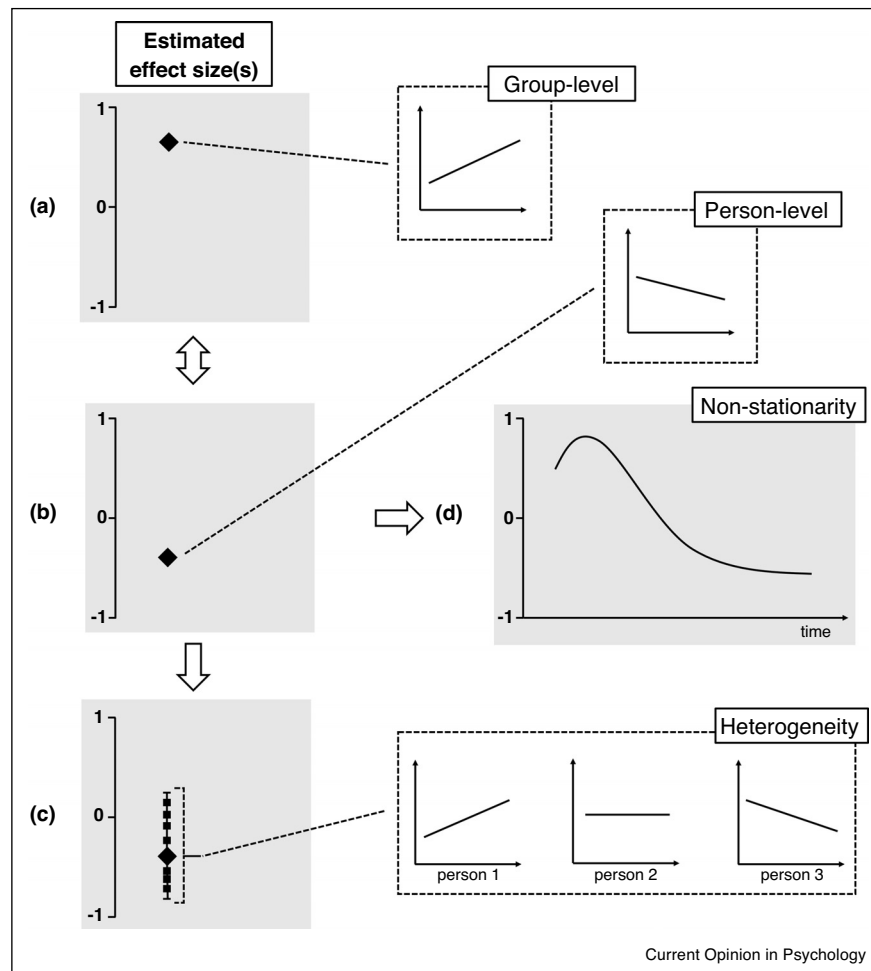
As much as we know about general principles of longer-term linear effects from comparing children or families to each other (e.g. with correlation coefficients or with regression-based structural equation models), only under the very strict conditions of both homogeneity (i.e. all children and families are identical) and stationarity (i.e. children or family processes are stable and do not develop over time)

can such estimates be translated one-on-one to the dynamic processes within an individual or family [34]. Specifically, how families differ from each other at the between-family level (e.g. in families with more secrets children are more often depressed compared to other families), does not imply that, within the same family, children are more likely to be depressed during periods, in which they keep more secrets from parents. How families differ is not how they function. Yet because alternatives were lacking, a nomothetic paradigm, in which families are compared to each other has been frequently used for the study of within-family processes [31]. With the appearance of alternative multilevel approaches evidence is accumulating that the translation of nomothetic findings to assess processes within-families is indeed plagued with the interpretation fallacies of (1) assuming that between-family effects provide insights into within-family processes (the *ecological fallacy*), (2) assuming homogeneity (the *one size fits all fallacy*), and (3) assuming that longer-term effects are identical to short-term processes (the *galloping horse fallacy*) [37**].

Within-family versus between-family

Although families may differ from each in the amount of secrecy, the dynamic processes of secrecy occur within the individual and their family, not between families. One of the powerful approaches to assess dynamic processes that emerged in the second wave, for instance, is the cross-lagged panel model for longitudinal data. This method is designed to and therefore powerful in disentangling the direction of effects. Nevertheless, it has recently been criticized for not differentiating between-family from within-family effects [38,39], potentially leading to false positive or false negative claims regarding within-family transactional processes (i.e. *ecological fallacy*). Dietvorst *et al.* [17**] wonderfully illustrated the importance of distinguishing the between-family from within-family level by showing a Simpson's paradox [40] in the links between parental privacy invasion and adolescent secrecy in a three-wave longitudinal study: While privacy invasion and secrecy were *positively* linked at the between-person level (thus, adolescents who experienced more privacy invasion also kept more secrets; see Figure 1a), they were *unidirectionally* and *negatively* linked at the within-family level (thus, within a family higher levels of secrecy predicted lower levels of privacy invasion (as illustrated in Figure 1b). Thus, when looking at how families differ at the between-person level, adolescents who experience more parental privacy invasion also keep more secrets. Within-families, however, when adolescents do keep secrets in their interactions with parents, they successfully avoid privacy invasion. Several recent studies at the forefront of the third wave have taken this within-family approach [17**,19,30*,41*,42,43]. Although these studies underline the fallaciousness of translating between-families comparisons to within-person processes, and the complementary

Figure 1



The links between adolescent information management and parenting. Four illustrative depictions of the association between adolescents' (secrecy or disclosure) and parents' (privacy invasion or solicitation) roles in parent-child communication as (a) a single estimate at the between-person level as in a correlation, (b) a single estimate at the within-person level as in a multilevel model, (c) between-person heterogeneity in within-person estimates as in a multilevel model with random slopes, and (d) heterogeneity across different time-scales as in a continuous time model.

value of assessing both between-family effects and within-family processes, most within-family approaches still yield a single estimate of how dynamic within-family processes operate per (sub)sample (as in Figure 1a and b). Which brings us to our next fallacy.

One size fits all?

While adolescents often experience a heightened sense of personal uniqueness, researchers seem to more often fall prey to the *one size fits all-fallacy* [37]. By obtaining one estimate per (sub)sample, they implicitly assume that adolescents are basically all alike and that family processes are homogeneous, without actually testing whether the mechanisms that link secret-keeping to outcomes within-family differ from family to family. Studies that do test for such differences find quite some heterogeneity [41,44]. In one such study, for instance, the strong

positive link between adolescent disclosure and parental knowledge at the between-family level, was replicated in only 3% of individual families [41]. The within-family effect was smaller in 96% of the families and ranged between -0.22 and .91. Thus, only estimating one effect per sample (or subsample, as is often the case when moderation is assessed) is in fact something of a Trojan horse, as it may hide the heterogeneity inside. With novel approaches that use multiple assessments of one family, for instance by employing multilevel models to intensive longitudinal data (e.g. daily diaries or experience sampling), the uniqueness of each family can be studied. This is illustrated in Figure 1c, which shows variation across families in within-family process. Thus, unless we actually test for the full range of heterogeneity and estimate the random slopes of associations, it is hard to detect how differently every family functions.

Real-time versus longer-term development

Another source of heterogeneity besides differences between adolescents and between-families is the non-linearity of dynamic processes, or differences across time-scales. Very few developmental phenomena, by default, are stable over time or stationary [34], even when observing a single individual or family. In analogy, the slow movement of a trotting horse is qualitatively different from the fast movement of a galloping horse: Speeding up a video recording of a trotting horse will not yield a galloping horse, nor vice versa [37**]. One can thus only understand a process by assessing it at the right time scale. In longitudinal research, however, often the slower processes are observed by assessing families years apart, but conclusions are interpreted and generalized as if they also capture much faster real-time interactions. This has been dubbed the *galloping horse fallacy* [37**].

Likewise, the processes of secrecy on the micro levels of daily and day-to-day interactions, where secrecy involves keeping specific pieces of information secret from one's parents through tactics such as avoiding the topic in conversation and lying [29], may not be the same as those on the macro level of development over the adolescent years. In the short run, parental monitoring may put adolescents under pressure and get them to disclose information on their whereabouts and activities, because it is solicited and they may feel obliged to disclose or wish to avoid disappointing their parents [8,29,45,46]. Paradoxically, it may at the same time also entice them to keep more secrets and evoke negative reactions [19,47] that may accumulate in the long run into information management strategies with lower levels of disclosure and higher levels of secrecy [18,21,48] that would then undermine the very things parents hope to achieve through monitoring their children [47]. In line with this reasoning, the finding from a longer-term study that solicitation was linked to less secrecy [20] was contrasted by a short-term diary study's [19] finding that mothers' solicitation of information was linked to both more adolescent disclosure and more secrecy. At the same time, secrecy was negatively linked to relational quality, a result that lines up with other findings showing the relational detriments of secrecy [21,49] and another study showing strong links between parental perceptions of adolescent concealment and poorer parenting behaviours (even when controlling for parents' perception of disclosure from their child) [32,50]. Akin to the diverging links between privacy invasion and secrecy at the between person and within person level, the links between monitoring and information management may thus also vary with time-scale. This is illustrated as an example in Figure 1d.

Looking ahead: new waves of bottom-up research

In the preceding, we have sketched what we view as the beginnings of a third wave of research on adolescent

secret keeping from parents that should greatly advance our understanding of these processes by tapping into and comparing different levels of inference, testing for heterogeneity across families, and considering non-linearity of effects over time. This threefold approach may be useful more broadly, not just for those who study adolescent-parent communication but also for those in other research traditions that study disclosure and secrecy from many different angles across multiple disciplines, as illustrated in the diverse set of papers in this special issue. We hope that our discussion provides food for thought and encourage all to take these considerations into account.

Ultimately, each and every individual, and each and every adolescent and their family are unique and as such should be assessed, at different time scales, with idiographic methods [51**,52]. New methods such as Experience Sampling, and person-specific times series models that allow to detect causal mechanisms for a single family, are already proving their usefulness in person-specific advices in clinical practice for depression and chronic fatigue [35,53,54**]. For among horses there are the occasional unicorns, individuals that do not follow the general principles that we researchers have so carefully captured in nomothetic theories. If we are to truly translate science to practice, we need to take the insights from the third wave one step further and take a bottom-up approach by first understanding each person, before summarizing them into groups or more general principles (the nomothetic objective of finding what is common to all). The theoretical aim of this fourth wave would be to obtain a more complete picture of the extent to which adolescents do function according to (sets of) general principles versus idiosyncratic ones. Its real test would be to not only substantiate our theoretical ideas with more fitting methods, but to also improve the relevance and applicability of our scientific efforts for parents and clinicians alike.

Conclusion

Letting go of the nomothetic ideal of identifying general principles of development and embracing novel, more person-specific possibilities may open paths towards insights into adolescent uniqueness, into how a wide diversity of daily life mechanisms of keeping secrets from parents ultimately feed into divergent developmental paths over the course of adolescence in both secrecy and related outcomes. This could, in turn, open up possibilities to provide more tailored advice in clinical practice as to when and for whom secrecy is bad and when and for whom it is good.

In the metaphorical terms of the subtitle of this paper then, we should not view adolescence as traversed by a uniform herd of horses³ trotting along. There are ponies

³ Or sheep, for that matter.

among the herd and the occasional pink unicorn (i.e. there is heterogeneity), besides trotting there is prancing and galloping (i.e. there are different time scales), and, as with their Trojan counterparts, what goes on within cannot simply be inferred from observing the herd (i.e. it is important to distinguish within versus between person or family levels). We firmly believe that taking these considerations into account will provide us with a much richer view of secrecy from parents in adolescence.

Funding

This paper was partially supported by a personal research grant awarded to Loes Keijsers from The Netherlands Organisation for Scientific Research (NWO-VIDI; ADAPT. *Assessing the Dynamics between Adaptation and Parenting in Teens* 452-17-011).

Conflict of interest statement

Nothing declared.

References and recommended reading

Papers of particular interest, published within the period of review, have been highlighted as:

- of special interest
 - of outstanding interest
1. Stattin H, Kerr M: **Parental monitoring: a reinterpretation.** *Child Dev* 2000, **71**:1072-1085 <http://dx.doi.org/10.1111/1467-8624.00210> A classic paper that changed the way we look at parental monitoring and highlighted adolescents' active role in parent-child communication. Started a new avenue of research that has yielded a large body of evidence.
 2. Kerr M, Stattin H: **What parents know, how they know it, and several forms of adolescent adjustment: further support for a reinterpretation of monitoring.** *Dev Psychol* 2000, **36**:366-380 <http://dx.doi.org/10.1037/0012-1649.36.3.366>.
 3. Kerr M, Stattin H, Burk WJ: **A reinterpretation of parental monitoring in longitudinal perspective.** *J Res Adolesc* 2010, **20**:39-64 <http://dx.doi.org/10.1111/j.1532-7795.2009.00623.x>.
 4. Keijsers L, Branje SJT, VanderValk IE, Meeus W: **Reciprocal effects between parental solicitation, parental control, adolescent disclosure, and adolescent delinquency.** *J Res Adolesc* 2010, **20**:88-113 <http://dx.doi.org/10.1111/j.1532-7795.2009.00631.x>.
 5. Racz SJ, McMahon RJ: **The relationship between parental knowledge and monitoring and child and adolescent conduct problems: a 10-Year update.** *Clin Child Fam Psychol Rev* 2011, **14**:377-398 <http://dx.doi.org/10.1007/s10567-011-0099-y>.
 6. Smetana JG: **"It's 10 o'clock: do you know where your children are?" Recent advances in understanding parental monitoring and adolescents' information management.** *Child Dev Perspect* 2008, **2**:19-25 <http://dx.doi.org/10.1111/j.1750-8606.2008.00036.x>.
 7. Frijns T, Keijsers L, Branje S, Meeus W: **What parents don't know and how it may affect their children: qualifying the disclosure-adjustment link.** *J Adolesc* 2010, **33** <http://dx.doi.org/10.1016/j.adolescence.2009.05.010> The first paper to show the value of distinguishing between disclosure and secrecy in adolescent-parent communication.
 8. Smetana JG, Metzger A, Gettman DC, Campione-Barr N: **Disclosure and secrecy in adolescent-parent relationships.** *Child Dev* 2006, **77**:201-217 <http://dx.doi.org/10.1111/j.1467-8624.2006.00865.x>.
 9. Lionetti F, Keijsers L, Dellagiulia A, Pastore M: **Evidence of factorial validity of parental knowledge, control and solicitation, and adolescent disclosure scales: when the ordered nature of Likert scales matters.** *Front Psychol* 2016, **7**:1-10 <http://dx.doi.org/10.3389/fpsyg.2016.00941>.
 10. Jäggi L, Drazdowski TK, Kliewer W: **What parents don't know: disclosure and secrecy in a sample of urban adolescents.** *J Adolesc* 2016, **53**:64-74 <http://dx.doi.org/10.1016/j.adolescence.2016.08.016>.
 11. Finkenauer C, Engels RCME, Meeus W: **Keeping secrets from parents: advantages and disadvantages of secrecy in adolescence.** *J Youth Adolesc* 2002, **31**:123-136 <http://dx.doi.org/10.1023/A:1014069926507>.
 12. Frijns T, Finkenauer C, Vermulst AA, Engels RCME: **Keeping secrets from parents: longitudinal associations of secrecy in adolescence.** *J Youth Adolesc* 2005, **34** <http://dx.doi.org/10.1007/s10964-005-3212-z>.
 13. Keijsers L, Laird RD: **Introduction to special issue. Careful conversations: adolescents managing their parents' access to information.** *J Adolesc* 2010, **33**:255-259 <http://dx.doi.org/10.1016/j.adolescence.2009.10.009>.
 14. Marshall SK, Tilton-Weaver LC, Bosdet L: **Information management: considering adolescents' regulation of parental knowledge.** *J Adolesc* 2005, **28**:633-647 <http://dx.doi.org/10.1016/j.adolescence.2005.08.008>.
 15. Hawk ST, Becht A, Branje S: **"Snooping" as a distinct parental monitoring strategy: comparisons with overt solicitation and control.** *J Res Adolesc* 2016, **26**:443-458 <http://dx.doi.org/10.1111/jora.12204>.
 16. Hawk ST, Keijsers L, Frijns T, Hale WW, Branje S, Meeus W: **"I still haven't found what i'm looking for": parental privacy invasion predicts reduced parental knowledge.** *Dev Psychol* 2013, **49** <http://dx.doi.org/10.1037/a0029484>.
 17. Dietvorst E, Hiemstra M, Hillegers MHJ, Keijsers L: **Adolescent perceptions of parental privacy invasion and adolescent secrecy: an illustration of Simpson's paradox.** *Child Dev* 2018, **89**:2081-2090 <http://dx.doi.org/10.1111/cdev.13002>.
 18. Lionetti F, Palladino BE, Moses Passini C, Casonato M, Hamzallari O, Ranta M, Dellagiulia A, Keijsers L: **The development of parental monitoring during adolescence: a meta-analysis.** *Eur J Dev Psychol* 2018:1-29 <http://dx.doi.org/10.1080/17405629.2018.1476233>.
 19. Villalobos Solís M, Smetana JG, Comer J: **Associations among solicitation, relationship quality, and adolescents' disclosure and secrecy with mothers and best friends.** *J Adolesc* 2015, **43**:193-205 <http://dx.doi.org/10.1016/j.adolescence.2015.05.016>.
 20. Keijsers L, Laird RD: **Mother-adolescent monitoring dynamics and the legitimacy of parental authority.** *J Adolesc* 2014, **37**:515-524 <http://dx.doi.org/10.1016/j.adolescence.2014.04.001>.
 21. Keijsers L, Branje SJT, Frijns T, Finkenauer C, Meeus W: **Gender differences in keeping secrets from parents in adolescence.** *Dev Psychol* 2010, **46** <http://dx.doi.org/10.1037/a0018115>.
 22. Padilla-Walker LM, Son D: **Longitudinal associations among routine disclosure, the parent-child relationship, and adolescents' prosocial and delinquent behaviors.** *J Soc Pers Relat* 2018:1-19 <http://dx.doi.org/10.1177/0265407518773900>.
 23. Laird RD, Marrero MD, Melching JA, Kuhn ES: **Information management strategies in early adolescence: developmental change in use and transactional associations with psychological adjustment.** *Dev Psychol* 2013, **49**:928-937 <http://dx.doi.org/10.1037/a0028845>.
 24. Laird RD, Marrero MD: **Information management and behavior problems: is concealing misbehavior necessarily a sign of trouble?** *J Adolesc* 2010, **33**:297-308 <http://dx.doi.org/10.1016/j.adolescence.2009.05.018>.
 25. Laird RD, Bridges BJ, Marsee MA: **Secrets from friends and parents: longitudinal links with depression and antisocial behavior.** *J Adolesc* 2013, **36**:685-693 <http://dx.doi.org/10.1016/j.adolescence.2013.05.001>.
 26. Willoughby T, Hamza CA: **A longitudinal examination of the bidirectional associations among perceived parenting**

- behaviors, adolescent disclosure and problem behavior across the high school years. *J Youth Adolesc* 2011, **40**:463-478 <http://dx.doi.org/10.1007/s10964-010-9567-9>.
27. Smetana JG, Villalobos M, Tasopoulos-Chan M, Gettman DC, Campione-Barr N: **Early and middle adolescents' disclosure to parents about activities in different domains.** *J Adolesc* 2009, **32**:693-713 <http://dx.doi.org/10.1016/j.adolescence.2008.06.010>.
 28. Darling N, Cumsille P, Caldwell LL, Dowdy B: **Predictors of adolescents' disclosure to parents and perceived parental knowledge: between- and within-person differences.** *J Youth Adolesc* 2006, **35**:667-678 <http://dx.doi.org/10.1007/s10964-006-9058-1>.
 29. Cumsille P, Darling N, Martínez ML: **Shading the truth: the patterning of adolescents' decisions to avoid issues, disclose, or lie to parents.** *J Adolesc* 2010, **33**:285-296 <http://dx.doi.org/10.1016/j.adolescence.2009.10.008>.
 30. Rote WM, Smetana JG: **Within-family dyadic patterns of parental monitoring and adolescent information management.** *Dev Psychol* 2018, **54**:2302-2315 <http://dx.doi.org/10.1037/dev0000615>.
 31. Robinson OC: **The idiographic/nomothetic dichotomy: tracing historical origins of contemporary confusions.** *Hist Philos Psychol* 2011, **13**:32-39.
 32. Finkenauer C, Frijns T, Engels RCME, Kerkhof P: **Perceiving concealment in relationships between parents and adolescents: links with parental behavior.** *Pers.* 2005, **12** <http://dx.doi.org/10.1111/j.1475-6811.2005.00122.x>.
 33. Thelen E, Smith LB: **Dynamic systems theories.** *Handb. Child Psychol.* 2009 <http://dx.doi.org/10.1002/9780470147658.chpsy0106>.
 34. Molenaar PCM: **A manifesto on psychology as idiographic science: bringing the person back into scientific psychology, this time forever.** *Meas Interdiscip Res Perspect* 2004, **2**:201-218 http://dx.doi.org/10.1207/s15366359mea0204_1.
 35. Hamaker EL, Wichers M: **No time like the present: discovering the hidden dynamics in intensive longitudinal data.** *Curr Dir Psychol Sci* 2017, **26**:10-15 <http://dx.doi.org/10.1177/0963721416666518>.
 36. Fisher AJ, Medaglia JD, Jeronimus BF: **Lack of group-to-individual generalizability is a threat to human subjects research.** *Proc Natl Acad Sci U S A* 2018, **115**:E6106-E6115 <http://dx.doi.org/10.1073/pnas.1711978115>.
 37. Keijsers L, Van Roekel E: **Longitudinal methods in adolescent psychology. Where could we go from here? And should we?.** *Reframing Adolescent Research.* 2018 <http://dx.doi.org/10.4324/9781315150611>This chapter introduces the three fallacies that we also address in the current paper, but in both a much broader sense as they occur in the developmental psychology of adolescents and more focused on methodology.
 38. Keijsers L: **Parental monitoring and adolescent problem behaviors: how much do we really know?** *Int J Behav Dev* 2016, **40**:271-281 <http://dx.doi.org/10.1177/0165025415592515>.
 39. Hamaker EL, Kuiper RM, Grasman RPPP: **A critique of the cross-lagged panel model.** *Psychol Methods* 2015, **20**:102-116 <http://dx.doi.org/10.1037/a0038889>.
 40. Kievit RA, Frankenhuis WE, Waldorp LJ, Borsboom D: **Simpson's paradox in psychological science: a practical guide.** *Front Psychol* 2013, **4**:1-14 <http://dx.doi.org/10.3389/fpsyg.2013.00513>.
 41. Keijsers L, Voelkle MC, Maciejewski D, Branje S, Koot H, Hiemstra M, Meeus W: **What drives developmental change in adolescent disclosure and maternal knowledge? Heterogeneity in within-family processes.** *Dev Psychol* 2016, **52**:2057-2070 <http://dx.doi.org/10.1037/dev0000220>This paper is the first to empirically address the one-size-fit-all fallacy and explore between-person heterogeneity in within-person processes (as illustrated in Figure 1c).
 42. Laird RD, Zeringue MM: **Between- and within-person predictors of children's information management following rule violations.** *Soc Dev* 2019, **28**:234-251 <http://dx.doi.org/10.1111/sode.12324>.
 43. Rekker R, Keijsers L, Branje S, Koot H, Meeus W: **The interplay of parental monitoring and socioeconomic status in predicting minor delinquency between and within adolescents.** *J Adolesc* 2017, **59**:155-165 <http://dx.doi.org/10.1016/j.adolescence.2017.06.001>.
 44. Padilla-Walker LM, Son D, Nelson LJ: **A longitudinal growth mixture model of child disclosure to parents across adolescence.** *J Fam Psychol* 2018, **32**:475-483 <http://dx.doi.org/10.1037/fam0000369>.
 45. Smetana J, Robinson J, Bourne SV, Wainryb C: **"I didn't want to, but then i told": Adolescents' narratives regarding disclosure, concealment, and lying.** *Dev Psychol* 2019, **55**:403-414 <http://dx.doi.org/10.1037/dev0000646>.
 46. Darling N, Tilton-Weaver L: **All in the family: within-family differences in parental monitoring and adolescent information management.** *Dev Psychol* 2019, **55**:390-402 <http://dx.doi.org/10.1037/dev0000641>.
 47. Laird RD, Zeringue MM, Lambert ES: **Negative reactions to monitoring: do they undermine the ability of monitoring to protect adolescents?** *J Adolesc* 2018, **63**:75-84 <http://dx.doi.org/10.1016/j.adolescence.2017.12.007>.
 48. Petronio S: **Communication privacy management.** *Int Encycl Commun Theory Philos* 2016:1-9 <http://dx.doi.org/10.1002/9781118766804.wbiect138>.
 49. Smetana JG, Villalobos M, Rogge RD, Tasopoulos-Chan M: **Keeping secrets from parents: daily variations among poor, urban adolescents.** *J Adolesc* 2010, **33**:321-331 <http://dx.doi.org/10.1016/j.adolescence.2009.04.003>.
 50. Finkenauer C, Engels RCME, Kubacka KE: **Relational implications of secrecy and concealment in parent-adolescent relationships, in: what can parents do? New insights into role parents adolesc.** *Probl Behav* 2008:43-64 <http://dx.doi.org/10.1002/9780470774113.ch2>.
 51. Molenaar PCM, Sinclair KO, Rovine MJ, Ram N, Corneal SE: **Analyzing developmental processes on an individual level using nonstationary time series modeling.** *Dev Psychol* 2009, **45**:260-271 <http://dx.doi.org/10.1037/a0014170>The first truly idiographic study into family processes.
 52. Lerner RM, Schwartz SJ, Phelps E: **Problematics of time and timing in the longitudinal study of human development: theoretical and methodological issues.** *Hum Dev* 2009, **52**:44-68 <http://dx.doi.org/10.1159/000189215>.
 53. Van Roekel E, Vrijen C, Heininga VE, Masselink M, Bos EH, Oldehinkel AJ: **An exploratory randomized controlled trial of personalized lifestyle advice and tandem skydives as a means to reduce anhedonia.** *Behav Ther* 2017, **48**:76-96 <http://dx.doi.org/10.1016/j.beth.2016.09.009>.
 54. Bamberger KT: **The application of intensive longitudinal methods to investigate change: stimulating the field of applied family research.** *Clin Child Fam Psychol Rev* 2016, **19**:21-38 <http://dx.doi.org/10.1007/s10567-015-0194-6>This paper proposes experience sampling methods as a tool in assisting clinical family practice and is the first to hint at bridging the gap between science and practice.