Longitudinal Profiles of Externalising Behaviour Problems from Infancy to Mid-Adolescence: Early Predictors, Timing of Risk Factors, and Late Adolescence Outcomes

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Content

SUMMARY

Externalising behaviour problems have serious negative impacts both on individuals and society. Despite extensive research efforts, there is still a lack of knowledge in major areas on the development of such problems. Greater understanding of longitudinal patterns of externalising behaviour problems across childhood would be of importance for public health, by informing prevention and early intervention efforts.

This current study focused on the development of externalising behaviour problems in a population-based sample, following children from infancy to adolescence. The study examined prediction to, risk factors that co-occur with, and long-term consequences of, different longitudinal profiles of externalising behaviour problems. The study had five main aims: 1) to explore typical longitudinal profiles of externalising behaviour problems from infancy to mid-adolescence; 2) to examine whether factors present as early as at 18 months of age can differentiate between different developmental profiles; 3) to examine the relationships between the initiation and maintenance of externalising behaviour problems across childhood, and timing of child, family and contextual risk factors; 4) to examine whether different longitudinal profiles of externalising behaviour problems would predict late adolescence internalising symptoms and well-being differently; and 5) to explore whether there are gender differences in these relationships.

We used questionnaire data from the Tracking Opportunities and Problems Project (TOPP). The TOPP study is an eight-wave prospective longitudinal study focusing on development of well-being, good mental health, and mental health problems in children and their families. The current thesis consists of three papers. The first two papers are based on mother-reported data, while the third paper included both mother-reported and adolescent self-reported data.

In the first paper we identified typical longitudinal profiles of externalising behaviour problems from infancy to mid-adolescence, as well as the most influential early risk factors for profile membership. We used mother reports on their child's externalising behaviour assessed at six time-points between infancy (age 18 months) and mid-adolescence (age 14.5 years), and mothers' information about child and family risk factors as the children were 18 months of age. We first identified the optimal number of longitudinal profiles based on child externalising data. We then used multinomial logit regression to test for class discrimination by a wide range of relevant predictors measured at child age 18 months, one predictor at a

time. All predictors were then combined in one simultaneously estimated model of latent profiles and predictors. The children were classified into five profile classes with distinct longitudinal patterns of externalising problem behaviours, describes as High stable, High childhood limited, Medium childhood limited, potential Adolescent onset, and Low stable. Six risk factors measured at child age 18 months significantly discriminated the profiles. Young maternal age and higher levels of family stress discriminated children in the High stable profile from children in all the other profiles. The variables within the overall stress construct most closely related to profile membership, were problems in the relationship between mothers and their partners, and partner's health problems.

In the second paper we examined how initiation and maintenance of externalising behaviour problems across childhood were related to timing of risk factors. We studied the occurrence of a wide range of child, family and contextual risk factors among children in the five longitudinal profiles of externalising behaviour problems in infancy, early childhood, mid-childhood, and mid-adolescence. In order to get a better picture of risk timing, we used the latent profile solution identified in the first paper based only on externalising data, as well as a Cholesky factorisation approach to separate initial and stable risk exposure from new risk exposures appearing in successive developmental periods. There were striking patterns of correspondences between the longitudinal profiles and the risk exposures. The children in the High stable longitudinal profile were exposed to highly elevated levels of family adversity from infancy onwards, and these children developed co-morbid internalising and hyperactivity problems with age. Further, the remission in externalising behaviour by mid-childhood for the High childhood limited class was not paralleled by diminishing levels of child internalising, hyperactivity or maternal symptoms of anxiety and depression. The Low stable profile had low levels of risks in all developmental periods. These findings lent support to the existence of two different classes with externalising behaviour problems limited to childhood.

In the third paper we examined whether any of the longitudinal profiles of externalising behaviour problems predicted internalising symptoms and well-being in late adolescence. We used the latent profile solution based only on externalising data, and found that the High stable profile of externalising behaviour from infancy (age 1.5) to mid-adolescence (age 14.5) predicted depression symptoms in boys, and anxiety symptoms in girls, in late adolescence (age 18.5), compared to adolescents of the same gender having followed a Low stable profile. Following a High stable pattern of externalising behaviour throughout childhood also

predicted lower life satisfaction and flourishing for both girls and boys, again compared to the adolescents in the Low stable profile. All findings had medium to strong effect sizes. Furthermore, the results points to plasticity in development as the adolescents in the High stable profile still had average scores on life satisfaction.

Data from boys and girls were analysed together as the longitudinal profiles were identified. Contrary to expectations, the High stable longitudinal profile had an even split between the genders, rather than mainly consisting of boys. The post-hoc analyses of gender differences within the High stable class show that, on average, the High stable boys were more involved in overt (i.e., confronting) externalising behaviour types than the High stable girls, while for the remaining externalising behaviour types there were no gender differences within the High stable class. Thus, the inclusion at all time-points of relatively normative and non-confronting externalising behaviour types, in addition to overt behaviour types, may have allowed for a higher proportion of girls to be included in the High stable profile.

These results are noteworthy as, to our knowledge, they are the first to document how a person-oriented typological study of externalising behaviour problems with its starting point in infancy, can predict mental health outcomes in late adolescence. Taken together, the study results point towards a continuity in problems across childhood, involving chronic high levels of externalising behaviour problems, early family adversity, high levels of co-occurring risk factors across time, and negative long-term mental health outcomes.

Findings from these three studies emphasize the importance of prevention and early intervention. The findings suggest that paying special attention to infants' externalising behaviour in the context of young motherhood and higher levels of family stress - in particular mothers' experience of enduring problems in their relationship with their partner and with partners' health - may contribute to identification of children with increased risk for developing a chronic high pattern of externalising behaviour problems across childhood and adolescence, and sequelae related to such development.

LIST OF PAPERS

Paper 1:

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1. INTRODUCTION

The WHO World Mental Health Surveys estimates the lifetime prevalence of externalising disorders in the adult US population to be as high as 25% (Kessler et al., 2009). The prevalence estimates for other regions of the world are substantially lower. In Europe, the lifetime prevalence estimates range from 1.7% in Italy to 7.6% in France. About one out of three diagnosed with an externalising disorder are severely disabled by their disorder as it interferes significantly with house management, ability to work, social life, and ability to form and maintain close relationships with other people (Kessler et al., 2009). The human costs of serious externalising behaviours may still be underestimated in the WHO World Mental Health Surveys as the prevalence estimates used may be "overly conservative" (Kessler et al., 2009). Besides, the categorical diagnostic classification system leaves out important and prevalent sub-threshold conditions (Brown & Barlow, 2005). In addition, serious externalising behaviour generates tremendous direct and indirect economic expenses, both for the rule-breaking individuals, for victims, and, not least, for the society at large. Hence, the benefits of intervening are huge, as long as interventions programs are proven efficient, and are well implemented. Lee and colleagues (2012) present comprehensive estimates of monetary benefits and costs for a diversity of public policy strategies in various domains (juvenile justice, adult criminal justice, child welfare, education, children's and adult mental health, general prevention programs for children and adolescents, substance abuse, public health and housing) – estimates which address externalising behaviours and/or conditions related to such. Externalising disorders are characterised by onset in childhood, and has, as other early-onset mental disorders, a wide array of adverse life course outcomes (Kessler et al., 2009; Odgers et al., 2008).

The term externalising behaviour problems refers to problem behaviour that mainly involve conflicts with other people and their expectations for the child (Achenbach & Rescorla, 2001). Such behaviour in early childhood represents normative behaviour that most children outgrow (Shaw, Lacourse, & Nagin, 2005; Côté, Vaillancourt, LeBlanc, Nagin, & Tremblay, 2006; Wakschlag, Tolan, & Leventhal, 2010). However, externalising behaviour in early childhood may also be a signal of a stressed infant or a child that does not get its developmental needs met (Reid, Patterson, & Snyder, 2002). It is likely to be perceived as annoying or unpleasant, and will often add strain and struggle to the everyday life of caregivers, siblings and peers. Externalising behaviour in children may as such reduce the joy of parenthood, create parental stress, and affect parent’s behaviour towards the child in a

negative way (Podolski & Nigg, 2001). Negative attributions and interpretations of the child seem to be factors that maintain the problems (Patterson & Forgatch, 2010). Such interactions are related to less positive involvement in the child from its caregivers (Reid, Patterson & Snyder, 2002). Worries related to externalising problems are the most common reason for referrals to child mental health services (Reigstad, Jorgensen, & Wichstrom, 2004) and are a prevalent reason for applications to the child welfare service (Statistics Norway, 2012a).

The current study had the privilege to follow 921 infants and their families throughout childhood until late adolescence. This allowed us to explore the development of externalising behaviour problems in these children across childhood, as well as characteristics of the children, their family and wider social context along the way. Furthermore, we were able to study mental health outcomes in late adolescence in relationship to their externalising development. Our goal has been to gain knowledge that might contribute to preventive and early intervention efforts for children at risk for chronic high levels of externalising behaviour problems and the sequelae of such behaviour problems, across childhood and adolescence.

1.1. Defining externalising behaviour problems

The research on externalising behaviour problems in childhood and adolescence represents a broad field that encompasses several externalising behaviour types and definitions. Different research disciplines are involved in this field, and the diversity of constructs and definitions reflects approaches from psychology, psychiatry and social sciences. This complexity constitutes a challenge when comparing results from studies on externalising behaviour.

The constructs within the externalising behaviour field may be organised according to whether they focus on one dimension (i.e., "narrow" definitions), or on several dimensions (i.e., broad definitions). Physical aggression is a narrowly defined construct that has been widely studied (Broidy et al., 2003; Côté et al., 2006; Tremblay, 2000; Tremblay et al., 2004). Broad definitions of externalising behaviour problems that encompass several classes of behaviour are also frequently in use, and these definitions often partially overlap. Examples of broad definitions are: "disruptive behaviours" (e.g., defiance, destructiveness, and physical aggression; Degnan, Calkins, Keane, & Hill-Soderlund, 2008); "overt conduct problems" (e.g., cruel to animals, disobedient, gets into fights, physically attacks people, and temper tantrums or hot tempered; Shaw et al., 2005); "conduct problems" (e.g., tempers, disobedience, fighting, lying, and stealing; Goodman, 1994); "antisocial behaviour" (e.g., physical fighting, bullying, destroying property, lying, truancy and stealing; Odgers et al.,

2008); "violent delinquency" (e.g., using threat or force to get someone to do something, gang fighting, fist fighting, fighting with weapons, beating someone up for no reason, throwing objects at people, carrying a weapon; Broidy et al., 2003); "non-violent delinquency" (e.g., shoplifting, taking money from home that is not yours, entering a place without paying, breaking into someplace to steal something; Broidy et al., 2003), and; "offending" (e.g., 30 items including theft, property damage, and violence; Wiesner, Kim, & Capaldi, 2005). Furthermore, based on factor analytic studies, externalising behaviour has been defined as a broad-band syndrome that includes rule-breaking and aggressive behaviour (Achenbach & Rescorla, 2001).

Different externalising definitions may also be organised according to whether they are dimensional/continuous (i.e., based on frequency measures, as the ones described above) or dichotomous/categorical (i.e., the behaviour disorders). The evaluation of whether externalising behaviour meets the criteria for the disruptive behaviour diagnoses according to DSM-IV-TR (American Psychiatric Association, 2000) (or the forthcoming DSM - 5) or ICD-10 (WHO, 2013) are important in the context of psychiatric epidemiologic research, health service research and in clinical settings. The behaviour diagnoses (i.e., conduct disorder, oppositional defiant disorder, and behaviour disturbances not otherwise specified) - involve several different externalising behaviour types. In this sense, the behavioural diagnoses represent broad definitions. Diagnoses are usually made based on a structured clinical interview. Such interviews are expensive and are rarely used in larger epidemiologic studies, where questionnaire-based frequency measures are more common.

The issue of multiple and partially overlapping definitions constitutes a challenge within the externalising field. The many different constructs add complexity to the interpretation of the body of evidence (Campbell, Spieker, Vandergrift, Belsky, & Burchinal, 2010). The content validity of scales may also be non-optimal. Tremblay (2000) has described how several popular scales that intend to measure aggression contain a mix of different behaviours. He argues that few of the items in the scales clearly refer to, or can be interpreted as, measuring (physical) aggression.

The approach of the current study is to use the construct *externalising behaviour problem* as a broad and continuous definition of problem behaviours that shift across ages (see below in Section 1.3). We used non-identical but developmentally appropriate measures across the different developmental periods from infancy to mid- adolescence. Oppositional and

disruptive behaviours (i.e., manageability, temper tantrums and irritability) were included in the early childhood period, and inter-personal aggression, loitering, stealing and vandalism were included in adolescence (see below, Sections 5.4.1 and 5.5).

1.2. Prevalence of externalising behaviour problems

The estimated population rate of any behavioural disorder in Norway is 3.5% among four-year-olds (three-month prevalence (Wichstrom et al., 2012), and 3.2 % for eight to ten-year-olds (prevalence period not specified; Heiervang et al., 2007). In the US, Kessler and colleagues reported prevalence rates of 7.6 % for adolescents (30-day prevalence in adolescents ages 13-17; Kessler et al., 2012), and Merikangas and colleagues reported lifetime prevalence rates of ODD and CD of 16 % for ages 13-14, 20 % for ages 15-16, and 22% for ages 17-18 (Merikangas et al., 2010).

In addition, a substantial proportion of children have sub-clinical levels of externalising behaviour problems. Data from the current TOPP study shows that at ages 18 months and 2.5 and 4.5 years respectively, 56%, 59% and 57% of the children are experienced as difficult to manage "some of the time" or " most of the time" by their mothers. The numbers for child temper tantrums are slightly higher (Mathiesen et al., 2007). In a study that used the Strength and Difficulties Questionnaire to measure conduct problems based on young people's own assessment in pre-, early, and late adolescence, respectively, the researchers found that 14% of boys in all three study periods, and 11%, 15% and 15% of the girls in the three periods respectively, had severe problems with tempers. And, among the study participant, 3%, 7% and 5% of the boys, and 2%, 3% and 2% of the girls, reported that they had severe problems with fighting (Van Roy, Groholt, Heyerdahl, & Clench-Aas, 2006). Finally, summing up results from two studies of problem behaviour in the context of schools, 7 to 10% of youths between ages 10 and 17 are considered to have moderate levels of externalising behaviour problems (Sørlie, 2000).

1.3. Patterns and sequences in the development of child externalising behaviour problems

Externalising behaviour problems are identified as a heterogeneous and multi-faceted phenomenon (e.g., Achenbach & Edelbrock, 1978). The heterogeneity in externalising behaviour problems, both within and across time, has important implications for the current study.

Factor analytic studies repeatedly find the distinction between overt (i.e., confrontive) behaviour types like arguing, temper tantrums and aggressive behaviours, and covert (i.e., concealed or happening behind the back of adult caretakers) behaviour types like truancy, stealing and running away (Loeber & Schmaling, 1985; Kazdin, 1992).

The development of externalising behaviour problems across childhood and adolescence are further described in terms of sequences in types of behaviours unfolding over time (Loeber et al., 1993; Loeber, DeLamatre, Keenan, & Zhang, 1998; Reid et al., 2002) . Different behaviour types tend to follow each other in a temporal order with different age of onset (Loeber et al., 1993; 1998). Loeber and colleagues (1998) highlight the complexity by describing different onset curves for, respectively, stubborn behaviour (increased gradually from birth until it flattened out by age 10); defiant behaviour (increased steadily from birth and steepened from around age 4 to age 10), authority avoidance (the curve was flat until the curve increased steeply from age 6 until age 10, when it flattened out); minor covert behaviour (few experienced this until age 3 or 4, when the curve rose relatively steeply until age 11, when it flattened out); property damage (increased only slightly until age 6 or 7, when it accelerated; then it levelled off at age 10 or 11); moderate to serious delinquency (flat curve until age 6, when it began a gradual increase until age 11 or 12); and minor aggression (curve increase around age 3 or 4 and then increased sharply until age 10).

Loeber and colleagues (1993) further argue that the gradual unfolding of externalising behaviour problems takes the form of three different pathways; one characterised by authority conflict or authority avoidance, one overt, and one covert pathway. The early authority conflict pathway starts out with stubborn behaviours as the first step, moving on to defiance as the second step (doing things in own way, refusing to do things, disobedience), and proceeds on to authority avoidance. The covert pathway consists of minor covert behaviours and property damage, and moves on to moderate to serious forms of delinquency. The third pathway is described as an overt pathway consisting of aggression, fighting and violence. The three different developmental pathways seem to partly overlap. It is interesting to note that the distinction between overt, covert and authority avoidant externalising behaviours recently has gained support from a behaviour genetic study (Kendler, Aggen, & Patrick, 2012). Kendler and colleagues identified two discrete dimensions of genetic risk reflecting overt aggression and authority conflict/avoidant behaviours, and one shared environmental risk factor corresponding to covert externalising behaviours.

Coercion theory (Reid, Patterson, & Snyder, 2004) also presents a somewhat similar sequential understanding of how externalising behaviour develops. This theory describes externalising behaviour progressing from distressed infant, to toddler noncompliance, further on to temper tantrums, and then to attention getting, hitting, fighting, and stealing (Reid, Patterson, & Snyder, 2004).

The models of Loeber (1993, 1998), and Reid and colleagues (2004), both suggest that the development of externalising behaviour problems involves so-called heterotypic continuity. This implies that there is a meaningful continuity in the course of externalising behaviour problems, despite the fact that it has dissimilar manifestation across ages. The construct of heterotypic continuity is central within developmental psychopathology (Rutter & Sroufe, 2000; Rutter, Kim-Cohen, & Maughan, 2006), and the heterotypic continuity perspective is important in the rationale for combining different externalising behaviour types in one longitudinal model in the present study. This is addressed further in Section 5.5.

2. THEORETICAL PERSPECTIVES

2.1. Developmental psychopathology

Developmental psychopathology constitutes an organising framework for the current study. It is described as a "big tent" approach of multiple theories and research strategies, that have a common focus on discovering processes of development with the goal of understanding the continuous unfolding of adaptation and maladaptation over time (Cicchetti, 2006). Striving towards a developmental understanding of psychopathology, it focuses on the interplay between normal and pathological development and on the interplay between biological, psychological and socio-contextual factors across the life course (Cicchetti, 2006).

Risk factor studies are central within developmental psychopathology. Temporal precedence is necessary for a factor to gain status as a risk, though not sufficient for gaining status as a causal factor. Risk factors are still viewed as important, as "they are valuable in terms of elucidating potential processes that do have causal impact on outcomes" (Cicchetti, 2006, p. 9). Moreover, it is stressed that mental health outcomes are likely to result from multiple component processes involving several risk factors, where risks are likely to interact with protective factors that might counterbalance the impact of the risk processes (Rutter, 1990; Chiccetti, 2006). Factors on many different levels are important (Bronfenbrenner & Morris, 2006), including contextual aspects (Bronfenbrenner & Morris, 1979; Cicchetti, 2006). In

addition, the existence of multiple processes is described. The concept of equifinality refers to the principle that an outcome may be reached from a variety of conditions and processes. The concept of multifinality refers to the principle that the outcomes of one single condition may be multiple, depending on the organisation of the totality of factors in which it operates (Cicchetti & Rogosch, 1996; Bergman, Andershed, & Andershed, 2009). Finally, stability and change within a developmental phenomenon can be characterised by so-called homotypic continuity (i.e., stability in the same behaviours) or heterotypic continuity (i.e., a stability that involves different behaviours) (Rutter & Sroufe, 2000; Rutter et al., 2006).

2.2. A person-oriented approach

The person-oriented approach is perceived as part of developmental psychopathology (Bergman, von Eye, & Magnusson, 2006), and has specific relevance for the current study. The person-oriented approach reflects a holistic-interactionistic view of the individual. This implies that the individual is perceived as an organised whole where all aspects of developmental processes, like biological and environmental factors, gain meaning by their role in the total functioning of the individual (Bergman & Magnusson, 1997). Studying individuals based on their patterns of individual characteristics, and conceptualising individuals as belonging to different subgroups based on patterns of similarity, are central (Bergman, Magnusson, & El-Khouri, 2003). The person-oriented approach represents a theoretical perspective that forms the basis for a methodological strategy that is different from the so-called variable-oriented approach where the foci of theory and analysis are on the relationships between variables (Bergman, Magnusson, El-Khouri, 2003). The person-oriented approach has become increasingly influential in developmental psychopathology research; however the benefits and drawbacks of this approach are still under debate (e.g., Bauer & Curran, 2003; Sterba & Bauer, 2010).

The concept of "types" is central to the person-oriented approach, meaning that a smaller number of observed patterns or "common types" are likely to be observed although an infinite variability in characteristics are possible in theory (Bergman & Magnusson, 1997). Longitudinal types are individual patterns of scores based on all measurement occasions (Bergman & Magnusson, 1997). Two longitudinal types were identified in a study of criminal activity in childhood, adolescence and adulthood (Stattin & Magnusson, 1996). Recurrence in criminality (i.e., criminal - criminal – criminal) seldom occurred, however more often than expected by chance. Stable non-involvement (i.e. noncriminal- noncriminal- noncriminal) was

typical for a much larger group. All sequences with criminality in only one of the three periods represented antitypes (Stattin & Magnusson, 1996).

The construct of problem gravitation has specific relevance for the development of externalising behaviour problems (Bergman & Magnusson, 1997; Stattin & Magnusson, 1996). It implies that adjustment problems will tend to develop into a stable state of multiple adjustment problems given that several problem-maintaining mechanisms are present (Bergman & Magnusson, 1997). Stattin & Magnusson (1996) propose that problem gravitation might represent an important source for temporal stability of a problem, co-morbidity among different problems, and risks for later maladjustment, for a small minority of subjects.

Longitudinal pattern analysis has had a strong position within the study of externalising behaviour development since Moffitt (1993) postulated the presence of two subtypes of antisocial youths with differential age of onset, causal factors and outcomes. Moffitt's theory postulated the existence of a group of "early starters" characterised by a diversity of negative short and long term outcomes. She also postulated a trajectory group with onset of externalising behaviour problems in adolescence. Several longitudinal studies have also identified a "childhood limited" group, although this was not predicted by a priori theory (for a review, see Moffitt, 2006). The first generation of person-oriented longitudinal studies used cut-off scores to create longitudinal classes with different patterns of externalising across time (Moffitt, Caspi, Dickson, Silva, & Stanton, 1996; Moffitt & Caspi, 2001; Vassallo et al., 2002). Then a new generation of model-based approaches entered the scene (Nagin, 1999; Muthén & Muthén, 2000). Thus, externalising may be the research area where person-oriented longitudinal pattern approaches have had the longest tradition and the strongest position. The current study follows this tradition in being a person-oriented study using a model-based longitudinal pattern approach to the study of externalising behaviour problems throughout childhood.

3. EMPIRICAL FINDINGS WITH SPECIFIC RELEVANCE TO OUR STUDY

3.1. Previous studies of longitudinal patterns

As described above, person-oriented approaches typically have identified groups of children whose externalising behaviour development is characterised by variations around patterns of high stable levels, externalising limited to childhood, adolescent onset of externalising, or by

low stable levels of externalising, respectively (Nagin & Tremblay, 1999; Broidy et al., 2003; Odgers et al., 2008; Barker & Maughan, 2009; Campbell et al., 2010). To our knowledge, however, only five studies (of which three used the same sample of children) have examined developmental trajectories over longer time periods with a starting point before age three (National Institute of Child Health and Human Development, 2004; Shaw et al., 2005; Campbell, Spieker, Burchinal, & Poe, 2006; Côté et al., 2006; Fanti & Henrich, 2010). The National Institute of Child Health and Human Development Study (2004) identified five distinct trajectory classes based on levels of physical aggression from age 2 to 9 years in a U.S. general population sample (NICHHD, 2004; Campbell et al., 2006). Later, Fanti and Heindrich (2010) found five trajectories of externalising from age 2 to 12 in the same sample. Shaw, Lacourse, and Nagin (2005) identified four typical trajectories of overt conduct problems from age 2 to 10 years in a U.S. high-risk sample of boys. Côté and colleagues (2006) identified three classes of children with distinct developmental trajectories of physical aggression from age 2 to 9 years in a nationally representative Canadian sample. In addition, a shorter-term study focused on disregard for rules, an aspect of externalising that is seldom studied separately, and identified four trajectories of disregard for rules between age 29 and 74 months (Petitclerc, Boivin, Dionne, Zoccolillo, & Tremblay, 2009). Stable high or chronic patterns of externalising problems over time were identified in each study, but the size of the group varied in the different samples (between 3% and 17%). While these studies provide valuable insights, the results have limited generalizability for several reasons: the samples are all from North America, two of the studies focused on a narrow construct of physical aggression only, one included only high-risk boys, and they all stopped following the children before they reached adolescence.

3.2. Early risk factors

Theoretical perspectives (Moffitt, 1993; Reid, Patterson, & Snyder, 2002; Cicchettti, 2006; Bronfenbrenner & Morris, 2006) have suggested that it is important to focus on a wide range of intrinsic child, family and contextual factors in order to understand externalising behaviour. "Difficult" child temperament characteristics, such as high levels of emotional reactivity, are generally linked to the development of externalising problems (Rothbart & Bates, 2006; Janson & Mathiesen, 2008). Beside child factors, several cross-sectional and longitudinal studies have related a wide range of family factors to high levels of externalising problems. Elevated levels of maternal depressive symptoms have been found to predict child conduct problems (NICHD ECCRN, 2004; Shaw et al., 2005), as well as family demographic factors

including low income (Côté et al., 2006; NICHD ECCRN, 2004), low maternal education (Côté et al., 2006; Nagin & Tremblay, 2001), lone mothers and non-intact families (Campbell et al., 2010; Nagin & Tremblay, 2001), early motherhood (Côté, Vaillancourt, Barker, Nagin, & Tremblay, 2007; Tremblay et al., 2004), and child gender (Côté et al., 2006). In addition, the presence of another young sibling in the household (Tremblay et al., 2004), large family size (Farrington, 1995), chronic family stress (Campbell, Pierce, Moore, Marakovitz, & Newby, 1996), and low social support (Mathiesen, Sanson, Stoolmiller, & Karevold, 2009; Shaw, Owens, Giovannelli, & Winslow, 2001) are also found to predict development of externalising behaviour. Factors like high levels of temperamental shyness are, on the other hand, shown to protect children against the development of externalising behaviour (Sanson, Hemphill, & Smart, 2004). While there is reasonably consistent evidence of the predictive importance of the above factors when assessed in childhood, less is known about their long term impact if they are present in infancy. Moreover, the relative importance of each of these risk factors is unclear. Further clarification of the most influential risk factors in infancy for externalising pathways appears to be necessary, and is important as it has the potential to inform early intervention and preventive efforts.

3.3. Timing of risk factors

There is a complex relationship between the timing of risk factors and the development of externalising behaviour problems. Longitudinal studies often include risk factors from several developmental periods without explicitly examining the impact of timing. One of the most comprehensive studies, the Dunedin study Multidisciplinary Health and Development Study (Moffitt & Caspi, 2001; Odgers et al., 2008), for example, used composite indices of risk data collected at several time-points. The child maltreatment index combined data from ages 3, 7, 9, 11 and 26, respectively (Odgers et al., 2008). Such an approach makes it impossible to study effects of the timing of risk factors on the outcomes.

We have found only two comprehensive longitudinal studies addressing the effects of time variations in risks on changes in externalising trajectory patterns. Barker and colleagues (2010) studied relationships between co-occurrence of four problem areas - hyperactivity, emotional difficulties, peer relational problems, and low levels of pro-social behaviours - and different trajectories of externalising problems over six measurement time points ranging from age 4 to 13 years. They found that the development of the problem areas corresponded to the development of externalising problems, in that the problem areas and externalising

displayed similar trajectories. The "Early onset persistent externalising" group had the highest levels of these additional problems across time, which may indicate co-occurrence in problem timing and level of externalising, and hence co-morbidity can be taken as a risk for the development of ongoing externalising problems. The NICHD Early Child Care and Research Network (2004) study also investigated change over time in a set of risk factors – family income, the presence of a partner in the family, and maternal depression – collected at six time-points between age 24 months and 3rd grade, and whether these accounted for differences among aggression trajectory groups over the same time period. They found the group differences in the predictors at age 24 months to be stable during the children's next 6 years. These results add to the knowledge base regarding timing of risk factors, but need replication in new samples and with a broader range of predictors to be firmly established.

Measures of some risk factors, such as temperament or personality characteristics over time, are often moderately to highly inter-correlated (Roberts & DelVecchio, 2000; Skipstein, Janson, Stoolmiller, & Mathiesen, 2010). In order to allow more precise conclusions to be drawn about effects of timing of risk factor on child outcome, such as longitudinal patterns of externalising, it is important to clarify the contribution of risk that is stable versus the contribution of risk that changes over time. One possible statistical technique is to separate the variance of a risk variable into its stable and its changing parts. To our knowledge, the possibility of studying longitudinal risk influences separated in this way has hitherto not been utilized in previous studies.

3.4. Mental health outcomes in late adolescence

Several studies have shown that developmental pathways of externalising behaviour make a great impact on adaptation later in life (e.g., Odgers et al., 2008; Wiesner et al., 2005; Broidy et al., 2003; Reef, Diamantopoulou, van Meurs, Verhulst, & van der Ende, 2010). Children with chronic levels of externalising behaviours have increased risk for subsequent academic underachievement (Masten et al., 2005), juvenile delinquency (Broidy et al., 2003), exertion of serious violence, and problems regarding mental and physical health, and economy, in adulthood (Odgers et al., 2008). As described earlier, we have only found five studies (three using the same sample of children) that have examined developmental trajectories over longer time periods starting before age three (NICHD ECCRN 2004; Shaw, Lacourse, & Nagin, 2005; Campbell et al., 2006; Côté et al., 2006; Fanti & Heinrich, 2010). The NICHD ECCRN team (2004) examined outcomes at age nine among 1200 children classified into groups with

different trajectories of externalising problems. The classification was based on aggression scores measured six times between the ages two and nine. These authors found that membership in the high and the moderate high trajectory groups predicted lower social skills and poorer academic functioning, and more internalising and peer problems, compared to inclusion in two low problem trajectory groups. Campbell and colleagues (2006) also reported that the same trajectory solution predicted social skills, academic achievement and child internalising at age 9 through 12. Thus, there is still a specific need for extended knowledge about to what extent longitudinal patterns starting in infancy can predict long-term developmental outcomes (beyond 12 years of age). As far as we know, such knowledge is lacking today.

Anxiety and depression are among the most frequent mental disorders during childhood and adolescence (Cohen et al., 1993; Kessler et al., 2012). Three comprehensive studies have reported conflicting results when focusing on symptoms of depression and depressive disorder, as developmental outcomes of externalising trajectories starting from mid-childhood or early adolescence. An increased risk of having depressive symptoms at age 19 was found for both genders among children with increasing scores of delinquent behaviour from ages 12 to 18, but not for those having chronic high or desisting patterns of delinquency (Miller, Malone, & Dodge, 2010). A somewhat similar finding was reported from the Australian Temperament Project (ATP). The ATP researchers used cut-off scores to form groups with different developmental patterns of antisocial behaviour between ages 13 and 18 years. These researchers found that a late onset group had somewhat more depression symptoms than a low/non group at ages 19-20, while a persistent antisocial group did not have significantly more depression symptoms than the low/non group (Smart et al., 2005). However, Odgers and colleagues (2008) reported that increased risk of Major Depressive Disorder (MDD) at age 32 is predicted from a high stable trajectory pattern of antisocial behaviour between ages 7 and 26 for males and ages 7 and 15 for females. Classification into groups with childhood limited and adolescent onset trajectory patterns, respectively, was not linked to increased risk for the development of MDD (Odgers et al., 2008).

Longitudinal studies also have reported conflicting results regarding anxiety disorders and anxiety symptoms as developmental outcomes of externalising problem trajectories starting from mid-childhood or early adolescence. When researchers from the Dunedin study used person-oriented methods to predict anxiety diagnosis, they found an increased risk for having anxiety disorders at age 32 among members in a group with a high stable trajectory pattern of

antisocial behaviour between the ages 7 and 26 for males and ages 7 and 15 for females (Odgers et al., 2008). Inclusion in groups with the childhood limited and adolescent onset trajectory patterns were linked to increased risk for subsequent anxiety disorder in males, but not in females. On the other hand, using cut-off scores to form groups with different patterns of antisocial behaviour between ages 13 and 18 years, researchers from the Australian Temperament Project found that children in the persistent antisocial group did not have significantly more anxiety symptoms than those in the low/non group at ages 19-20. However, the late onset group did have somewhat more symptoms of anxiety than those in a low/non group (Smart et al., 2005). Finally, using a continuous symptom measure based on antisocial behaviour data collected when the participants in the Dunedin study were between the ages 13 and 18, researchers from this study reported that anxiety symptoms were predicted in both men and women at age 21 (Moffitt, Caspi, Rutter, & Silva, 2001). Thus, the findings from studies of the relationships between externalising problem behaviours in early childhood and later symptoms of depression and anxiety are to some extent non-conclusive.

Well-being is an important, but often overlooked, aspect of mental health. While some researchers have found externalising problems and life satisfaction to be inversely related in early, middle, and late adolescence (Suldo & Huebner, 2004), to our knowledge few, if any, longitudinal studies have reported explicitly on well-being as a long-term outcome of externalising development through childhood. The genetic and environmental risk factors for externalising behaviours (externalising behaviour being restricted to alcohol related problems and smoking) are found to be negatively related to well-being (Kendler, Myers, & Keyes, 2011). Thus, even though we have not been able to identify any studies that have examined the impact of longitudinal patterns of externalising starting from as early an age as in the current study, it was expected that high stable externalising across childhood would be linked to low well-being later on.

3.5. Gender differences

One of the most consistent findings within the field of externalising behaviour problems is the over-representation of boys. Boys score higher on aggressive behaviour (Broidy et al., 2003), antisocial behaviour (Moffitt, 2001), and Conduct Disorder (Moffitt et al., 2001). However, for some behaviours like stealing and lying (Tiet, Wasserman, Loeber, McReynolds, & Miller, 2001), and for relational aggression (Crick & Grotpeter, 1995; Tapper & Boulton,

2004), the rates may be similar across the genders. Thus, the size of gender differences seems to depend on the behaviour types that are measured.

Classic developmental models within the externalising field are largely based on samples with boys only (Patterson, DeBaryshe, & Ramsey, 1989; Loeber et al., 1993). The extent to which these models can be generalised to girls has been controversial, and the possibility that childhood onset pathways do not exist in girls has been suggested (Silverthorn & Frick, 1999). However, girls on early onset pathways have been identified in samples of girls only (Côté, Zoccolillo, Tremblay, Nagin, & Vitaro, 2001; Fontaine et al., 2008), and in mixed samples with analyses conducted separately by gender (Schaeffer et al., 2006; Odgers et al., 2008) or on both genders combined (Pepler, Jiang, Craig, & Connolly, 2010; Miller et al., 2010). Today's status in the literature seems to be that both boys and girls tend to follow corresponding developmental patterns, although the proportions of boys and girls vary across the respective patterns (Odgers et al., 2008; Miller, Malone, & Dodge, 2010). The lack of early starting girls that has been suggested (Silverthorn & Frick, 1999), may, according to Miller, Malone, and Dodge (2010), be due to reliance on a narrow definition of externalising behaviour.

The processes that lead to externalising behaviours may be different for boys and girls (Dodge, Coie, & Lynam, 2006). Results from the Dunedin Multidisciplinary Health and Development Study found little support for the existence of gender-specific risk factors, but they found that some risks had a stronger effect on males than females (Moffitt, 2001). These risks were related to family adversity, neuropsychological functioning, difficult child temperament and hyperactivity (Moffitt, 2001).

Boys are expected to have less favourable outcomes of externalising development due to a higher prevalence of neuropsychological difficulties (Moffitt, 1993; 2001). On the other hand, a minority of girls with high externalising development are expected to have less favourable outcomes due to a gender paradox effect (Loeber & Keenan, 1994; Diamantopoulou, Verhulst, & van der Ende, 2011). Relatively few studies have examined the relationships between externalising trajectories and internalising outcomes in samples with both genders, mainly because many longitudinal studies have included samples of boys only (e.g., Loeber et al., 2001; Farrington, 1995; Wiesner et al., 2005; Shaw et al., 2005; Nagin & Tremblay, 2001), or have focused on long-term outcomes limited to the externalising field (e.g., Broidy et al., 2003; Schaeffer et al., 2006). Only the two comprehensive studies mentioned above

have reported similar associations for males and females between children in trajectory groups with a chronic high externalising pattern through childhood and later symptoms of depression in young adulthood and at age 32, respectively (Miller et al., 2010; Odgers et al., 2008). However, Moffitt (2001) used a continuous measure of antisocial behaviour and found an increased risk for symptoms of depression among females only. The current evidence thus seems scarce and mixed, and is based on studies from mid-childhood and onwards. Further, although the literature indicates few gender differences in well-being (Huebner, 2004; Clench-Aas, Nes, Dalgard, & Aaro, 2011), we need more knowledge about the differential long term impact on well-being for boys and girls that have followed developmental patterns of externalising problems throughout childhood.

4. AIMS

4.1. General aims

It follows from the review of the literature and previous findings that there still is a need to expand knowledge about the prediction to, risk factors that co-occur with, and long term mental health consequences of, different longitudinal patterns of externalising behaviour problems from very early childhood onwards. The general aim of the current study was fivefold: to gain more knowledge about: 1) typical longitudinal profiles of externalising behaviour problems from infancy to mid-adolescence; 2) to what extent factors already present at age 18 months can differentiate between longitudinal profiles, and about the relative importance of risk factors measured that early; 3) the relationships between initiation and maintenance of externalising behaviour problems and the timing of risk factors; 4) the prediction to internalising symptoms and well-being in late adolescence from the identified longitudinal profiles; and 5) gender differences in the above-mentioned relationships.

4.2. Aims of Paper 1

The main aim of the first study was to identify typical longitudinal profiles of externalising behaviours, and to identify predictors already present in infancy that discriminate among the profile classes. More specifically, we employed a simultaneously estimated latent class model with predictors to: 1) identify the number and nature of latent classes of mother-reported externalising behaviour in a representative sample of Norwegian children followed longitudinally from 18 months to 14.5 years, and 2) identify intrinsic child and family factors assessed at age 18 months that predicted membership in the different latent classes. We also wanted to study gender differences in the proportion of boys and girls in the different profiles.

4.3. Aims of Paper 2

The main aim of the second study was to examine how initiation and maintenance of externalising behaviour problems were related to timing of risk factors across childhood. The co-occurrence of a wide range of within-child and family risk factors were studied contingent on five longitudinal profiles of externalising behaviour in infancy, early childhood, mid-childhood, and mid-adolescence. In order to get a better picture of risk factor timing, we used a Cholesky factorisation model that separated initial (and stable) risk levels from changes in risk levels appearing at different developmental periods. Some risk factors labelled as family factors in this paper could be described as representing contextual risk factors.

4.4. Aims of Paper 3

The main aim of the third study was to investigate the prediction from longitudinal profiles of externalising behaviour problem followed from infancy to mid-adolescence, to internalising problems (i.e., symptoms of depression and anxiety) and well-being (i.e., life satisfaction and flourishing) in late adolescence, and to address whether there were gender-specific patterns in these associations. The study thus aimed to expand upon previous studies by using an earlier starting point, a longer time span, including both genders, and also by assessing positive, in addition to problem-oriented, indicators of mental health.

5. METHOD

5.1. Sample and procedure

The current study used data from The Tracking Opportunities and Problems study (TOPP), an eight-wave longitudinal population-based prospective study designed to investigate mental health in Norwegian children and their families followed from 1993 to the present.

More than 95% of Norwegian families with children attend public health services for 8-12 health screenings during the first four years of the child's life. Every family who visited a child health clinic within six municipalities in eastern Norway in 1993 for the scheduled 18 months vaccination visit was invited to complete a questionnaire. Of the 1,081 eligible families, the parents of 939 children participated at Time 1 (t1). These parents received a similar questionnaire when the children were 2.5 years of age (t2), 4.5 years (t3), 8.5 years (t4), 12.5 years (t5), 14.5 years (t6), 16.5 years (t7) and 18.5 years (t8). At the three first waves, questionnaires were handed out by, and given back to, the health-care station personnel. From the fourth wave, questionnaires were sent by mail. The parents chose

whether the mother or father would complete the questionnaire at t1-t4 (only 1-2 % of the fathers replied), at t5 the mothers were encouraged to answer, and at t6 –t8 separate maternal and paternal questionnaires were dispatched. As such a low rate of fathers participated across the first five waves, the paternal questionnaires were not included in the current study. The children/adolescents themselves completed questionnaires from age 12.5 (t5) to age 18.5 (t8). The number of children on whom mothers reported, as well as the number of participating adolescents, is presented in Table 1. Mother-reported data from t1 to t6, and adolescent self-reported data at t8, were used in the current study.

Table 1, Participants in the TOPP study from 1993 to 2010, mothers and adolescents

Data waves	t1: age 1.5	t2: age 2.5	t3: age 4.5	t4: age 8.5	t5: age 12.5	t6: age 14.5	t7: age 16.5	t8: age 18.5
Year	1993	1994	1996	2000	2004	2006	2008	2010
N reported by mothers	921	784	737	512	594	481	441	522
% mothers*	85 %	85 %	80 %	56 %	65 %	52 %	46 %	57 %
N adolescents	--	--	--	--	566	458	375	442
% adolescents*					61 %	50 %	41 %	48 %

* All response rates for T2-T7 are calculated on basis of mothers participating at T1.
* T1 response rate is calculated on basis of families invited at T1

The data collection was approved by the Data Inspectorate and the appropriate Regional Committee for Medical Research Ethics. General ethical guidelines for research have been followed. The participants received both oral and written information from the public health nurses before each of the three waves of data collection. After that, the participants received written information accompanying the questionnaire. The information emphasized the confidentiality of the participants' responses, the option of not responding to any part of the questionnaire, and the right to withdraw from the study at any point in time. After each wave of data collection the participants received additional information about the study in a written rapport summing up the main results at the group level. Participants gave their written consent, and the family members were provided with an envelope each for returning their surveys, thus ensuring privacy. All data were treated to make sure that no families in the study could be identified; each participant was allotted an ID-number with which the data from the questionnaires were linked. Information identifying persons (name, address, or date of birth) was kept separately. The list bridging the person information and ID-numbers was kept in an

encrypted data file, and was stored away from the physical surveys and the survey data files. No analyses or reports will enable the identification of individual participants.

The 19 child health-care areas were representative of the diversity of social environments in Norway: 28% of the families lived in cities, 55% in towns or densely populated areas, and 17% in rural areas. Gender of children in the sample was nearly evenly divided, with 48.9% (n=450) boys at t1. At baseline, the age of the mothers ranged from 19 to 46 (M =30 years; SD = 4.7), and a minority of the mothers (9%) were single parents. With regards to education, 8% of the mothers had completed nine years of schooling or less, while 18% had completed college or university education lasting four years or more. Roughly equal numbers of mothers worked full-time (32%), part-time (31%), or had no paid work (37%) at t1. The index child was the only child at t1 in 49% of the families, 37% of the families had two, and 15% had three or more children. The participating families were predominantly ethnic Norwegians with middle class SES, which was representative of the majority of Norwegian families at that time. In 1993 only 2.3% of the Norwegian population came from non-Western cultures (Statistics Norway, 2012b). The only inclusion criterion was that the mothers had to be able to read and write Norwegian in order to reply to the questionnaires.

5.2. Initial response rate and attrition

Data from the child health clinics showed that the non-participants at t1 did not differ significantly from the study participants with respect to maternal age, education, employment status, number of children, or marital status (Mathiesen, Tambs, & Dalgard, 1999).

Two attrition analyses - survival analyses of mothers from t1 to t5 (Karevold, Roysamb, Ystrom, & Mathiesen, 2009) and logistic regression analyses from t1 to t7 (Gustavson, von Soest, Karevold, & Roysamb, 2012) - showed that the families who dropped out were not significantly different from the families who completed questionnaires on maternal symptoms of depression and anxiety, maternal age, financial status, chronic stress, or social support. Low maternal education was the only factor in the two analyses that predicted drop-out. Additional analyses of the TOPP-data for the current study showed that child externalising behaviour at t1 did not predict study drop out at t7 (OR = 1.1, p = 0.15, 95% CI = 0.97-1.26).

Additional multiple logistic analyses of adolescent participation showed that adolescent participation at t8 was only predicted by three of 18 variables at t1: adolescent female gender (OR = 1.90, $p < .001$), high maternal education (OR = 1.46, $p < .001$), and mother's

temperamental activity (OR = 1.23, p < .05). The remaining variables: maternal age, whether they lived with the child's father or not, employment status, financial situation, mothers symptoms of anxiety and depression, mothers temperamental sociability or emotionality, criticism from partner, self-reported daily stressors, the child's internalising and externalising problems, the child's temperament (emotionality, shyness, sociability or activity), did not predict t8 adolescent participation. After Bonferroni correction for the high number of tests, only mother's education level and the adolescents' gender predicted adolescent participation.

5.3. Handling of missing data

Participants with missing values on up to half of the items in any given scale at each time point were kept in the indexes and included in the analyses. The mean of the completed items was used to represent the scale score. Models were estimated by using the full information maximum likelihood estimator in Mplus, which allows for the inclusion of participants with partial longitudinal data in the latent profile variables (externalising), but not participants with missing predictor data, under the assumption that missingness is at random, conditional on variables included in the model (MAR). Thus, the sample size varies somewhat across models depending on which predictor variables are included. The amount of missing data at t1 was minimal, however, with less than 2% for any particular predictor, and less than 3% for the multi-predictor models. It is not possible to test the MAR assumption unless the missing data can somehow be recovered. However, even if the MAR assumption is not completely true, MAR based likelihood estimation performs well under most circumstances and is superior to obsolete methods based on including subjects with complete data only (Graham, 2009).

5.4. Instruments

5.4.1. Externalising behaviour problems

Core aspects of mother-reported child and adolescent externalising behaviours were measured at all six waves with items rated on a three point scale: 0 (*no difficulties*), 1 (*moderate difficulties*), or 2 (*substantial difficulties*).

5.4.1.1. The Behaviour Checklist (BCL)

At ages 18 months, 2.5 years, and 4.5 years, the Behaviour Checklist (Richman & Graham, 1971) was chosen by the research group as the best measure at that time, to measure temper tantrums, manageability, and irritability. The scales were created by using the average of three items, and internal consistency (Cronbach's alpha) was .41, .46, and .49, at t1, t2, and t3,

respectively. The average inter-item correlations were .21, .23, and .25 at the three time points. This is comparable to the average inter-item correlation of .25 for the 24-items of the Externalising syndrome grouping of the CBCL for 1.5 -5 years (Achenbach & Rescorla, 2000) in a large study with a Norwegian sample of 4-year-olds – the Trondheim Early Secure Study (L. Wichstrøm, personal communication, June 10, 2011).

5.4.1.2. The Strength and Difficulties Questionnaire (SDQ) Conduct Problem Subscale

At age 8.5 years the Conduct Problem subscale from the Strengths and Difficulties Questionnaire (Goodman, 1994) was used to measure tempers, obedience, fighting, lying, and stealing. The reliability and construct validity of the SDQ has been established in a Norwegian sample (Van Roy, Veenstra, & Clench-Aas, 2008). The scale was created by calculating the average of the five items, and the internal consistency was at .48. The alpha for the Conduct Problem subscale is similar to the findings in other studies (Van Roy, Veenstra, & Clench-Aas, 2008).

5.4.1.3. The TOPP Scale on Antisocial Behaviour (TSAB)

At age 12.5 and 14.5 years we used the TOPP Scale on Antisocial Behaviour (TSAB) as a measure of externalising behaviours in adolescence (See Table 1, Paper 1, 2, and 3). The reason for the change of measures was the need for a broader and more comprehensive measure of externalising, covering a wider range of behaviours than the five-item SDQ subscale. The 18-item scale was constructed for the current project given the absence of an age and culture sensitive measure of problem behaviours ranging from relatively normative to serious (illegal) through adolescence, and the new scale combines items from other Scandinavian scales (Bendixen & Olweus, 1999; Mahoney & Stattin, 2000; Rossow & Bø, 2003). The specific behaviours were included into TSAB with reference to Loeber and colleagues' model of three developmental pathways in child disruptive behaviour, as is described above (Loeber et al., 1993). The items measuring inter-personal aggression refers to "overt behaviours" in the Loeber and colleagues' model, stealing and vandalism to "covert behaviours", and loitering to "authority conflict/avoidant behaviours". The TSAB indices were created by calculating the average of the 18 items, and the alpha coefficients were at .69 and .77 at t5 and t6, respectively. Due to a change of wording for three items at t6 (excluding aggressive behaviours among siblings) the measure of physical aggression at t6 may be underestimated compared to t5.

In yet unpublished analyses, the fit between the Loeber et al. model (1993) and the TSAB data were tested with confirmatory factor analyses (CFA) in Mplus on the age 14.5 externalising reports given by mothers and by the adolescents themselves, respectively. The CFAs were run on categorical variables. The "loitering" items were loaded on a first factor (i.e., authority conflict/avoidant), the "inter-personal aggression" items loaded on a second factor (i.e., overt), and the stealing and vandalism items were loaded on a third factor (i.e., covert). These three first-order factors loaded on a second-order externalising factor. The results showed strong factor loadings on the second-order externalising factor (from .70 to 1. in the mother reported data, and from .74 to .98 in the adolescent self-report data). The first-order factor loading ranged from .54 to .94 for the mother reports, and .53 to .94 for the adolescent self-reports. Model fit was very good in the mother-reported data (Chi-square =120.94 with 52 df, RMSEA = 0.053, and CFI/TLI =.97/.96), and excellent in the adolescent self-reported data (Chi-square = 156.1 with 87 df, RMSEA = 0.042, and CFI/TLI = .98/.97). Some items were not included in these CFAs because of extremely low prevalence of high scores. The item "Threatened or forced someone to give you money or goods", was removed from CFA of both mother reported and adolescent self-reported data. In addition, all three items that measured vandalism were removed from the CFA on mother reported data. Taken together, the CFA supported the notion of one higher order externalising factor and three first order factors. Further details are available from the author.

5.4.2. Predictors at child age 18 months, used in Paper 1

5.4.2.1. Child temperament

Child temperament was assessed by the EAS Temperament Survey for Children: Parental Ratings (Buss & Plomin, 1984) at age 18 months. The EAS contains four dimensions: (a) Emotionality – the tendency to become easily and intensely aroused (often called Negative Emotionality); (b) Activity level – preferred levels of activity and speed of action; (c) Sociability – the tendency to prefer the presence of others to being alone; and (d) Shyness – the tendency to be inhibited and awkward in new situations. The EAS for children aged 1-9 years was used. Due to ambiguity in translation, one item was deleted from each dimension. The items were scored on a Likert scale from 1 (*very typical)* to 5 (*very untypical*). Cronbach's alphas for the four items in each dimension were .66, .68, .52, and .75, respectively.

5.4.2.2. Maternal symptoms of depression and anxiety

Maternal symptoms of anxiety and depression were measured by a 23-item version of the Hopkins Symptom Check List (HSCL-25; Hesbacher, Rickels, Morris, Newman, & Rosenfeld, 1980) at child age 18 months. The reliability of the HSCL has been well established in a Norwegian sample (Strand, Dalgard, Tambs, & Rognerud, 2003). Two items, "thoughts of ending your life" and "loss of sexual interest or pleasure", were excluded from the current version of the questionnaire as some mothers who participated in a pilot study perceived the questions as offensive. The items were scored on a 4-point Likert scale, from 1 (*not at all*) to 4 (*very much*). The alpha coefficient was .90.

5.4.2.3. Family Stress

At child age 18 months mothers were asked to indicate whether they had experienced enduring problems during the last 12 months in the following areas: housing, employment, financial status, their partner's health (somatic and mental), and their relationship with their partner - each scored 0 (*no problem*) or 1 (*problem*). The sum of the scores in the five stress areas formed the composite score of family stress, with a range of 0 to 5. The alpha coefficient was .56.

5.4.2.4. Social support from partner

At child age 18 months a social support from partner index was formed by taking the mean of three items, each on a Likert scale from 1 (*completely disagree*) to 5 (*completely agree*), measuring closeness and contact, respect and responsibility, and a feeling of belonging (Dalgard, Bjork, & Tambs, 1995; Mathiesen et al., 1999). The alpha coefficient was .59.

5.4.2.5. Social support from friends and family of origin

Corresponding to the social support from partner index, this questionnaire targeted the same three qualities (closeness and contact, respect and responsibility, and a feeling of belonging) to describe the mothers' relationships with friends and members of her family of origin. This measure was also completed at child age 18 months. A social support from friends and family of origin index was computed by summing the mean value of the 6 items. The alpha coefficient was .72.

5.4.2.6. Family demographics and child gender

Maternal education at child age 18 months was measured using eight response categories, and was recoded to represent the approximate total years of education. In Paper 1 we also included the following predictor variables at child age 18 months: *Maternal birth year;*

Mothers living without spouse or partner; *Siblings*, a dichotomous variable of 0 (*no siblings*) and 1 (*one or more siblings*); and *Child sex*, all values were reported by mothers.

5.4.3. Timing of risk factors across childhood, used in Paper 2

Child and family risk data collected in infancy (at age 18 months, t1), in early childhood (at age 4.5 years, t3), in mid-childhood (at age 8.5 years, t4), and in mid-adolescence (at age 14.5 years, t6) were used, and are described below.

5.4.3.1. Child temperament

Child temperament was assessed by the EAS Temperament Survey for Children: Parental Ratings (Buss & Plomin, 1984) at age 18 months, 4.5 and 8.5 years (see description above). At age 14.5 the EAS Temperament Survey for Adults was used (Buss & Plomin, 1984). As the adult version does not measure shyness, the measure of shyness from the EAS Temperament Survey for Children at age 12.5 years (t5) was used instead. Cronbach's alphas for the four-item scale of emotionality were .66, .71, .67 and .68; for the activity dimension .68, .74, .75, and .68; for the sociability dimension .52, .65, .66, and .68; and for the shyness dimension .75, .77, .77, .and .69; at the four time points respectively.

5.4.3.2. Child internalising behaviour problems

Internalising problems in infancy and early childhood were assessed using two items ("Has many different worries, broods over things", "Is often frightened by load noises and unexpected things") from the BCL (Richman & Graham, 1971), and one additional item pertaining to sadness ("Seems often, or for long periods, to be unhappy"). The items were measured on a scale of 0 (*no difficulties*), 1 (*moderate difficulties*), or 2 (*substantial difficulties*). Internal consistency (Cronbach's alpha) was .43 and .48 at the two time points respectively. The low alpha was expected due to the small number of items in the scale. Time-to-time correlations were .41 (t1 to t2) and .38 (t2 to t3). At age 8.5 years the Internalising Problem subscale from the SDQ (Goodman, 1994) was used to measure: sadness, somatic complaints, general worries, nervousness, and fear. The items were measured on the same scale as above, and internal consistency was .66. The measure of child internalising problems at age 14.5 years constituted a compound of two different scales, one for depressive symptoms and one for anxiety symptoms. Depressive symptoms were measured with the Short Mood and Feelings Questionnaire (SMFQ; Angold et al., 1995). Items were rated on a 3-point Likert scale ranging from 0 (not true) to 2 (certainly true). Symptoms of anxiety were assessed with the Coolidge Personality and Neuropsychiatric Inventory for Children, General

Anxiety Disorder Scale (GAD; Coolidge, Thede, Stewart, & Segal, 2002). The GAD has 12 items directly extracted from the DSM-IV criteria for generalized anxiety disorder, separation anxiety and social anxiety. The items were rated on a 4-point scale from 0 (not true) to 3 (certainly true). After rescaling the SMFQ data to a four point scale, the SMFQ and GAD were combined to create a 25-item index of child internalising at age 14.5 years with a Cronbach's alpha of .89.

5.4.3.3. Child hyperactivity

In infancy and early childhood the average of two items from the Behaviour Checklist (Richman & Graham, 1971) was used, one assessing activity level and the other concentration. The items were measured on a scale of 0 (*no difficulties*), 1 (*moderate difficulties*), or 2 (*substantial difficulties*). The time-to-time correlations were .35 (t1 to t2) and .43 (t2 to t3). At ages 8.5 and 14.5 years the Hyperactivity subscale from the SDQ (Goodman, 1994) was used to measure: restlessness, always on the move, easily distracted, thinking before acting (reversed) and completing tasks (reversed). The items were measured on a scale of 0 (*no difficulties*), 1 (*moderate difficulties*), or 2 (*substantial difficulties*), and internal consistency was .74 and .78 in mid-childhood and in mid-adolescence, respectively.

5.4.3.4. Maternal symptoms of anxiety and depression

At child age 18 months, 4.5, 8.5, and 14.5 years mothers reported on their own symptoms of anxiety and depression using a slightly shortened version of the Hopkins Symptom Check List (HSCL-25; Hesbacher, Rickels, Morris, Newman, & Rosenfeld, 1980); one item was excluded at age 4.5, 8.5 and 14.5 years, and two at age 18 months, as some mothers who participated in a pilot study perceived them as offensive. The HSCL is described above. The alpha coefficients were .90, .90, .92, and .90, at the four time points respectively.

5.4.3.5. Stressors related to partner relationship and health

At child age 18 months, 4.5, 8.5, and 14.5 years, mothers were asked to indicate whether they had experienced enduring problems over the last 12 months in the following five areas: their relationship to their partner, the social support they received from their partner, their partner's physical or mental health, their children's physical health or their own physical health. Social support from partner was a composite (mean) score of three items each measured on a Likert scale from 1 (*totally agree*) to 5 (*totally disagree*), referring to feeling attached to partner, whether partner valued one's opinion, and feeling left out even at home (reversed). The other four items were scored on a Likert scale from 1 (*no problem*) to 4 (*huge problem*), and a 1-5

point scale was created from responses to these questions. The mean of the scores on the five items was used as the measure of 'stressors related to partner relationship and health'. Its alpha coefficient was .76, .79, .73 and .73, at the different time points respectively.

5.4.3.6. Living condition stressors

At child age 18 months, 4.5, 8.5, and 14.5 years, mothers were asked to indicate whether they had experienced enduring problems in the last 12 months in three areas - housing, employment and financial status - each scored on a Likert scale from 1 (*no problem*) to 4 (*huge problem*). The sum of scores on these three items was used to create a composite score for living condition stressors. The alpha coefficient was .61, .65, .66 and .58, at the different time points respectively.

5.4.3.7. Social support from friends, family and neighbours

At child age 18 months, 4.5, 8.5, and 14.5 years, fourteen questions were administered to tap the mothers' experience of social support from friends, family and neighbours. Four qualities of social support were measured for friends and family: *closeness and contact, respect and responsibility, feeling of belonging* (each on a Likert scale from 1 [*totally agree*] to 5 [*totally disagree*]), and *practical help* (measured on a five point scale from 0 [*no*] to 4 [*very often*]). The alpha coefficient for family support was .68, .71, .68 and .70, while the corresponding alphas for support from friends were .59, .66, .68 and .67 at the different time points, respectively. Regarding social support from neighbours / neighbourhood, mothers were asked about *their sense of belonging to their neighbourhood* (one item on a Likert scale from 1 [*low*] to 5 [*high*]), *number of neighbourhood acquaintances* (2 items on a scale from 1 [*no one*] to 5 [*five or more*]), and *practical help received from neighbours* (3 items with a 0 [*no*] - 1 [*yes*] format). A 1-5 point scale was created from responses to these questions. The alpha coefficients were .74, .75, .74 and .72, respectively. The mean of all 14 items was used to form a composite score of *Social support from friends, family and neighbours* (Dalgard, Bjork, & Tambs, 1995; Mathiesen & Prior, 2006).

5.4.4. Adolescent self-reported outcomes at age 18.5, used in Paper 3

5.4.4.1. Depression symptoms

Depressive symptoms were measured with the Short Mood and Feeling Questionnaire (SMFQ; Angold et al., 1995). SMFQ is a one-dimensional scale consisting of 13 questions, designed for epidemiological studies of childhood and adolescence. The scale measures affective and cognitive symptoms of depression (e.g., "didn't enjoy anything at all", "felt

miserable or unhappy") taken from the original 34-item Mood and Feelings Questionnaire. The answers range on a 3-point Likert scale ranging from 0 (*not true*) to 2 (*true*). First an average score was calculated in order to include participants with partial data (i.e., all participants with data on half of the items or more were included), then the average score was multiplied with the number of items in the scale in order to form a total SMFQ score on the original scale format. Chronbach's alpha was .88.

5.4.1.2. Anxiety symptoms

Anxiety symptoms were measured with the Anxiety Scale from the Depression, Anxiety and Stress Scale (DASS; Lovibond & Lovibond, 1995). The Anxiety Scale consists of 14 items measuring autonomic arousal, skeletal muscular effects, situational anxiety, and subjective experiences of anxious affect. The items are scored on a four-point scale ranging from 0 (*did not apply at all*) to 3 (*applied very much, or most of the time*). A total DASS Anxiety score was created using the same procedure as described for the total SMFQ score. Chronbach's alpha was .90.

5.4.1.3. Well-being

Well-being was measured with two different scales: the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) and the recent Flourishing Scale (Diener et al., 2010). SWLS represents the Hedonic tradition, has a one-dimensional structure, and is metric invariant across sexes (Clench-Aas et al., 2011). The five items are scored on a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The Flourishing scale represents the Eudaimonic tradition, and measures the presence of positive relationships, feeling of competence, and the experience of having meaning and purpose in life. The Flourishing scale consists of eight items scored on a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Total SWLS and Flourishing scores were calculated using the same procedure as describes for the total SMFQ score. Internal consistencies (Cronbach's alphas) for the two scales were .89 and .91, respectively.

5.5. Combining different externalising behaviour types in one longitudinal model

Two main approaches to the combination of data in longitudinal models are described in the literature. The most frequently used approach involves using identical items at different measurement time points in the trajectory models (e.g., Broidy et al., 2003; Wiesner, Kim, & Capaldi, 2005; Campbell et al., 2006; Odgers et al., 2008). The strength of this approach is that one assumes to measure the same construct at each occasion. However, this may turn out

to be incorrect in longitudinal models that cover longer developmental spans. For instance, the social function of a given behaviour is likely to change across development as a child's cognitive capacities and verbal skills develop, as pointed out by Tremblay (2000) in regard to aggressive behaviours. Testing whether longitudinal data is measurement invariant across age, is a way of statistically testing whether the same construct is consistently being measured (Widaman, Ferrer, & Conger, 2010). To our knowledge only one trajectory study has tested their longitudinal data for measurement invariance, and since their externalising measures were not invariant across time the researchers were obliged to exclude several waves of data for the girls from their longitudinal model (Odgers et al., 2008).

Moreover, the identical-item-across-age approach does not allow for a longitudinal model focusing on externalising development from infancy onwards that opens up for a broader definition of externalising behaviour problems in adolescence. Since prevention and early intervention efforts aim to address this broad and developing constellation of behaviours, it seems most valuable to employ measures that capture the breadth of the phenomenon. However, given that some externalising behaviour types in adolescence are not relevant in preschool age (e.g., truancy), our approach implies shifting indicators corresponding to shifts in modal externalising behaviours with increasing child age.

The three instruments that are used by the current study to measure externalising behaviour problems across childhood are described above. These instruments are developmentally appropriate for the ages in which they are used. Table 2 presents the specific behaviour types that are included at the different instruments across age, Table 3 presents the overlap between behaviour types across instrument/age.

Table 2. Measurement Instrument and Child Age, Types of Externalising Behaviour and Item Content

Instrument and Child Age	Behaviour Type	Item Content
BCL, 1.5, 2.5 and 4.5 years	Obedience/manageability	Difficult to manage
	Temper tantrum	Temper tantrums
	Irritability	Irritability
SDQ, 8.5 years	Obedience/manageability	Is obedient, does as adults tell (rev)
	Tempers	Often has temper tantrums or is in bad mood
	Inter-personal aggression	Often fights or bullies other children
	Stealing	Steals at home, in school or other places
	Lying or cheating	Often lies or cheats
TSAB, 12.5 and 14.5 years	Stealing	Refrained from paying at cinema, bus, train or similar
		Taken money from someone in family, without permission
		Taken goods from shopping mall, shop or kiosk without paying
		Stolen things from somebody's pocket or purse, when the was not around
		Broken into a shop, house, or apartment in order to steal
	Inter-personal aggression	Scratched someone or pulled someone's hair*
		Threatened to hit or hurt somebody*
		Hit or kicked somebody*
		Been in a fist fight at school or other places
		Been in a fight using weapon (knife, bat, or similar) or other items
	Loitering	Been truant from school one or two hours
		Been truant from school a whole day
		Hung out in other places than was allowed to
		Stayed out much later in the evening or at night, than allowed to
	Vandalism	On purpose destroyed or broke windows, benches, telephone boxes, mailboxes, garden plants, or similar
		On purpose destroyed chairs, tables, or other things that belongs to school
		On purpose destroyed seats in bus, at the cinema or other places
	Mixed	Threatened or forced somebody to give away money or other things
		Carried weapon (knife, bat or similar) or items that can be used as weapon, at school or other places

Note. * indicates that "not between siblings" was added at t6.

Table 3. Overlap Between Types of Externalising Behaviour across Measurement Instruments

Externalising Behaviour Type	Number Of Items		
	BCL	SDQ	TSAB
Obedience or manageability	1	1	0
Temper tantrums	2	1	0
Inter-personal aggression	0	1	5
Stealing	0	1	4
Lying or cheating	0	1	0
Vandalism	0	0	3
Loitering	0	0	4
Mixed	0	0	2

The combination of different types of externalising behaviour in one longitudinal profile is done with reference to developmental sequences and heterotypic continuity in externalising behaviour across development (see above, Section 1.3). Core indicators of externalising behaviour problems differ across age, and such a shift is indicated, for example, in wide-spread measures of externalising, such as CBCL 1 1/2 -5 (Achenbach & Rescorla, 2000) and CBCL 6-18 (Achenbach & Rescorla, 2001). Externalising behaviours in early childhood years involve oppositional and disruptive behaviours (Wakschlag, Tolan & Leventhal, 2010), which are measured by the included BCL items. Later in childhood, behaviours like truancy, stealing, vandalism and aggression are important aspects of the construct in addition to the behaviours described above (Achenbach & Rescorla, 2001; Odgers et al., 2008). These behaviours are captured by the SDQ and TSAB. Thus, the current study applies shifting indicators of externalising behaviour corresponding to shifts in modal externalising behaviours with increasing child age. The time-to-time correlations (i.e., t1 to t2, t2 to t3, etc.) for all the externalising behaviour measures in the study were .46, .50, .32, .29, and .43, with the lowest correlations corresponding to the longest intervals between waves.

In the first two papers of the current study the word "trajectories" was used to describe the longitudinal patterns of externalising behaviour problems that we had identified. Later, in the third paper, we found that "longitudinal profiles" was a more appropriate label as our approach involves indicators of the externalising construct that shift across age.

5.6. Statistical analyses

5.6.1. Statistical analyses in Paper 1

Latent Profile Analysis (LPA) was used in order to identify longitudinal profiles of externalising behaviour problems. LPA refers to modelling with categorical latent variables to represent subpopulations. The latent profiles explain the relationships among the observed dependent variables, similar to factor analysis, but sort individuals into latent classes rather than producing continuous latent factor scores. Latent Class Growth Analysis (LCGA) is a popular latent class analysis method for longitudinal measures that produces classes that are similar in terms of development. LPA is similar to LCGA but it does not impose a parametric form to growth (e.g., linear growth), and hence, is more general than LCGA. LPA captures developmental change as does LCGA, but in the form of a profile of change rather than as slopes and intercepts. Because we did not want a priori to restrict the possible shape of developmental patterns to estimate, we considered this a sound choice.

Mother reported child and adolescent externalising behaviour measures at six waves (age 18 months and 2.5, 4.5, 8.5, 12.5, and 14.5 years), were used as data in the LPA analyses. Data from boys and girls were analysed together in one combined model.

The specification of the LPA model was demanding. Means and variance estimates for each of the six externalising mean indexes for each class can be defined a priori, or be freely estimated. We performed an extensive evaluation of the rationale behind, and the implications of, different model specifications, before we chose what we considered to be the optimal specification. The externalising mean scores at each assessment were rescaled to have approximately equal variance at every time point to eliminate possible estimation problems due to different scales of measurement. The rescaling was done by multiplying the variable by 10 (at t1, t2 and t3, respectively), 14.29 (at t4), and 26.67 (at t5 and t6). After rescaling, the mean externalising scores were 4.2, 4.6, 4.7, 3.1, 1.9, and 1.9 at age 18 months and 2.5, 4.5, 8.5, 12.5 and 14.5 years respectively. We further allowed the residual time-specific variances to be different across classes but forced them to be equal for each instrument across time to minimize the number of variance parameters and potential convergence problems.

A series of latent class analyses was conducted in order to decide on the optimal number of latent classes. Due to skewness of the TSAB scores at t5 and t6, the data drove the models toward solutions that included one or two classes with virtually no externalising in adolescence. Since subgroups with means and variances of zero are known to produce

estimation challenges and model non-convergence (Hipp & Bauer, 2006), the variance estimates for these two groups were fixed at a small value near zero (0.22). Solutions with 2 to 6 classes were examined. We examined the fit statistics (BIC and sample size adjusted BIC), and the meaningfulness of the class solutions in order to decide on the optimal number of latent classes.

Child and family factors measured at child age 18 months were then used as predictors of the longitudinal profiles. Logistic regression was used to test for group discrimination by the early predictor, one predictor at a time. All variables that were significant in the first round of analyses were then combined in one simultaneously estimated latent class and multinomial logit regression model to compare the relative strength of the predictors in discriminating the latent classes. Including predictor variables into a simultaneously estimated LPA and logit regression model was the best and recommended approach for these analyses, as we wanted to avoid a two-step analysis. A simultaneously estimated model takes the uncertainty of latent class membership into account when evaluating the statistical significance of predictor effects. It also avoids the inflation of significance levels that comes with treating latent class membership as if it were known. Class solutions can change when more information, such as class predictors, are included in the model (Clogg, 1995; Roeder, Lynch, & Nagin, 1999). Thus, the LPA solution based on the externalising variables only ("basic model") and the LPA solution based on the simultaneously estimated profile and predictor model ("multi-predictor model") may be more or less different from each other.

5.6.2. Statistical analyses in Paper 2

We investigated differences among trajectory groups in child, family and contextual risk across childhood. The five longitudinal profiles of externalising behaviour problems that were identified in the first paper prior to including the child age 18 month predictors in the model, i.e., a "basic externalising model", was utilised in the second paper. As we wanted to study the relationship between externalising profiles and exposure to risk factors across development, we wanted to utilise the profile solution that was unaffected by predictor variables at t1.

A Cholesky factorisation model was used to separate the child, family and contextual risk variables measured in infancy, early childhood, mid-childhood, and mid-adolescence into their stable and changing components. The Cholesky factorisation model consisted of a "Cholesky risk factor infancy" representing events and processes occurring up to child age 18

months that resulted in risk at 18 months, and that contributed to stability at later time points. The "Cholesky risk factor early childhood" represented new events and processes occurring between child ages 18 months and 4.5 years that contributed to changes in risk over this time period and to stability onwards. The "Cholesky risk factor mid-childhood" represented new events and processes occurring between child ages 4.5 and 8.5 that contributed to change in risk over this time period and to stability onward. The "Cholesky risk factor mid-adolescence" represented new factors occurring between child age 8.5 and 14.5 years that contributed to change over this time period. All risk variables were standardised before Cholesky factorisation was applied. The Cholesky models were specified by fixing the variance of the observed variables to zero, and by fixing the first factor loading to unity.

The latent profile solution of externalising was constrained to be identical with the model in the original study, by fixing the means and variances for each externalising index in each latent class in accordance with the original model, thus preventing the co-occurring risk data from influencing the profile model. The Cholesky means were set to zero for the Low stable externalising class and estimated freely for the remaining four externalising classes. The variances of the Cholesky risk factors were estimated for all five classes. Thus, a Cholesky risk factor was elevated when it was significantly different from zero, i.e., from the Low stable class. Significance of trajectory group differences in Cholesky factorized child and family risks was judged by examining the overlap of confidence intervals, which is considered to be a conservative criterion for evaluating group differences (Schenker & Gentleman, 2001).

5.6.3. Statistical analyses in Paper 3

The "basic externalising model" utilised in the second paper was also used in the third paper. As we wanted to study the prediction from externalising profiles across childhood to mental health outcomes in late adolescence, we wanted to apply the profile solution that was unaffected by predictor variables at t1.

Means of the outcomes at 18.5 years were estimated across the five latent externalising profiles. The latent profile solution was constrained to be identical with the model in the original study in the same way as in the second paper, thus preventing the outcome variables from influencing the profiles. The late adolescent outcomes were regressed on gender within each latent class. As gender was coded *0= boys* and *1=girls*, the regression intercepts within each latent class can be interpreted as the outcome levels for the boys within each class,

respectively, and the regression coefficients as the value to be added to identify the outcome levels for girls. Standard errors and confidence intervals for the girls were obtained by running the analyses again on recoded gender variable (*0=girls, 1=boys*). Significance testing of difference scores (e.g., High stable class versus Low stable class) was done by dividing the difference score by the standard error of the difference score (Cohen, Cohen, West, & Aiken, 2003).

6. RESULTS

6.1. Optimal number of latent profiles (paper 1)

We first examined LPA solutions with 2 to 6 classes based on externalising data only in order to decide on the optimal number of latent profile classes. We inspected the meaningfulness of the solution and the fit statistics (sample size adjusted BIC [SSA-BIC] and BIC). The BICs were 19,313, 18,983, 18,805, 18,743, and 18,767, respectively, for the 2 to 6 class solutions. SSA-BICs were 19,256, 18,895, 18,688, 18,594, and 18,590. We settled on the model with 5 profiles based on the clear minimum of the series of BIC fit statistics for 2 to 6 classes and the meaningfulness of the 5-class solution. Although the SSA-BIC did not show the same clear minimum, it is known that the BIC imposes a higher per parameter penalty than the SSA-BIC, and the SSA-BIC usually indicates more classes than the BIC (Nylund, Asparouhov, & Muthén, 2007). The class solution based on externalising behaviour only, i.e. the "basic externalising model", was the model used in Paper 2 and 3. Then, risks factors measured at child age 18 months were included into a simultaneously estimated latent class and multinomial logit regression model, resulting in a "multi-predictor model" which was used in Paper 1.

The optimal LPA solution consisted of the following five classes; a High stable (HS) class, a High childhood limited (HCL) class, a Medium childhood limited (MCL) class, a possible Adolescent onset (AO) class, and a Low stable (LS) class. As expected (see Section 5.6.1 above), the basic externalising model and the multi-predictor model differed somewhat. However, the identification of the High stable class was a robust finding, in that the class emerged early in the analytic process, it was classified in a good way within each model, and it remained consistent across models. When comparing the basic and the multi-predictor model, there was some instability regarding the proportion and shapes of the remaining four profiles across the two solutions (See Figure 1 in Paper 1, and Figure 1 in Paper 2). The most pronounced difference being that the multi-predictor solution discriminated between classes

to a greater extent over the earliest ages, and that the HCL and the MCL classes shifted with regard to having zero externalising in adolescence. Descriptive statistics for the basic and multi-predictor models, showing the rescaled variables, are presented in Table 4.

Table 4, Means, Variances, and Class proportions in Five-Class Solutions in Basic Model and Multi-Predictor Model

	Estimated means (variances) of externalising						Estimated
Class and solution	t1	t2	t3	t4	t5	t6	proportion
Low stable							
Basic	2.55 (6.05)	3.18 (6.05)	2.83 (6.05)	1.93 (3.83)	0.04 (0.22)	0.11 (0.22)	34 %
Multi-predictor	1.07 (2.77)	1.78 (2.77)	1.00 (2.77)	1.35 (2.75)	0.10 (0.22)	0.21 (0.22)	16 %
Medium childhood limited							
Basic	5.79 (2.47)	6.32 (2.47)	6.21 (2.47)	2.54 (4.38)	1.20 (1.68)	1.17 (1.68)	20 %
Multi-predictor	4.33 (6.59)	5.11 (6.59)	5.32 (6.59)	2.98 (6.26)	0.04 (0.22)	0.1 4 (0.22)	31 %
High childhood limited							
Basic	7.21 (16.08)	7.55 (16.08)	8.32 (16.08)	5.45 (19.12)	0.07 (0.22)	0.04 (0.22)	9 %
Multi-predictor	9.95 (17.06)	8.94 (17.06)	8.95 (17.06)	3.35 (5.14)	1.15 (1.79)	1.05 (1.79)	5 %
Adolescent onset							
Basic	2.52 (5.66)	2.66 (5.66)	2.85 (5.66)	1.72 (2.85)	2.21 (4.75)	2.66 (4.75)	19 %
Multi-predictor	3.46 (6.50)	3.91 (6.50)	3.99 (6.50)	1.91 (3.11)	2.28 (4.80)	2.41 (4.80)	30 %
High stable							
Basic	5.29 (9.70)	6.23 (9.70)	6.63 (9.70)	5.90 (14.82)	6.61 (26.10)	6.31 (26.10)	17 %
Multi-predictor	5.59 (7.27)	6.62 (7.27)	6.88 (7.27)	6.68 (18.91)	6.66 (28.46)	6.44 (28.46)	18 %

The entropy estimate indicates the quality of a classification by reflecting the degree of correspondence between class membership based on the fitted model and on pseudo-classes. The entropy was 0.62 for the basic externalising model and 0.70 for the multi-predictor model, which indicates that the solutions were reasonable. The average diagonal values (between the fitted and pseudo-class assignments) suggest that the classifications of the High stable and Adolescent onset classes were good (at least .80; Muthén, 2009) in the basic model (.84 and .80), and that the classifications of the High stable, Low stable and High childhood limited classes were good in the multi-predictor model (.83, .83, and .89). The slight increase in entropy in the multi-predictor model reflects that the classification quality got higher when predictor data were included in the model. Due to the uncertainty relating to class membership, all analyses were conducted on the latent model and not on pseudo-class membership.

6.2. Early predictors of class membership (Paper 1)

Most of the predictor variables measured at child age 18 months discriminated between the longitudinal profiles in the single-predictor models, and six variables were the most influential in the multi-predictor model. These six variables were child negative emotionality,

child gender, presence of siblings in the family, young motherhood, maternal symptoms of depression and anxiety, and family stress. Two of these, family stress and maternal age, discriminated uniquely between the HS class and all other classes. Comparing families with levels at the 10th percentile value on both of these risk factors to families with levels at the 90th percentile on both of these variables, all else being equal, yielded an 8.8 increase in the odds of being in the HS class versus the other classes. Exploratory post-hoc analyses (cross-tabulations of pseudo-class membership with scores on each item within the family stress construct, comparing observed and expected frequencies for the HS class) suggested that the variables within the overall family stress construct which were most closely related to membership in the HS class were problems in the relationships between mothers and their partners, and partners' health problems. The gender distribution was equal in the High stable class, while male gender predicted membership in the Adolescent onset class, and female gender predicted membership in the High childhood limited, Medium childhood limited and Low stable classes.

6.3. Timing of risk factors across childhood (Paper 2)

The results from the Cholesky factorisation of child, family and contextual risk factors for each latent class identified striking patterns of correspondence between externalising development and timing of risk exposure. Children in the HS longitudinal profile were exposed to very elevated levels of family adversity that were stable from infancy onwards, and in addition, new levels of family risks appeared over successive periods. The HS children were also highly emotional as infants, and became increasingly so with age. Furthermore, while these children did not have elevated mean levels of internalising and hyperactivity in infancy, they developed co-morbid internalising and hyperactivity problems with age. Thus, chronic high levels of family risk in the context of high externalising problems from early in life appeared to set the scene for the development of these co-morbid conditions.

Unexpectedly, the levels of most risk factors for the HCL externalising class were also highly elevated in all the developmental periods covered by this study. Thus, the remission in externalising behaviour by mid childhood for this class was *not* paralleled by diminishing levels of internalising, hyperactivity, and maternal mental distress. However, maternal exposure to health stressors and partner stressors lessened by mid-adolescence and there was a substantial improvement in social support from family, friends and neighbours that both preceded and co-occurred with the reduction in externalising problems.

The second class with externalising behaviours limited to childhood, the MCL class, had levels of risks that were intermediate between the HCL and LS classes. This finding supports the validity of *two* trajectory classes with externalising behaviours limited to childhood. The possible AO externalising class had no early child-related risks, but was exposed to substantially elevated levels of maternal mental distress and maternal health and partner strain from infancy and throughout the periods covered here. The LS class had stable low levels of child and family risk factors and stable high support from family, friends and neighbours in all study periods.

6.4. Prediction to late adolescent mental health outcomes (Paper 3)

The long-term prediction to internalising symptoms and subjective well-being in late adolescence from the longitudinal profiles of externalising behaviour problems from infancy to mid-adolescence showed that the HS pattern of externalising behaviour predicted depression symptoms in boys and anxiety symptoms in girls. The HS pattern of externalising behaviour throughout childhood predicted lower well-being scores for both girls and boys, as opposed to children with a LS pattern over the study period. Boys with a HCL pattern on the average had lower life satisfaction, while children with a possible AO pattern of externalising did not differ significantly on the outcomes from those with low levels of externalising across time. The current findings are noteworthy as they are the first to document how a person-oriented typological study of externalising behaviour problems with its starting point in infancy can predict internalising problems and well-being in late adolescence.

6.5. Gender differences (all papers)

In the first paper, child gender was a significant predictor of class membership. Being a girl predicted membership in the HCL, MCL and LS classes, being a boy predicted membership in the class with the second highest level of externalising in adolescence (AO class), while the HS class had an even split between the genders. For descriptive purposes, each individual was assigned to the class where they had the maximum probability of belonging (pseudo-class) so that gender proportion for each class could be estimated. The distribution of boys and girls was about equal across classes between the two profile solutions, with the exception of the MCL class, which had an overrepresentation of girls in the multi-predictor model and an even gender split in the basic model. The even split between the genders in the HS class was surprising, and post-hoc analyses of gender differences within the HS class were conducted. These analyses (t-test of gender differences for all externalising item at t5 and t6) revealed

that the HS boys were on average more involved in overt behaviour types than the HS girls, while for the remaining externalising types were there no significant differences between the genders within the HS class. Thus, the HS class was a heterogeneous class with respect to gender differences in externalising behaviour types at the adolescent end-point of the profile period.

The timing of risk factor results pertains to boys and girls in accordance with the proportion of the genders in the various classes.

Overall, girls had higher levels of depressive and anxiety symptoms than the boys at age 18.5, while the levels of well-being were equal between the genders. Boys that had followed a HS longitudinal profile across childhood had higher levels of depressive symptoms, and girls that had followed a HS profile had higher levels of anxiety symptoms in late adolescence, compared with the same gender in the LS class. The levels of life satisfaction and flourishing differed for both boys and girls between those who had followed a HS profile and those who had followed a LS profile across childhood.

7. DISCUSSION

The study focuses on prediction to, co-occurring risk with, and long term consequences of, different longitudinal profiles of externalising behaviour problems across childhood. Despite extensive research efforts within the area of externalising behaviour problems, there is still a lack of knowledge about the longitudinal profiles of externalising behaviour problems from early childhood onwards, predictors in infancy for chronic high levels of externalising behaviour across childhood, risk factors that co-occur with longitudinal profiles of externalising, the links from such patterns to long-term mental health outcomes, and potential gender differences in these relationships.

The study has several important findings. The heterogeneity in the 13-year course of externalising development from infancy to mid-adolescence was best captured by a latent profile model with five classes. These classes were labelled High stable (HS), High childhood limited (HCL), Medium childhood limited (MCL), possible Adolescent onset (AO), and Low stable (LS). Two family risk factors, young motherhood and family stress - specifically related to partner problems - already measured at child age 18 months, uniquely discriminated the HS profile from all the other profiles. The timing of child, family and contextual risk

factors revealed striking patterns of correspondence between level of externalising and risk exposure across development for the HS profile, and unique relationships for the remaining profile classes. The study was able to differentiate between two longitudinal profiles characterised by externalising behaviours that were limited to childhood. The remission in externalising behaviour by mid childhood for children in the HCL class was not paralleled by diminishing levels of internalising, hyperactivity, and maternal mental distress. The second class with externalising behaviours limited to childhood, the MCL class, had levels of risks that were intermediate between the HCL and LS classes and less comorbid conditions than the HCL class. Adolescents that had followed a HS profile from infancy to mid-adolescence had increased levels of depressive symptoms (boys) and anxiety symptoms (girls), as well as reduced well-being in late adolescence, compared with adolescents that had followed a LS profile. We found an even split between the genders among the children in the HS class. However, there were gender differences in types of externalising behaviours in adolescence. The study has shed light on temporal sequencing in the relationships between externalising behaviour and risk factors across development, and gives an important contribution to the understanding of developmental processes throughout childhood. In the following, findings regarding longitudinal profiles (Aim 1), predictors at child age 18 months (Aim 2), timing of risk factors across childhood (Aim 3), late adolescent outcomes (Aim 4), and gender differences (Aim 5) will be discussed and sought integrated.

7.1. Typical longitudinal profiles (Aim 1)

The identification of typical longitudinal profiles involved two different LPA solutions, one based on externalising data only (Papers 2 and 3), and one where child age 18 month predictors had influenced the solution in the simultaneously estimated LPA and logit regression model (Paper 1). In the following results from the three papers will be combined and integrated. The differences between the two profile solutions are not considered to pose a hindrance for this integration of results. Since the HS class was stable in both solutions, conclusions regarding the HS class can be drawn across papers. The inconsistencies regarding the other classes are considered to have less bearing, since the differences among the remaining classes were not a focus while discriminating the HS class from these remaining classes (Paper 1), and the analyses of risk factor timing and long term outcomes were done on the same longitudinal profile solution (Paper 2 and 3).

The five longitudinal profiles that are identified in the current study represent typically occurring patterns and may thus be understood as longitudinal types in the way the term is used within a person-oriented framework (see above, Section 2.2). Due to changes in measures and rescaled variables, only relative change across profiles, and not absolute (developmental) change, can be interpreted. Still, the shapes of the profiles across time indicate that there are a) two longitudinal types that decline in externalising behaviour problems across childhood relative to the other profiles (the HCL and the MCL profiles), b) one type that increases in externalising from mid-childhood onwards relative to the other profiles (the AO profile), c) one type with consistently elevated levels relative to the other profiles (the HS profile), and d) one type that is constantly low in externalising from infancy to mid-adolescence relative to the other profiles (the LS profile).

The longitudinal types that were identified in the current study are well in line with theory and earlier findings. As postulated by Moffitt's taxonomy (1993), an early-onset and an adolescent-onset type were identified. Childhood limited types are, as we did in our study, also identified in other longitudinal studies (Moffitt, 2006). Finally, while our longitudinal types are based on a broad externalising construct, the longitudinal types are still in correspondence with results from person-oriented studies that have defined externalising more narrowly. Both Shaw and colleagues (2005) and Côté and colleagues (2006) identified two classes with desisting levels of externalising across age and one chronic high class.

The HS externalising class comprised 18% of the sample. This is substantial in comparison with most previous studies. For example, 7% of the sample used by Shaw and colleagues (2005) was classified as having high externalising problems, and 3% fell into a similar class in the NICHD ECCRN (2004) study. The only study to identify a similar proportion is Côté and colleagues (2006), with 16.6%. However, these studies have measures physical aggressive behaviour or conduct problems dominated by aggressive behaviour. As the construct of externalising used in the TOPP study is broader and ranging from relatively normative to serious behaviour, the larger High stable class is an expected finding compared with the studies that have limited focus on overt conduct problems and physical aggression. Furthermore, there is a normative increase in status violations during adolescence (Bongers, Koot, van der Ende, & Verhulst, 2004). The participants in the current study are followed longer into adolescence than in other studies with comparable timing of the first data collection. It is therefore expected that the normative increase in status violations in

adolescence would affect the proportion of the HS class in the present study. The even split of genders within the HS class will be discussed below in Section 7.4.

7.2. Longitudinal types with high externalising levels in infancy (Aim 2, 3, 4 and 5)

Three longitudinal profiles, the High stable, the High childhood limited, and the Medium childhood limited profiles, had high and rather similar externalising levels in infancy. However, these initial scores represented the starting points of three longitudinal patterns that became increasingly dissimilar with age and that ended out substantially different with regard to externalising problems in mid-adolescence, thus illustrating multifinality. Further, in agreement with central tenets of the holistic-interactionistic theory, it is the greater picture, or Gestalt, of risk factors that seems to carry the meaning and developmental significance of high levels of externalising behaviour problems in infancy. Each profile will now be discussed separately.

7.2.1. The High stable type

Overall, the High stable (HS) longitudinal type seems to illustrate the principle of problem gravitation. With regard to risk factors at child age 18 months (Aim 2), it was in the unique context of young motherhood and increased family stress that high externalising scores early on constituted a risk for staying elevated across childhood. The presence of siblings, child emotionality, child gender, and maternal distress also represented significant risk factors in the model, but these risks did not uniquely predict a HS development. These findings speak to the call for research aimed at better early differentiation between children with persisting high levels of externalising throughout childhood as opposed to those with transient high levels at an early stage (Moffitt et al., 2008). Identification of factors in infancy and toddlerhood that uniquely predict chronic high externalising development across childhood are also reported from other studies. The current study's findings on young motherhood are in line with results from high risk samples in the US and Canada (Shaw et al., 2005; Nagin & Tremblay, 2001), while we note that young motherhood was not a significant predictor in a US general population sample (NICHHD, 2004). The current study index of early family stress consisted of three topics. First, living condition stressors constitute an important parts of this index and were measured with three items covering enduring problems with housing, employment and financial status. Our finding on living condition stress is in line with results on low income from general population samples in the US, Canada and UK (NICHHD, 2004; Côté et al.,

2006; Barker & Maughan, 2009), underlining that living condition stressors are an important predictor of the development of chronic high externalising from early childhood onwards.

Regarding the second topic within the early family stress index, that is the mothers' experience of enduring problems in their relationship with their partner, studies are scarce, and we have located only one trajectory study from early childhood onwards with which to compare our results. The Avon Longitudinal Study (Barker & Maughan, 2009) measured grave parental relationship problems in the form of partner cruelty towards the mother (defined as any indication of emotional and/or physical abuse from the mother's partner), and found that partner cruelty between child age 0 and 4 predicted chronic conduct problems from age 4 to 13. Our findings expand upon the Avon study results by indicating that parental relationship problems do not need to include cruelty to have significance for early-onset externalising development. More studies on this topic are warranted.

The third topic within the early family stress index is mothers' experience of enduring problems related to partners' somatic and/or mental health. Here as well, we have located only one early starting trajectory study with a measure that was somewhat similar to ours. A Canadian population based study measured depressive symptoms in fathers at child age 5 months and found paternal depression to be a unique predictor of chronic disregard for rules between ages 29 to 74 months (Petitclerc et al., 2009). The Canadian finding in combination with our results point toward the importance of health issues in fathers (mothers' partners) for chronic high externalising development from early childhood onward. More studies on this topic are also warranted. Post-hoc analyses indicated that mother's relationship to her partner and health issues in mother's partner represented the most influential aspects within the family stress construct for HS externalising development. As these two issues were measured with only one item each within a family stress index in the current study, and given the overall scarcity of studies on these two topics, there is a need for more studies to shed light on the impact of enduring difficulties in mother's relationship to her partner and to partner's health, as early predictors of a chronic high externalising profile across childhood.

Finally, we will describe how our findings on early predictors differ from those in the literature. Low education in mothers (Nagin & Tremblay, 2001; Shaw et al., 2005; Côté et al., 2006), maternal depression (NICHHD, 2004; Shaw et al., 2005), maternal anxiety (Barker & Maughan, 2009), aspects of child temperament (Shaw et al., 2005; Barker & Maughan, 2009), and child male gender (Côté et al., 2006; Petitclerc et al., 2009) are unique predictors of

chronic high externalising development from early childhood onwards in these studies. However, these factors did not constitute unique indicators of membership in the HS class in the final multi-predictor model of the current study. The lack of unique effect of low maternal education may be related to study attrition, but may also be a reflection of a society that is organised differently from those in other studies. Generally, our finding regarding early predictors of chronic high externalising development across childhood are overall in line with results from other studies, and are also adding knowledge to the importance of parental relationship and health issues. The findings indicate that particularly high risk for a continuation of elevated levels of externalising behaviour problems across childhood may be identified already in infancy.

Regarding study Aim 3, timing of risk factors across development, the HS profile class was exposed to continuous and renewed levels of family risks in the successive developmental periods up to mid-adolescence. The HS children also became increasingly temperamentally emotional with age, and even though they did not have internalising and hyperactivity symptoms in infancy, they developed such problems with age. Thus, high externalising in the context of on-going high levels of family risk from early in life appeared to set the scene for the development of these co-occurring conditions. Regarding timing of risk factors, the current findings expand on earlier studies (NICHHD, 2004; Barker, Oliver, & Maughan, 2010), by showing that new levels of child, family and contextual risk factors appear at successive developmental periods.

With regard to study aim 4, the continuity in internalising symptoms for the HS adolescents was further carried forward into late adolescence, where they reported more depression symptoms (boys) and anxiety symptoms (girls), compared with the LS adolescents. The HS adolescents also had reduced life satisfaction and flourishing at the threshold to adulthood. Hence, the adolescents in the HS profile seem to be on a pathway with increasing problem consolidation. These results had medium to large effect sizes. At the same time, the HS adolescent scores on life satisfaction were at average when compared to norms. This finding may indicate plasticity in development. However, it may also reflect a more including society, where, among other youth support systems, all adolescents have a legal right to upper secondary education and training (Norwegian Ministry of Education and Training, 2013).

What may be the mechanism behind this reproduction of risk across development for the HS profile? The on-going high levels of maternal mental distress, health and partner stressors,

and living condition stressors seem to underline the importance of family and contextual risk factors. The continuous risk exposure in the HS class may involve a process characterised by reproduction, interaction, and exacerbation of risks, and reinforcement of problem behaviour, resulting in the maintenance of externalising problems. Although the current data cannot shed light on the precise mechanisms behind this process, it may involve poorer parenting practices and more negative parent-child relationships, such as suggested by Patterson's notion of coercive cycles (Reid, Patterson, & Snyder, 2002). Neuro-biological factors may have made these children hard to parent (Moffitt, 1993), and development of adequate emotion-based self-regulation may be impeded (Eisenberg, Spinrad, & Eggum, 2010). The findings may be congruent with developmental cascade processes involving deficits in child social competence (Reid, Patterson, & Snyder, 2002; Bornstein, Hahn, & Haynes, 2010; Burt & Roisman, 2010), failures in the academic context (Masten et al., 2005; Moilanen, Shaw, & Maxwell, 2010; Burt & Roisman, 2010), alienation from the "normal" peer group (Bergman & Magnusson, 1997; van Lier & Koot, 2010), and deviant peer processes (Dishion, McCord, & Poulin, 1999; Snyder et al., 2008), representing a narrowing of opportunities (Moffitt et al., 1996). Furthermore, the continuities in risk may reflect genetic influences on both the family and child risk factors, and the timing of risk factor findings are consistent with the genetic innovation model which identifies new genetic risks coming into play at different developmental periods (van Beijsterveldt, Bartels, Hudziak, & Boomsma, 2003).

7.2.2. The High childhood limited type

The high levels of externalising behaviour problems in infancy for the High childhood limited (HCL) type were part of a rather different risk gestalt than for the HS class, even though problem gravitation seems to characterise the HCL type as well. This type consisted of a higher proportion of girls, had multiple risk factors in infancy, both within-child risks and family risks, at levels that were often higher than for the HS class. Moreover, the HCL children were exposed to continuous and renewed levels of most risk factors in successive developmental periods, with the notable exception of living condition stress. However, remission in externalising behaviour by mid-childhood for the HCL children was *not* paralleled by diminishing levels of child internalising and hyperactivity and maternal mental distress, but health and partner stress on the mothers lessened by mid-adolescence. There was also a substantial improvement in social support from family, friends and neighbours that both preceded and co-occurred with the reduction in externalising problems. Still, the HCL youths seemed to be on a developmental path towards internalising difficulties. When followed to

late adolescence these youths had the highest depression-level of all classes, and the HCL boys the lowest life satisfaction of all, but as a low prevalent profile further reduced by attrition only one contrast involving this class was statistically significant. Overall, the results are in line with research indicating troubled outcomes for individuals on childhood limited trajectories (Farrington, Gallagher, Morley, Stledger, & West, 1988; Odgers et al., 2008).

This continuous risk exposure for the HCL profile may also involve a process characterised by reproduction, interaction and exacerbation of risks. One can speculate that coercive parenting may be one factor that plays a role in some of these families as well, as maternal depression is a known risk factor for negative parent-child interactions (Reid, Patterson, & Snyder, 2004). We do not know whether potential cascading effects involving low social competence, failure in the academic context, and rejection from peers, may characterise the HCL children. The HCL mothers reported no living condition strains, which are likely to reflect good workforce participation by at least one adult in the household. What may be the mechanisms behind this remission in child externalising behaviour problem in the context of continuity in most child and family risk factors? The significantly higher level of child temperamental emotionality can point towards a differential contribution of a genetic vulnerability factor for the HCL class, compared to the HS class, and the remission in externalising may be in line with the genetic innovation model which identifies new genetic factors coming into play at different developmental periods (van Beijsterveldt et al., 2003). Thus, even in the absence of contextual stressors related to family economy and with an improvement in social support to the families, high exposure to maternal mental distress and parental health and partner relationship difficulties may interact with biological child factors, thus setting the scene for the observed continuation in internalising problems despite remission in externalising problems.

7.2.3. The Medium childhood limited type

The high level of externalising behaviour in early childhood for the Medium childhood limited (MCL) type consisted in the context of yet another, and overall more moderate, constellation of risk factors. These children were emotional as infants and were exposed to early family risks. The remission in externalising by mid-childhood for the MCL class was not related to a development into internalising symptoms as for the HCL type. Besides, the MCL class was characterised by hyperactivity symptoms throughout every developmental period, thus it may be permissible to speculate that there can be some neurological basis for

the high early externalising level and for the hyperactivity scores across age for this type. The MCL type had normal scores on all outcomes in late adolescence.

These marked differences between the HCL and the MCL types with regard to longitudinal risk exposures and developmental outcomes lend support to the existence of two different classes of externalising problems limited to childhood. Thus, the MCL is suggestive of a "true recovery" from externalising behaviour problems in line with the findings of Barker, Oliver, & Maughan (2010), and Veenstra and colleagues (2009), while the HCL profile seems to be characterised by "a shift" from externalising into problems in other domains as is described by Farrington and colleagues (1988), and Odgers and colleagues (2008). Hence, the current findings have contributed to a nuanced developmental understanding of externalising behaviour problems limited to childhood, as has been called upon by Moffitt and colleagues (2008).

7.3. Longitudinal types with low externalising in infancy (Aims 2, 3, 4 and 5)

Two longitudinal types had lower levels of externalising in infancy (most pronounced in the "basic externalising model"), namely the Adolescent onset and the Low stable classes.

7.3.1. The Adolescent onset type

The Adolescent onset (AO) type consisted of a majority of boys and got the prescript "possible" added in the first paper, as we did not know whether this class actually represented an adolescent onset pattern. The results from the second paper supported the notion of an AO type, as this type also had distinct patterns of risk that were congruent with an AO profile (Odgers et al., 2008). The AO children were exposed to substantially elevated levels of maternal mental distress, as well as health and partner stress in mothers' partners from infancy and from mid-childhood, and to living condition stress from early childhood, but we note that they did not have early child-related risks. From mid-childhood, though, the AO children developed elevated scores on internalising problems and hyperactivity that co-occurred with the onset of externalising behaviour. Thus, the exposure to on-going family risks (even in the absence of initial child risks) may have created vulnerability for the debut of externalising problems, as well as internalising problems and hyperactivity, when these children approached adolescence.

The validation of the self-reported outcomes in late adolescence, on the other hand, gave a less clear picture. Moffitt's taxonomic theory (1993) postulated relatively good adaptation for

the AO type by late adolescence / early adulthood. Still, we expected elevated levels of internalising symptoms for the AO class based on findings from longitudinal studies that have followed development from early adolescence onward (Miller et al., 2010; Smart et al., 2005). However, the contrasts involving the AO versus LS classes were non-significant. There may still be some indications of potential problematic outcomes for the AO type in late adolescence. The AO boys were somewhat elevated on depressive symptoms, and the AO girls even more so, displaying higher mean depressive scores than the HS girls.

7.3.2. The Low stable type

In order to create a metric for comparing classes regarding timing of risk factors, the Cholesky models were specified so that the mean values for the Low stable (LS) type were set to zero. When comparing the other longitudinal types to the LS class, it was clear that the LS class had, with very few exceptions, the lowest levels of child and family risk factors and the highest levels of social support in every developmental period. In late adolescence, the self-reported data from the LS class showed mean anxiety levels that were within the normal range and high life satisfaction and flourishing scores. The only indication of possible problematic outcomes for the LS class in late adolescence was elevated depressive symptoms for the LS girls. Thus, despite low levels of risk across childhood, our results supported the notion that girls are generally more vulnerable for developing depressive symptoms in adolescence (Cyranowski, Frank, Young, & Shear, 2000).

7.4. Gender differences (Aim 5)

Data from boys and girls were analysed together when the longitudinal profiles were identified. The advantage of this approach was that results for each gender could be compared within the same solution(s), and that gender differences appeared in the form of class proportions instead of as different solutions. Furthermore, the current approach seemed reasonable since there were no weighty reasons for expecting boys and girls to follow qualitatively different longitudinal patterns of externalising behaviour problems (Odgers et al., 2008; Miller et al., 2010).

Contrary to expectations, the HS profile had an even split between the genders, rather than mostly consisting of boys. The even split between the genders in a high externalising class is not in line with previous research (e.g. Côté et al., 2006). Previous findings have suggested that robust gender differences are typical for overt externalising behaviour types, as well as for wider construct were overt types are included (Broidy et al., 2003; Moffitt et al., 2001).

Boys are also more likely to follow a chronic trajectory of disregard for rules between age 29 and 74 months (Petitclerc, 2009). To our knowledge, gender differences are not equally robust in other facets of externalising behaviours. For stealing and lying, the frequency may be equal between the genders (Thiet et al., 2001). The post-hoc analyses of gender differences within the HS class show that the HS boys were on average more involved in overt externalising behaviour types than the HS girls, while for the remaining externalising types there were no gender differences within the HS class. Furthermore, the size of the HS class identified in the current study is substantial in comparison to other studies (Shaw et al., 2005; NICHHD ECCRN 2004). Thus, the inclusion of externalising behaviour types that were relatively normative and non-confrontive at all time points, in addition to overt behaviour, may have allowed a higher proportion of children in general, and also a higher proportion of girls, to be included in the HS profile.

Girls had higher overall levels of internalising symptoms than boys in late adolescence, as was expected. We also found that the HS longitudinal profile throughout childhood predicted internalising symptoms in late adolescence in a way that differed for boys and girls. Adolescent HS boys had elevated levels of depressive symptoms, but not of anxiety symptoms, compared with boys in the LS class. As for the HS girls, the picture was reversed with elevated levels of anxiety symptoms, but not of depressive symptoms, compared with the girls in the LS class. All classes of girls had elevated depression levels. Why our expectations were only partly met is an open question. These relationships have not been studied over the same time span in other studies, as far as we know, thus we have not been able to locate other findings with which to compare our results. Further, comprehensive studies that have tracked externalising from mid-childhood or early adolescence onwards failed to identify increased levels of depression (Miller et al., 2010; Smart et al., 2005) and anxiety (Smart et al., 2005) in late adolescence / early adulthood for chronic high externalising classes. Overall, our findings may reflect real relationships. However, they may also be affected by attrition. It is possible, for instance, that depressed HS girls or non-depressed LS girls may have dropped out of the study to a larger extent than other girls. In addition, late adolescent males were participating in the study to a less extent than girls, and this could potentially have biased the results. Thus, gender differences in long term outcomes of longitudinal profiles of broadly defined externalising behaviour problems starting from infancy should be studied in future research.

7.5. Methodological strengths and challenges

This study has considerable methodological strengths. To our knowledge, no longitudinal profile study has included such an array of simultaneously estimated early predictors of class membership, with the earliest externalising measure taken before child age 2 years and continuing to mid-adolescence. We have used developmentally appropriate measures of externalising behaviour problems collected at six time-points, and included broad measures of externalising composed of multiple behaviour types from mid-childhood onwards. The study is strengthened by the longitudinal mapping of a broad range of child, family, and contextual factors against externalising across development, allowing timing of risk factors to be examined. This study is, as far as we know, the first to use an analytic approach that separated between initial (and stable) levels of risks and newly emerging risks levels of the same risk factor appearing in later developmental periods. Finally, this study has reported on late adolescent self -reported outcomes of the mother-reported longitudinal profiles. This study is also, to our knowledge, the first to report on late adolescent outcomes of such early starting longitudinal profiles, and assessing positive, in addition to problem oriented, indicators of mental health. However, the study has also faced methodological challenges, which will be discussed in the following.

7.5.1. Mothers as informants

The mothers were the sole informant on themselves, as well as their children, in the data that were used in the first two papers of the study. This fact has been framed as possible single-informant bias in the discussions in Paper 1, 2 and 3. We would like to expand on that discussion here. Information discrepancies are frequently found with regard to child behaviour, and low correlations between informants have been used to cast doubt on one or both informants (Achenbach, Mcconaughy, & Howell, 1987). As child externalising behaviour problems are specific to the situations in which they occur, it logically follows that perspectives will wary across informants (Achenbach et al., 1987). A reasonable case has been made that maternal reports provide valid and useful information on their children (Rothbart & Bates, 2006; Janson & Mathiesen, 2008). The study of Broidy et al., (2003) used trajectories based on teacher-reported externalising while informing that the mother-reported trajectories were not materially distinct from the teacher-reported. In the third paper of the current study we included adolescent self-reported data, and the adolescent self-reported data validated the longitudinal profiles based on mother-reports.

7.5.2. Psychometric properties of the early externalising measure

The Behaviour Checklist (BCL) was used by the TOPP study to measure child behaviours in the first three study waves, and it contains only three items on externalising behaviour problems. Thus, the early measure of externalising could have been stronger. However, the three included items cover the content area of early-childhood externalising (Wakschlag et al., 2010). The only behaviour type that is missing is physical aggression. Low reliability constitutes a threat to the validity of measures. It is important to understand that internal consistency (Chronbach's alpha) only addresses one limited aspect of reliability. Internal consistency is very highly dependent on the number of items included in a scale. The mean inter-item correlation of the BCL at age 4.5 years is .25, equivalent to the mean inter-item correlation for the CBCL Externalising Syndrome Grouping in a recent large Norwegian sample (L. Wichstrøm, personal communication, June 10, 2011). Generally, scales that measure externalising behaviour tend to have lower internal consistency than scales that measure many other constructs. A reason for this may be that externalising scales are formative indexes as opposed to reflexive indexes that often measure tighter constructs or underlying traits. In a study that involved the different subscales in The Strength and Difficulties Questionnaire, the Conduct Problems Scale was the one with lowest internal consistency (Van Roy et al., 2008). Moreover, the time-to-time correlations between the six externalising measures across childhood were about equal in magnitude as the alphas for the BCLs at the various time points, which would not have been possible if the alphas represented true estimates of reliability. Finally, a latent variable model was used in the current study, which is a method for dealing with imperfect measures of important constructs whether the latent variables are continuous or categorical.

7.5.3. Different externalising types in one longitudinal model

Another aspect of this study that might be perceived as a limitation is the use of different measurement instruments to assess externalising behaviour in one longitudinal profile model. Thus, the externalising construct is not identical through all developmental phases. The current study used a broad externalising construct and included different externalising behaviour types at different time points based on heterotypic stability within the externalising domain. It has been shown that children's development differ within the various subtypes of the broad construct of externalising (Bongers et al., 2004; Reef et al., 2010). The current study's strength of using developmentally appropriate measures with a broad externalising construct from mid-childhood onwards encompassing heterotypic continuity should be

weighted against the disadvantage of not considering within sub-type development. Our approach is valuable in that it allows for an identification of different longitudinal profiles of externalising behaviour problems from infancy to mid-adolescence, even if specific mean levels of externalising are not directly comparable across time.

7.5.4. Two different LPA models

As described above, the identification of typical longitudinal profiles involved two different LPA models, i.e. one model based on externalising data only (Papers 2 and 3) and one model where predictor data had influenced the solution (Paper 1). The decisions regarding the use of different models were taken at different points of time during the process, and we perceive the decisions as well founded (See Section 5.6.1, 5.6 2 and 5.6.3). The discrepancies between the models resulted from the fact that more data were included into the multi- predictor model than into the basic model. The discrepancies may also be related to class membership uncertainties within each model, which again may be caused by partial profile data due to attrition and the changes in measurement instruments across development. As described above, we do not consider the differences between the two models as posing a hindrance against integration of results across the solutions. Still, some study results could have been clearer if one LPA model had been used in all papers throughout the study, but such an approach is also likely to have created new challenges.

7.5.5. Person-oriented methodology

We have used a person-oriented approach, and we have identified five longitudinal profiles to represent the diversity in the development of externalising behaviour problems throughout childhood. The value of this approach is that it sheds light on age of onset and developmental course that represent key differentiating features in externalising development (e.g., Moffitt, 1993). Person-oriented longitudinal methods have a long tradition and strong position within the externalising field (see Section 2.2 and 3.1). However, caution has been raised regarding certain aspects of person-oriented methodology. Group-based approaches may involve categorisation based on continuous variables, which brings along some well-known disadvantages (Bauer & Curran, 2003; Sterba & Bauer, 2010). This criticism is not particularly relevant for the current study. What Latent Profile Analysis does is to identify latent categorical variables, that is, the latent profiles. In this process each individual is assigned probabilities for belonging to each of the latent profiles based on the degrees of similarity between each individual's unique pattern of data and each latent profile. This implies that the LPA did not categorise individuals into groups, unless researchers actively

chose to assign each individual into the class in which they have the maximum probability of belonging and then use the so-called pseudo-class memberships in further analyses. The model is kept as a latent model in all analyses in the current study, which implies that the uncertainties related to class membership is kept in the model and factual groups are not created. Thus, the word (latent) "classes" are used throughout this study to describe the longitudinal profiles, and not the word "groups".

Another danger related to person-oriented methodology may be unjustified creation of groups (or classes) from cases that actually belong to the same population (von Eye & Bergman, 2003; Bauer & Curran, 2003; Sterba & Bauer, 2010). These authors have illustrated how groups can be created in homogeneous data where all individuals actually belong to one population, resulting in non-factual groups without external validity. However, several steps can be taken in order to assure the validity of a longitudinal profile solution. First, a general theoretical framework must be explicated (Bergman et al., 2009). Second, the quality of the typological representations must be evaluated (Bergman, Andershed & Andershed, 2009). Thirdly, external validity must be established (von Eye & Bergman, 2003). External validity implies that group membership can be predicted from other variables than the ones used to create the groupings, or that group membership can predict differences in covariates or outcomes involving other variables than the ones used to create the groupings (von Eye & Bergman, 2003; Ialongo, 2010). The danger of artifactual creation of groups does not seem to be particularly relevant for the current study, given the heterogeneous nature of externalising behaviour problems, and that the relevant requirements to assure validity of a solution seem to be met.

7.5.6. Attrition

Attrition represents a major methodological challenge to the generalizability of findings from longitudinal studies (Gustavson et al., 2012). Rates of attrition at 40-60% are not uncommon in longitudinal studies, and only attrition that is systematic and non-random represents a problem (van der Kamp & Bijleveld, 1998). In the present study the study participants did not differ significantly from the non-participants with respect to maternal age, education, employment status, number of children, or marital status (Mathiesen et al., 1999). The amount of attrition from t1 was moderate, with 57 % of the participants still in the study after 17 years. Low maternal education at t1 predicted study drop-out for mothers at t7 and adolescent own participation at age 18.5. Male gender did also predict adolescent non-participation at age 18.5. Education level is commonly found as a predictor of attrition in longitudinal studies

(Tambs et al., 2009; Torvik, Rognmo, & Tambs, 2012), and females generally participate to a higher extent than males in survey studies (Lundberg, Thakker, Hällström, & Forsell, 2005; Tambs et al., 2009; Torvik, Rognmo, & Tambs, 2012). The associations between variables at baseline did not differ among drop-out families and families that remained later in the study (t7), suggesting that estimated associations between variables are generalizable (Gustavson et al., 2012). Also, a Monte Carlo simulation study showed that estimates of associations between variables are far more robust to selective attrition than estimates of mean values and prevalence (Gustavson et al., 2012). The simulation showed that the association between attrition and study variables had to approach a strong effect size before estimates of associations became biased in a situation with 50% attrition and an original sample size of 1000. The study attrition related to maternal education may, however, have resulted in an underestimation of the occurrences of externalising behaviour problems in the study, and also, a possible underestimation of the effect of low education on externalising trajectories. The lower participation of males in late adolescence may have biased the results regarding the long-term outcomes of the externalising profiles. Finally, selective attrition that possible may have occurred after t1 is not accounted for in the attrition analyses. However, all analyses in the study were carried out using full information maximum likelihood estimation which includes subjects with partial data and minimizes biases due to attrition (Graham, 2009).

7.6. Causality

This is a longitudinal study of risk factors, and the findings have contributed with new knowledge regarding the temporal sequencing in the relationships between externalising behaviour and risk factors across childhood. The study has contributed with descriptions of multiple risk factors and has shed light on potential developmental processes that may be causally linked to externalising development. However, causal links from risks to outcomes cannot be established from the present results, as other variables may account for the identified relationships. An important illustration of study confounds came from a study by D'Onofrio and collegues (2008). While smoking during pregnancy is repeatedly documented as a risk factor for child externalising behaviour even after controlling for important covariates, these researchers found that when a child was compared to its own sibling who had not been exposed to nicotine prenatally, there was no effect of nicotine exposure on child externalising. Thus, variables that were not included in the original studies had confounded the relationship between nicotine exposure and externalising. The gold standards from the experimental tradition, however, cannot be met when approaching causality in complex

developmental phenomena. Developmental psychopathology involves the convergence of findings from multiple studies including a wide range of predictor and control variables that in total gives a firmer basis for evaluation of the strength of relationships, and where replications of results across samples and countries strengthen the validity of findings.

The development of externalising behaviour problems throughout childhood reflects the interplay between environmental and genetic factors. As discussed above, the observed continuity in risk across age for the HS and HCL classes may reflect genetic influences on both the family and child risk factors, which again may be consistent with a genetic innovation model that identifies new genetic risks coming into play at different developmental periods (van Beijsterveldt et al., 2003). As reviewed by Rutter (1997) and Moffitt (2005), environments (E) and genotypes (G) are related in multiple ways. Passive correlation between G and E (passive rGE) occurs when the environment in which the child is raised and the child behaviour is related because they have the same origin in the parent genotype. Passive rGE may have been at play in the relationships between environmental adversity and externalising behaviour problems identified in the current study. Active E and G correlations (active rGE) occurs when the child behaviour and the environment is related because the child creates, seeks, or ends up in environments that match the behaviour (Moffitt, 2005, p. 76). Active rGE may have been at play in developmental processes that are hypothesised above, like when a highly emotional infant may evoke coercive and rejecting parenting, a disruptive child gets rejected from the normal peer group and seeks deviant peers, or other cascade processes. Finally, interactions between G and E (G x E) occurs as individuals vary in how susceptible they are to environmental adversity (Rutter, 1997; Moffitt, 2005). One mechanism involving differential susceptibility may be related to the MAOA genotype, where individuals with low levels of MAOA activity that were exposed to adversity during childhood were significantly more likely to report offending in late adolescence and early adulthood than individuals with high levels of MAOA activity (Fergusson, Boden, Horwood, Miller, & Kennedy, 2012). G x E interactions may have affected the results from the current study. Future trajectory studies should include genetic information to be able to shed light on the impact of such interactions in development of externalising problems.

7.7. Generalisation

The issue of generalisation involves several aspects. First of all, generalisation is about to what extent study findings are valid for the broader population from which the study sample

is taken (Shadish, Cook, & Campbell, 2002). Given that reliability and internal validity is sound, threats to external validity or generalisation are first and foremost related to study attrition. Has attrition changed the study sample so that it no longer resembles the population from which it was taken? As described above, the attrition in the TOPP study was moderate, and long-term attrition was predicted by two baseline predictors only - both commonly found to be associated with study attrition and non-participation. One can argue that the biggest threat to generalisation in this study is underestimation of effects, as one might expect more, rather than less, externalising problems in children of parents with a lower level of education and in adolescent boys.

A related issue is that studies based on general population samples cannot readily be generalised to high risk samples (Shadish, Cook, & Campbell, 2002). The extent to which study findings can be said to generalise across populations is also important (Shadish, Cook, & Campbell, 2002). The current study has to a large extent replicated findings from the US, Canada, and the UK with regard to typical longitudinal profiles and the effect of certain early risk factors. Still, there is one important difference. Maternal education seems to matter less for externalising development in the TOPP data, compared to study findings from the US and Canada (Nagin & Tramblay, 2001; Shaw et al., 2005; Côté et al., 2006). Our finding may be related to study attrition, but it may also indicate that education is not a strong marker of socioeconomic status in Norway, or that socioeconomic status does not have the same impact on the developmental context for children in Norway. The current null-finding for maternal education, after controlling for other risk factors in early childhood, may be linked to differences in how society is organised with regard to family and youth support systems. Our findings can thus be more easily generalised to Western European societies with social welfare systems more similar to Norway. Replications in high risk samples and in other societies are warranted.

7.8. Future research

A remaining issue is to increase knowledge about is the normative development of the broader externalising construct starting from very early in development. Comprehensive longitudinal studies should include the full range of externalising behaviour types including oppositional and disruptive behaviours in addition to aggression, add new items with age, and analyse heterotypic continuity within the domain in addition to within-type continuity. In addition, it seems important with a closer focus on parental relationships factors and health

issues in mothers' partner as early predictors of externalising development. Furthermore, the current approach to risk factor timing seems valuable, and the results from this study should be replicated and expanded with other risk factors and time points in order to approach a better general understanding of risk timing. Replication of the trajectory results, early predictors and co-occurrence of risks would also be valuable within a multi-informant design including more perspectives and contexts in addition to the perspective of mothers. Moreover, studies of long-term outcomes of longitudinal profiles starting already from infancy is almost non-existing, thus, more such studies including gender differences in outcomes are warranted. Finally, replicating the findings in other samples and in other cultures would be important in order to better understand how these phenomena vary across levels of risk exposure and organisations of societies.

7.9. Prevention and early intervention

We identified three different longitudinal profiles with elevated levels of externalising behaviour problems in the early childhood period (age 18 months to 4.5 years). This is a finding in line with results from other studies, indicating that early externalising in itself is not very predictive of future externalising. However, we found two family factors at child age 18 months that uniquely predicted the longitudinal profile with high levels of externalising behaviour problems across the whole childhood period until mid-adolescence. These findings have the potential to inform early prevention and intervention efforts. Current findings suggest that child and family workers / professionals should have these family factors in mind when evaluating the risk status related to child externalising behaviour problems in early childhood. The results suggest that preventive and early intervention efforts should have a broad focus and pay special attention to infants' externalising behaviours in the context of young motherhood and higher levels of family stress, as well as child temperament, maternal distress, and presence of siblings in the family.

An on-going nationwide strategy for improving services to children and youths in risk of developing severe externalising behaviour problems was initiated in Norway in 1997, and involves implementation of evidence-based treatment programs at the national level (Ogden & Halliday-Boykins, 2004; Ogden, Forgatch, Askeland, & Bullock, 2005; Ogden & Amlund Hagen, 2006). A community-wide intervention model named The Early Intervention for Children at Risk for Developing Behavioural Problems (EICR) is developed and (partly) implemented as part of this strategy. The EICR model is promising, and aims at preventing

and treating behaviour problems in children in the age range 3-12 years. It includes intervention modules at the universal as well as at selected and indicated levels (Kjobli & Sorlie, 2008; Norwegian Center for Child Behaviour Development, 2013). The findings from the current study indicate that children at specific risk with regard to chronic high level of externalising behaviour across childhood may be identified at an even younger age than what is aimed for in the EICR model, thus it could be possible to curtail high risk developmental patterns of externalising behaviour problems literally in its infancy.

8. CONCLUSION

The main aim of this study was to explore developmental trajectories of externalising behaviour across childhood and adolescence, as well as predictors, co-occurring risks and consequences thereof.

The study has shed light on temporal sequencing in the relationships between externalising behaviour and risk factors across development, and gives an important contribution to the understanding of developmental processes throughout childhood. Five longitudinal profile classes were optimal in describing the development of a broad construct of externalising behaviour problems from infancy to mid-adolescence. Two early family risk factors, young motherhood and family stress - specifically related to partner relationship and health problems measured at child age 18 months - uniquely discriminated the HS profile from all the other profiles. The results regarding timing of child, family and contextual risk factors revealed that especially the HS and the HCL profiles were exposed to new and elevated levels of risk factors across the different developmental periods covered by this study. The study results also lend support to the existence of two different classes of externalising behaviour problems limited to childhood. Adolescents following a HS profile from infancy to mid-adolescence had increased levels of depressive (boys) and anxiety symptoms (girls), as well as reduced well-being in late adolescence, compared with adolescents following a LS profile. We found an even split between the genders among the children in the HS class. However, there were gender differences in types of externalising behaviours in adolescence.

The results from this study point towards a continuity in problems across childhood from infancy onwards that involves chronic high levels of externalising behaviour problems, early family adversity, high levels of co-occurring risk factors across time, and negative long-term mental health outcomes. Thus, the findings underline the importance of prevention and early intervention efforts. The identification of family factors at child age 18 months that uniquely

predict such high-risk development across childhood and adolescence, is highly relevant in this context. These findings suggest that children at risk would benefit if personnel in kindergartens, child health clinics and other relevant arenas had these family factors in mind, when evaluating the risk status related to child externalising behaviour problems appearing in early childhood.

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Running head: EXTERNALISING: PROFILES AND PREDICTORS

Article title:

Externalising Behaviour from Infancy to Mid-Adolescence: Latent Profiles and Early Predictors

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Abstract

The overall aim of the current study was to identify typical trajectory classes of externalising behaviour, and to identify predictors present already in infancy that discriminate the trajectory classes. 921 children from a community sample were followed over 13 years from the age of 18 months. In a simultaneously estimated model, latent class analyses and multinomial logit regression analyses classified the children into 5 classes with distinct developmental patterns of externalising problem behaviours: High stable (18% of the children), High childhood limited (5%), Medium childhood limited (31%), potential Adolescent onset (30%), and Low stable (16%). Six risk factors measured at 18 months significantly discriminated among the classes. Family stress and maternal age discriminated the High stable class from all the other classes. The results suggest that focusing on enduring problems in the relationship with the partner and partners' health may be important in preventive and early intervention efforts.

Keywords**:** developmental trajectories, externalising problems, infancy, adolescence, family risk factors

Introduction

A moderate level of disruptive behaviour is normative in infancy and toddlerhood (Tremblay et al., 2004). Stable low or decreasing levels of externalising behaviour are the most typical developmental pathways, however, a smaller proportion of children are reported to have stable high scores of externalising problems (Côté, Vaillancourt, LeBlanc, Nagin, & Tremblay, 2006; Campbell, Spieker, Vandergrift, Belsky, & Burchinal, 2010). Discriminating normative high, but transient, externalising behaviours from high and stable externalising has important implications for prevention and early intervention (Wakschlag, Tolan, & Leventhal, 2010). There is a need for more knowledge about typical developmental patterns and the contribution of child and contextual factors present in early life to the continuity and discontinuity of externalising problem behaviours. Such knowledge might best be gained from studies examining developmental trajectories over the entire childhood period starting from infancy.

The identification of developmental paths of externalising behaviour from infancy through childhood and adolescence, and better understanding of factors and processes contributing to externalising behaviour development, has been the focus of decades of research. Unfortunately, externalising behaviour in childhood has long term significance beyond the strain and struggle it brings to daily life. The existence of an "early starter" group with a diversity of negative outcomes both in the short and long term, with distinct predictors, has been postulated by a theory developed by Moffitt (1993). Moffitt also postulated a trajectory group with onset of externalising in adolescence. In addition, although not predicted by a priori theory, a "childhood limited" group has been identified in several longitudinal studies (for a review, see Moffitt, 2006).

Latent class trajectory approaches have confirmed the importance of identifying varying developmental paths (Broidy et al., 2003; Odgers et al., 2008), and have been used to extend our understanding of factors discriminating transient and stable externalising behaviours (Nagin & Tremblay, 2001; Odgers et al., 2008). We found only three large studies, however, that have reported results from examinations of latent class trajectories over longer developmental periods starting from very early childhood. The National Institute of Child Health and Human Development Study (2004) identified five distinct trajectory classes based on levels of physical aggression from age 2 to 9 years in a U.S. general population sample. Shaw, Lacourse, and Nagin (2005) found four typical trajectories of overt conduct problems from age 2 to 10 years in a U.S. high-risk sample of boys. Côté et al. (2006) identified three classes of children with distinct developmental trajectories of physical aggression from age 2 to 9 years in a nationally representative Canadian sample. Stable high or chronic patterns of externalising problems over time were identified in each study, but the size of the groups varied in the different samples (between 3% and 17% across the studies). While these studies provide valuable insights, the results have limited generalizability for several reasons: the studies are all North American, two focused on a narrow construct of physical aggression only, one includes only high-risk boys, and they all stopped following the children well before adolescence.

Theory (Moffitt, 1993; Reid, Patterson, & Snyder, 2002; Bronfenbrenner & Morris, 2006) suggests that it is important to focus on a wide range of intrinsic child and family factors that have been shown to predict externalising behaviours. A large research literature links "difficult" child temperament characteristics such as emotional reactivity with the development of externalising problems (Janson & Mathiesen, 2008; Rothbart & Bates, 2006). Several cross-sectional and longitudinal studies have related a wide range of family factors to high levels of externalising problems. For instance, elevated levels of maternal

depressive symptoms are related to child conduct problems (NICHD ECCRN, 2004; Shaw et al., 2005), as well as family demographic factors including low income (Côté et al., 2006; NICHD ECCRN, 2004), low maternal education (Côté et al., 2006; Nagin & Tremblay, 2001), lone mothers and non-intact families (Campbell et al., 2010; Nagin & Tremblay, 2001), early motherhood (Côté, Vaillancourt, Barker, Nagin, & Tremblay, 2007; Tremblay et al., 2004), and child sex (Côté et al., 2006). In addition, the presence of another young sibling in the household (Tremblay et al., 2004), large family size (Farrington, 1995), chronic family stress (Campbell, Pierce, Moore, Marakovitz, & Newby, 1996), and low social support (Mathiesen, Sanson, Stoolmiller, & Karevold, 2009; Shaw et al., 2001) have also been found to predict development of externalising behaviour. Finally, high levels of shyness are a protective factor against the development of externalising behaviour (Sanson, Hemphill, & Smart, 2004).

While there is reasonably consistent evidence of the predictive importance of the above factors when assessed in childhood, less is known about their long term impact if they are present from infancy. Moreover, the relative importance of each of these risk factors is unclear. Further clarification of the most influential early risk factors for externalising pathways appears to be necessary, and has the potential to inform early intervention and preventive efforts.

Several definitions of externalising behaviours have been used in the research to date, varying from narrow (i.e. one single dimension such as physical aggression, see Broidy et al., 2003; Côté et al., 2006; Tremblay et al., 2004), to broader definitions corresponding to the DSM-IV definition of conduct disorder (Odgers et al., 2008). This diversity adds complexity to the interpretation of the body of evidence (Campbell et al., 2010). Factor analytic studies (e.g. Achenbach & Edelbrock, 1978) and diagnostic schemes (American Psychiatric Association, 2000) identify externalising behaviour problems as a

multi-faceted developmental phenomenon with differing indicators across time. Since prevention and early intervention efforts aim to address this broad and developing constellation of behaviours, it seems most valuable to employ measures that capture the breadth of the phenomenon; however, such an approach may imply shifting indicators corresponding to shifts in modal externalising behaviours with increasing child age.

The overall aim of the current study was to identify typical trajectory classes of externalising behaviours, and to identify predictors already present in infancy that discriminate among the trajectory classes. More specifically, we employed a simultaneously estimated latent class model with predictors, to (1) identify the number and nature of latent classes of mother-reported externalising behaviour in a representative sample of Norwegian children followed longitudinally from 18 months to 14.5 years, and (2) identify intrinsic child and family factors assessed at age 18 months that predict membership in the different latent classes. Based on earlier findings we expected to identify stable high, stable low, childhood limited, and adolescent onset trajectory classes. We also expected that the early child and family factors would uniquely discriminated a stable high class from all other classes.

Method

Sample and procedure

We used data from the Tracking Opportunities and Problems Project (TOPP), a population-based prospective longitudinal study focusing on development of well-being, good mental health, and mental disorders in children, adolescents, and their families. More than 95% of Norwegian families with children attend public health services in infancy, which include 8-12 health screenings during the first 4 years of the child's life. Every family who visited a child health clinic within six select municipalities in eastern Norway

(comprising 19 different health care regions) in 1993 for the scheduled 18 month vaccination visit, were invited to complete a questionnaire. Of the 1,081 eligible families, the parents of 939 children (87%) participated at Time 1 (t1). These parents received a similar questionnaire when the children were 2.5 years of age (Time 2: *n* = 804, 86% of t1), 4.5 years (Time 3: *n* = 760, 81%), 8.5 years (Time 4: *n* = 535, 57%), 12.5 years (Time 5: *n* = 610, 65%) and 14.5 years (Time 6: *n* = 481, 51%). The questionnaires were administered by health-care workers at t1 to t3. In subsequent waves questionnaires were sent by mail. The parents chose whether the mother or father completed the questionnaire at t1-t4, at t5 the mothers were encouraged to answer, and at t6 separate maternal and paternal questionnaires were sent. The number of questionnaires completed by mothers at each wave included 921 (t1), 784 (t2), 737 (t3), 512 (t4), 594 (t5) and 481 (t6). Since so few fathers participated across time, the paternal questionnaires were not included in the current study.

The 19 health care regions were chosen on the basis of their overall representativeness of the diversity of social environments in Norway: 28% of the families lived in large cities, 55% in small towns or other densely populated areas, and 17% in rural areas. The sex of the children in the sample was nearly evenly divided, with 48.9% (*n* = 450) boys. Maternal age ranged from 19 to 46 years at t1, with a mean of 30 years (*SD* = 4.7). At t1, 49% of the families had only one child, 37% had two, and 15% had three to ten children. The participating families were predominantly ethnic Norwegian with middle class SES; that is representative of the majority of Norwegian families. In 1993 only 2.3% of the Norwegian population came from non-Western cultures, therefore, this sample was largely representative of ethnicity in Norway at the time of data collection (Statistics Norway, 2013).

Data from the child health clinics showed that nonparticipants at t1 did not differ significantly from the study participants with respect to maternal age, education,

employment status, number of children, or marital status. Analyses of sample attrition from t1 to t7 (i.e. child age 16.5 years) showed that the families who had dropped out were not significantly different at t1 from the families who completed questionnaires at t7 in terms of child externalising behaviour, maternal depression, maternal age, financial status, number of children, negative life events, chronic stress, or social support. However, the dropout sample was significantly different from the remaining sample at t1, in that a greater proportion of mothers with low education had left the study. This is commonly found in longitudinal studies (Gustavson, Soest, Karevold, & Røysamb, 2012). Steps taken to minimize the impact on statistical analyses of this non-random attrition are addressed in the analyses section.

Measures

Externalising behaviour problems. Core aspects of mother-reported child and adolescent externalising behaviours were measured at all six waves with items rated on a three point scale: 0 (*no difficulties*), 1 (*moderate difficulties*), or 2 (*substantial difficulties*). At ages 18 months, 2.5 years, and 4.5 years the average of three items from the Behaviour Checklist (Richman & Graham, 1971) was used to measure temper tantrums, manageability, and irritability. Internal consistency (Cronbach's alpha) was .41, .46, and .49, at t1, t2, and t3, respectively, for the three-item scale. The average inter-item correlation was .21, .23, and .25 at the three time points, comparable to the average inter-item correlation of .25 for the 24-items of the Externalising syndrome grouping of the CBCL for 1.5 -5 years (Achenbach & Rescorla, 2000) in a large study with a Norwegian sample of 4-year-olds – the Trondheim Early Secure Study (L. Wichstrøm, personal communication, June 10, 2011).

At age 8.5 years the Conduct Problem subscale from the Strengths and Difficulties Questionnaire (Goodman, 1994) was used to measure tempers, obedience, fighting, lying,

and stealing. The reliability and construct validity of the SDQ has been established in a Norwegian sample (Van Roy, Veenstra, & Clench-Aas, 2008). Internal consistency for the five item scale was .48. The alpha for the Conduct Problem subscale is similar to the findings from other studies (Van Roy, Veenstra, & Clench-Aas, 2008).

At age 12.5 and 14.5 years we used the TOPP Scale on Antisocial Behaviour (TSAB) as a measure of externalising behaviours in adolescence. The reason for the change of measures was the need for a broader and more comprehensive measure of externalising, covering a wider range of behaviours than the five-item SDQ subscale. The 18-item scale was constructed for the current project given the absence of an age and culture sensitive measure of problem behaviours ranging from relatively normative to serious (illegal) through adolescence. The TSAB is presented in Table 1. The specific behaviours are included with reference to Loeber and colleagues' model of three developmental pathways in child disruptive behaviours (Loeber et al., 1993). The items measuring inter-personal aggression refers to "overt behaviours" in the Loeber et al. model, stealing and vandalism to "covert behaviours", and loitering to "authority conflict/avoidant behaviours". The TSAB combines items from other Scandinavian scales (Bendixen & Olweus, 1999; Mahoney & Stattin, 2000; Rossow & Bø, 2003). The alpha coefficients were .69 and .77 at t5 and t6 respectively. Due to a change of wording for three items at t6 (excluding aggressive behaviours among siblings) the measure of physical aggression at t6 may be underestimated compared to t5. Time-to-time correlations (i.e. t1 to t2, t2 to t3, etc.) were .46, .50, .32, .29, and .43 for the externalising measures, with the lowest correlations corresponding to the longest intervals between waves.

Temperament. At age 18 months child temperament was assessed by the EAS Temperament Survey for Children: Parental Ratings (Buss & Plomin, 1984), which contains four dimensions: (a) Emotionality – the tendency to become aroused easily and intensely

(often called Negative Emotionality); (b) Activity – preferred levels of activity and speed of action; (c) Sociability – the tendency to prefer the presence of others to being alone; and (d) Shyness – the tendency to be inhibited and awkward in new situations. The EAS for children aged 1-9 years was used. Because of ambiguity in translation, one item was deleted from each dimension. The items were scored on a Likert scale from 1 (*very typical)* to 5 (*very untypical*). Cronbach's alphas for the four items in each dimension were .66, .68, .52, and .75, respectively.

Maternal Mental Health. At child age 18 months maternal symptoms of anxiety and depression were measured by a 23-item version of the Hopkins Symptom Check List (HSCL-25; Hesbacher, Rickels, Morris, Newman, & Rosenfeld, 1980). The reliability of the HSCL has been well established in a Norwegian sample (Tambs & Moum, 1993). Two items, "thoughts of ending your life" and "loss of sexual interest or pleasure", were excluded from the current version of the questionnaire because some mothers who participated in a pilot study had perceived the questions as offensive. The items were scored on a 4-point Likert scale, from 1 (*not at all*) to 4 (*very much*). The alpha coefficient was .90.

Family Stress. At child age 18 months mothers were asked to indicate whether they had experienced enduring problems during the last 12 months in the following areas: housing, employment, financial status, their partner's health (somatic and mental), and their relationship with their partner, each scored 0 (*no problem*) or 1 (*problem*). The sum of the scores in the five stress areas formed the composite score of family stress, with a range of 0 to 5. The alpha coefficient was .56.

Social support from partner. At child age 18 months a social support from partner index was formed by taking the mean of three items, each on a Likert-scale from 1 (*completely disagree*) to 5 (*completely agree*), measuring closeness and contact, respect and

responsibility, and a feeling of belonging (Dalgard, Bjork, & Tambs, 1995; Mathiesen, Tambs, & Dalgard, 1999). The alpha coefficient was .59.

Social support from friends and family of origin. Corresponding to the social support from partner index, this questionnaire targeted the same three qualities (closeness and contact, respect and responsibility, and a feeling of belonging) to describe the mothers' relationships to friends and members of her family of origin. This measure was also completed at child age 18 months. A social support from friends and family of origin index was computed by summing the mean value of the 6 items. The alpha coefficient was .72.

Family demographics. Maternal education at child age 18 months was measured using eight response categories, and was recoded to represent the approximate total years of education.

Additional variables included: *Maternal birth year; Mothers living without spouse or partner*; *Siblings,* a dichotomous variable of 0 (*no siblings*) and 1 (*one or more siblings*); and *Child gender,* all values were reported by mothers at child age 18 months. See Table 2 for a description of sample characteristics.

Analytic strategy

Latent class analyses refer to modelling with categorical latent variables to represent subpopulations. The latent classes explain the relationships among the observed dependent variables, similar to factor analysis, but sort individuals into latent classes rather than producing continuous latent factor scores. Child externalising mean scores at each assessment (age 18 months and 2.5, 4.5, 8.5, 12.5 and 14.5 years), rescaled to have approximately equal variance at every time point to eliminate possible estimation problems due to different scales of measurement, were used in the latent class analyses. The rescaling was done by multiplying the variable by 10 (at t1, t2 and t3, respectively), 14.29 (at t4), and

26.67 (at t5 and t6). After rescaling, mean externalising was 4.2, 4.6, 4.7, 3.1, 1.9, and 1.9 at age 1.5, 2.5, 4.5, 8.5, 12.5 and 14.5 years respectively. Latent Class Growth Analysis (LCGA) is a popular latent class analyses method for longitudinal measures that produces classes that are similar in terms of development. Latent Profile Analysis (LPA) is similar to LCGA but it does not impose a parametric form to growth (e.g. linear growth) and is, therefore, more general than LCGA. LPA captures developmental change just as LCGA, but in the form of a profile of change rather than as slopes and intercepts. Because we did not want to restrict a priori the possible shape of developmental patterns to estimate, we considered this a sound choice. We allowed the residual time specific variances to be different across classes but forced them to be equal across time to minimize the number of variance parameters and potential convergence problems.

Child and family factors measured at child age 18 months were used as predictors of the longitudinal latent classes, including emotionality, shyness, activity, sociability, maternal symptoms of anxiety and depression, family stress, social support from partner, social support from family of origin and friends, maternal education, maternal age, mothers living without spouse/partner, siblings, and child gender. Multinomial logit regression was used to test for group discrimination by the 18 month predictors one at a time. The predictors were then combined in one multi-predictor model to compare their relative strength in discriminating the latent classes; those that were not significant in the multi-predictor model were removed. Models were estimated by using the full information maximum likelihood estimator in Mplus, which allows for the inclusion of participants with partial data in the trajectory variables (externalising), but not participants with missing predictor data, under the assumption that missingness is at random, conditional on variables included in the model (MAR). Thus, the sample size varies somewhat across models depending on which t1 variables are included. The amount of missing data at t1 was

minimal, however, with less than 2% for any particular predictor, and less than 3% for the multi-predictor models. It is not possible to test the MAR assumption unless the missing data can somehow be recovered, but even if the MAR assumption is not completely true, MAR based likelihood estimation performs well under most circumstances and is superior to obsolete methods based on including only subjects with complete data (Graham, 2009).

Results

Optimal number of latent classes

Externalising scores from all waves were first included in a series of latent class analyses in order to decide on the optimal number of latent classes. For models with 3 or more classes, the data drove the models toward solutions that included one or two classes with virtually no externalising in adolescence. This was due to skewness of the TSAB scores at t5 and t6, as 173 mothers reported that their adolescents had no externalising behaviours at both t5 and t6 combined. Since subgroups with means and variances of zero are known to produce estimation challenges and model nonconvergence (Hipp & Bauer, 2006), the variance estimates for these two groups were fixed at a small value near zero (0.22). Solutions with 2 to 6 classes were examined. We examined the sample size adjusted BIC (SSA-BIC) and BIC, to decide on the optimal number of latent classes. The BIC's were 19313, 18983, 18805, 18743, and 18767, respectively, for the 2 to 6 class solutions. SSA-BIC's were 19256, 18895, 18688, 18594, and 18590. We settled on the model with 5 trajectories based on the clear minimum of the series of BIC fit statistics for 2 to 6 classes and the meaningfulness of the 5 class solution. Although the SSA-BIC did not show the same clear minimum, it is known that the BIC imposes a higher per parameter penalty then the SSA-BIC and the SSA-BIC usually indicates more classes than the BIC (Nylund, Asparouhov, & Muthen, 2007). The resulting 5 class solution consists of a "High stable"

class (a group with a stable high level of externalising through the study period that emerged in the solutions with 3, 4, and 5 classes, suggesting that the identification of the "High stable" class is a robust finding), a "High childhood limited" class (characterized by a high level of externalising in the early epoch and a very low level in adolescence), a "Medium childhood limited" class, a "Low stable" class, and finally, a potential "Adolescent onset" class characterized by low levels of externalising in the early epoch and the second highest level relative to the other classes in adolescence (even though the developmental trend looks flat due to changes in instrumentation). The adolescent onset label will be used together with a question mark in the following text, as it is not clear whether it actually represents an adolescent onset trajectory pattern. The last three groups together accounted for 72% of the sample.

Single-predictor model results

A second series of latent class analyses was conducted by including the 18 month predictors into the 5 class model, one predictor at a time to test for the effect of separate predictor variables on the classification results. Including the early variables in the model increased the model stability without substantially changing the shape of the trajectories and the proportions of children in the classes. We used a nested chi-square test (likelihood ratio test or LRT) to compare all class contrasts (the H1 model) versus a model where all class contrasts were forced to zero (the H0 model). The nested chi-squares, resulting from a 4 *df* test of the null hypotheses that the predictors had no effect on class discrimination, were significant for all 18 month variables except three. Latent class membership was significantly predicted by child emotionality (LRT [4] = 169.4; $p < .001$), maternal depression (LRT [4] = 83.9; $p < .001$), family stress (LRT [4] = 54.8; $p < .001$), support from family and friends (LRT [4] = 23.6; $p < .001$), maternal education (LRT [4] = 23.4; $p <$

.001), maternal age (LRT [4] = 23.4; $p < .001$), child gender (LRT [4] = 20.8; $p < .001$), and support from partner (LRT [4] = 17.2; $p < .001$). Child temperamental shyness, mothers living without partners, and having siblings were not significant predictors. Models with child temperamental activity and sociability had severe convergence problems, did not give meaningful results, and were excluded from further analyses.

Multi-predictor model results

Finally, in order to identify the most influential predictors differentiating the 5 trajectory classes, we included a multi-predictor, multinomial logit regression analysis in the latent class model. We entered all of the 18 month predictors, and successively eliminated variables that were not significant in the total model. Again, this significance was evaluated by comparing a 4 *df* nested chi-square test for a model with all class contrasts (the H1 model) versus a model where all class contrasts were forced to zero (the H0 model). Six predictors remained in the final model and had significant effects in discriminating among classes. The individual class contrasts, the 4 that were actually estimated (classes 1-4 vs. 5) and the other 6 that can be derived from those 4 along with the 4 *df* nested chi-squares for these 6 variables are presented in Table 3. Estimating all 4 class contrasts for each of 6 predictors, 24 estimated effects in all, with no restrictions on any of the effects, makes the solution difficult to interpret and tends to inflate the standard errors of the estimates. To make the model more interpretable, we constrained class contrasts that were about the same magnitude to be equal with possibly different signs and forced two class contrasts to zero that were very close in magnitude to zero. This constrained model had 9 estimated class contrasts as opposed to 24, yet the fit of the model was not significantly worse (nested chi-square = 13.27 with 15 *df*, $p = .58$) and the standard errors for the 9 effects were

considerably better estimated, although the actual magnitudes of the effects were about the same as the unconstrained model. The class regression effects for the constrained model are shown in Table 4.

In general, class solutions can change when more information, such as class predictors, are included in the model. Interestingly, the "High stable" class remained almost identical across models, while the other classes changed only moderately. Boxplots with pseudo-class and fitted trajectories for the 5 class solution based on the multi-predictor model are presented in Figure 1. As can be seen, there is a close correspondence between the two, indicating a reasonable solution. For 3 of the 5 groups there is a shift in externalising level between t3 and t4 and between t4 and t5, which may partly be a result of a change in measures. The five LCA classes varied both in level and pattern over time. The class with the highest level of externalising behaviours in the three first waves had a low level of externalising at the adolescent end-point. This "High childhood limited" (HCL) class was the smallest with 5% of the sample. The class with the second highest level of externalising in infancy continued to have high scores throughout the entire measurement period. This "High stable" (HS) class comprised 18% of the sample. The class with the median level of externalising in infancy declined to a near zero level at the adolescent end-point. This "Medium childhood limited" (MCL) class was the largest, including 31% of the sample. The class with the second lowest level of externalising in infancy was the second highest group at the adolescent end-point. This possible "Adolescent onset" (AO) group constituted 30% of the sample. Finally, 16% of the sample was assigned to a "Low stable" (LS) group. Due to change in measures and rescaled variables, note that only relative change across groups and not absolute (developmental) change can be interpreted (Figure 1).

As can be seen by the 4 *df* nested chi-squares at the bottom of Table 3, child negative emotionality made the strongest class discrimination, followed by maternal symptoms of depression, child gender, family stress, maternal age, and siblings.

Turning now to the class regressions (Table 4), we start with the two variables, family stress and maternal age that had the hypothesized pattern of uniquely discriminating the high stable class (class 5) from the other classes (class 1-4). The fact that all 4 class regressions for family stress can be constrained to be equal without degrading model fit, -.29, and are significantly different from zero indicates that family stress uniquely discriminates the HS class from classes 1-4 but does not discriminate among classes 1-4. Higher levels of family stress were associated with lower log odds of membership in classes 1-4. The estimated class regressions can be exponentiated to determine the effect of a 1 unit shift in the predictor on the odds of being in one class vs. another, and for family stress this value is .75, indicating that each 1 unit increase in family stress lowers the odds of belonging to classes 1-4 by 25%. To appreciate the range of risk from family stress in the population we can consider the 10^{th} percentile family stress score of 0 as low risk and the 90^{th} percentile score of 3 as high risk. Going from low to high risk in the population would increase family stress by 3 units and thus increase the odds of belonging to the HS class by a multiplicative factor of 2.4 or 140%.

Maternal age also had the same pattern of effects as family stress such that increasing birth year (i.e. younger age) was associated with lower log odds of being in classes 1-4 vs. the HS class. Going from low to high risk increased the birth year variable by 1.2 units (it was linearly rescaled to prevent convergence problems in the model, on the raw scale it was 12 years, age 36 compared to age 24), which corresponds to an increase in the odds of being in the HS class by a factor of 3.7.

Because family stress and maternal age are the only 2 predictors that uniquely discriminated the HS class, it makes sense to consider the range of risk from both risk factors simultaneously. This entails comparing a family with both risk factors at the 10^{th} percentile value to a family with both risk factors at the 90^{th} percentile, all else being equal. Such a comparison yields an 8.8 fold increase in the odds of being in the HS class vs. classes 1-4, which is a very substantial increase in risk.

The next two variables with relatively simple class discrimination patterns were female gender and children with siblings. Siblings increased the odds of being in the HS class vs. the MCL, HCL and AO classes by 2.1 but had no effect on discriminating the LS class and the HS class. Female gender increased the odds of being in the MCL, HCL, and in the LS classes vs. the HS class by 1.7 but decreased the odds of being in the AO class vs. the HS class by 0.6.

Finally, maternal depression and child emotionality had a similar but more complicated pattern of effects on class discrimination. Both variables increased the odds of being in the HCL class vs. the HS class by very substantial amounts, but both variables also increased the odds of being in the HS class vs. the AO and LS class by substantial amounts. Maternal depression also increased the odds of being in the HS class vs. the MCL class, but child emotionality had no effect on this contrast. Child emotionality appears to discriminate largely based on early externalising in the first 3 time points. Maternal depression also fits this pattern, except for the significant discrimination of the HS and LS classes, which have similar levels of early externalising, but quite different levels of adolescent externalising. In fact, for low vs. high risk on maternal depression, a shift of 0.8 units on the maternal depression scale, the odds of being in the HS class vs. the LS class increases by 2.0.

Discussion

The overall aim of the current study was to identify typical trajectory classes of externalising behaviours, and to identify predictors already present in infancy that discriminate among the trajectory classes. A latent profile model with five classes best captured the heterogeneity in the 13-year course of externalising behaviour development from infancy to mid-adolescence. The model identified a class of children following a developmental trajectory with a HS level of externalising behaviours. Identification of this HS class is a robust finding, in that the class emerged early in the analytic process and remained consistent across models. While most predictor variables discriminated between trajectory classes in the single-predictor models, six variables were the most influential (multi-predictor model). Two variables, family stress and maternal age, discriminated uniquely between the HS class and all other classes. Comparing families with both of these risk factors simultaneously at the 10^{th} percentile value to families with both risk factors at the 90^{th} percentile, all else being equal, yields an 8.8 increase in the odds of being in the high stable class versus the other classes. The other four significant variables in the multi-predictor model – child gender, siblings, maternal depression, and child emotionality – had less clear patterns of class discrimination. The finding that maternal age and family stress, measured in infancy, seems to have strong impact on externalising development from infancy to mid-adolescence, has potential to inform preventive and early intervention efforts.

The HS externalising class comprised 18% of the sample, which is substantial in comparison to most previous studies. For example, 7% of the sample used by Shaw et al. (2005) was classified as having high stable externalising behaviour, and 3% fell into a similar class in the NICHD ECCRN (2004) study. The only study to identify a similar proportion is Côté et al., (2006), with 16.6%, while the Côté study identified three and not

five groups as did the current study. Post-hoc analyses indicate that the high stable class in the present study is characterized by a wide array of externalising behaviours and hence does not represent an extreme antisocial class. As the construct of externalising used in the TOPP cohort is broader, encompassing vandalism and status violations in addition to physical aggression, the larger high stable class is an expected finding compared to the studies that have limited focus on overt conduct problems and physical aggression. Furthermore, there is a normative increase in status violations during adolescence (Bongers, Koot, van der Ende, & Verhulst, 2004). The participants in the current study are followed longer into adolescence than in other studies with comparable timing of the first data collection. It is therefore expected that the normative increase in externalising in adolescence would affect the proportion of the HS class in the present study. The fact that the measure used here (TSAB) is designed to tap an "age-crime" curve in a general population sample of adolescents, and therefore also includes some less serious norm-violations, may have contributed to the larger size of this group than in previous studies.

Notably, two variables measured at 18 months, young maternal age and higher levels of family stress, strongly differentiated the HS problem trajectory group from all the remaining developmental pathways identified in the study. These include the HCL group, which started with an even higher externalising level in infancy. Given the need to extend knowledge about normative versus high-risk early externalising behaviour, the identification of these two family factors which can discriminate between the groups (odds ratio of 8.8 for high vs. low risk) is an important finding, with potential to inform prevention and early intervention efforts. Early family adversity is a well established predictor of externalising development (Aguilar, Sroufe, Egeland, & Carlson, 2000; Shaw et al., 2003). Despite this, the current study is to our knowledge, the first trajectory study over the period from infancy to mid-adolescence to documents this. The results suggest that support to young mothers

and families under stress, especially those whose toddlers are exhibiting noncompliant acting-out behaviour, may interrupt a pathway of externalising behaviour which may otherwise continue into adolescence.

The current study included a population based sample where the youngest mother gave birth at age 17. Young motherhood is identified as a risk for externalising development in both high-risk samples (Nagin & Tremblay, 2001) and in nationally representative samples (Côté et al., 2007). Our results are in line with these previous findings.

The measure of family stress that discriminated the HS class from all the other classes at 18 months, covered problems experienced during the previous 12 months in areas including socioeconomic difficulties and relationship issues. Low income has been established as a powerful early risk factor in other trajectory studies (i.e. Côté et al., 2006, 2007). The current findings suggest that other aspects of stress are also important. An exploratory post-hoc analysis suggested that the variables within the overall stress construct which were most closely related to class membership were problems in the relationships between mothers and their partners and partners' health problems. Very few studies of externalising trajectories have addressed these family risk factors; these findings suggest avenues for future research.

Child negative emotionality measured in infancy had the strongest impact on the final model as a whole; this variable contributed to the discrimination of most of the classes. Child emotionality appears to discriminate largely based on early externalising in the first 3 time points. Since for all five trajectory classes the mean levels of negative emotionality and externalising were parallel to each other at t1, it is possible that parents did not differentiate clearly between externalising behaviour and temperamental negative emotionality at this early age. Furthermore, it may be that there is conceptual overlap between the items tapping negative emotionality and externalising at this age (both of which

are related to child manageability), an issue that is common in the field (Sanson et al., 2010). However, studies suggest that confounding of measures does not fully account for the predictive role of emotionality, which has consistently emerged in the literature as a risk for externalising behaviour problems (Sanson et al., 2011). Parents raising a child high in negative emotionality may need support in helping the child to regulate a temperamental disposition, and in avoiding a punitive style of discipline and "coercive cycles" of interaction with their child (Reid et al., 2002).

Maternal anxiety and depressive symptoms when children were 18 months old had the second strongest impact on the final (multi-predictor) model as a whole, and similar to child emotionality, this predictor appears to discriminate largely based on early externalising in the first 3 time points. Unlike child emotionality, however, it discriminated the HS class from the MCL class (odds ratio of 2.0), two classes which have similar levels of externalising at the 3 earliest time points but quite different levels of externalising at adolescence. This finding points toward maternal symptoms of anxiety and depression as an early risk factor for all the pathways towards some level of externalising problems in adolescence. Once again, these findings suggest a need for early intervention for mothers showing signs of mental health problems.

More of the children in the HS class had siblings compared to all the other classes except the LS class. Parenting two or more children simultaneously creates higher demands on parents and family resources. A mother who is exposed to the risk factors of family stress, young age, and the presence of siblings in the family has a 16 fold increase in the odds of having a child in the HS class compared to the MCL, HCL, and the AO classes. The substantial increase in risk due to siblings could be because multiple siblings may exacerbate each others' antisocial behaviour in a negative cycle of so-called *deviancy training* (Patterson, 1986). In support of this notion, sibling aggression has previously been

found to have a unique contribution to externalising development in a genetic sensitive study (Natsuaki, Ge, Reiss, & Neiderhiser, 2009).

Contrary to expectations, the HS trajectory had an even split between the genders, rather than consisting of mostly boys. Girls were overrepresented in the three trajectory groups with low levels of externalising in adolescence, while boys were overrepresented in the trajectory group with the second highest level of externalising in adolescence. The even split between gender in the HS class is not in line with previous research (e.g. Côté et al., 2006). Robust gender differences in externalising behaviour are typical for overt externalising behaviours (i.e. physical aggression and violence). To our knowledge, gender differences are not equally robust in other facets of externalising behaviours that were measured by the TSAB, such as loitering or lack of supervision, and some types of theft where the levels are more equal between the genders. It seems likely that the item content of the TSAB may affect the gender distribution in all trajectory classes including the high stable class.

Maternal education level discriminated in the HS and LS groups in the single-predictor models, but failed to do so when all predictors were entered simultaneously. This is in contrast with findings from the U.S., Canada, and England, for example Nagin and Tremblay's (2001) study, in which low maternal education was one of two factors discriminating between "chronics" and "high decliners" in physical aggression. One possible explanation for why maternal education was not significant in the complete model of this study may be that education is not a strong marker of social class in Norway given that Norway is a relatively homogeneous society.

Overall, this study produces substantially important findings, and adds to the literature in notable ways. To our knowledge, no latent class trajectory study has included such an array of simultaneously estimated early predictors of class membership, with the

earliest externalising measure taken before child age of 2 years and continuing to mid-adolescence. The results suggest that preventive and early intervention efforts should have a broader focus and pay special attention to children's externalising behaviours in the context of young motherhood and higher levels of family stress, as well as child temperament, maternal distress, male gender, and presence of siblings in the family. It is possible that family support intervention programs focusing on supporting a stable, low stress family environment would reduce the numbers of adolescents likely to engage in delinquency.

What may the mechanisms be that link the identified factors in infancy with membership in a stable high trajectory pattern? A young mother may be less experienced as a caregiver and have poorer parenting skills, while at the same time she may be more vulnerable to the frustration of her own developmental needs. Additionally, when experiencing enduring strains in a relationship with a romantic partner, with health issues, with living condition related issues, and/or when having symptoms of depression and anxiety, these factors are likely to result in reduced sensitivity, contingency, and time available during day to day interactions with the child.

While this study benefited from six waves of data with a community sample, it has some limitations. Attrition analyses showed that the sample seemed to be slightly better functioning over time, indicating that some of the less educated mothers had left the study at t7. This maternal factor is known to be associated with externalising problems in the child. Thus, the results may be underestimating the effects of low education on externalising trajectories. All analyses, however, were carried out using full information maximum likelihood estimation which includes subjects with partial data and minimizes biases due to attrition.

Another limitation is the use of different measurement instruments to assess externalising behaviour in the trajectory model, meaning that the externalising construct is

not identical through all developmental phases. Three out of five groups show a shift in trajectory shape with changing instruments, and the physical aggression component may be underestimated at t6. Our measures, however, are still appropriate for identifying different patterns of externalising development even if specific mean levels of externalising are not directly comparable across time. It has also been shown that children's developments differ over the various domains within the broad construct of externalising (Bongers et al., 2004). The current study focused on the broader construct, and not on its sub-domains. The current study's strength of using a developmentally appropriate broad measure to identify and compare trajectory groups should be weighted against the disadvantage of not considering sub-domain development. Furthermore, the early predictors measured in this study are likely to change over time in ways that are likely to continue to impact development. Future studies should address a broader view of potential predictors throughout development.

Findings may have been weakened by the modest internal consistency of some predictor measures, which is likely to have attenuated some relationships. Internal consistency was also low for the outcome but the latent class model accounts for imperfect reliability in the outcome and hence bias is not likely to be a problem. In addition, because the mothers reported on themselves as well as their children, single-informant bias may have influenced the results. To our knowledge little is known about the exact nature of single-informant bias, and indeed, whether it really functions as "bias" or only as correlated measurement error. A reasonable case has been made that maternal reports provide valid and useful information (Rothbart & Bates, 2006; Janson & Mathiesen, 2008). However, replication with multi-source data is needed. Finally, although the study has tapped a range of important influences on children's development, there are other potential sources of influence such as children's peer relationships and genetic variation, on which more information is needed to fully understand the development of externalising problems.

This study contributes to the literature with data from a developing general population sample followed over a long time span. We have used a broad and developmentally appropriate measure of externalising, and taken advantage of a wide range of risk factors measured very early in development. The results add to the literature with unique and practically important findings that may be useful for prevention or early intervention efforts in minimizing the long term negative effects of early externalising behaviours. Although replication of these findings is necessary, they point towards the need for preventive interventions to start very early in life and to address multiple aspects of children's family life.

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Table 1

The TOPP Scale on Antisocial Behaviour

Domain	Item
Stealing	Refrained from paying at cinema, bus, train or similar
	Taken money from someone in family, without permission
	Taken goods from shopping mall, shop or kiosk without paying
	Stolen things from somebody's pocket or purse, when the owner was not around
	Broken into a shop, house, or apartment in order to steal
Inter-personal aggression	Scratched someone or pulled someone's hair*
	Threatened to hit or hurt somebody*
	Hit or kicked somebody*
	Been in a fist fight at school or other places
	Been in a fight using weapon (knife, bat, or similar) or other items.
Loitering	Been truant from school one or two hours
	Been truant from school a whole day
	Hung out in other places than was allowed to
	Stayed out much later in the evening or at night, than was allowed to
Vandalism	On purpose destroyed or broke windows, benches, telephone boxes, mailboxes, garden plants, or similar
	On purpose destroyed chairs, tables, or other things that belongs to school
	On purpose destroyed seats in bus, at the cinema or other places
Mixed	Threatened or forced somebody to give away money or other things
	Carried weapon (knife, bat or similar) or items that can be used as weapon, at school or other places

Note. *indicates that "not between siblings" was added at t6

Table 2

Sample Descriptive Statistics

Measure	Mean	SD	Minimum	Maximum	Skewness	Kurtosis
BCL, 18 months	0.42	0.32	.00	2.00	0.65	1.04
BCL, 2.5 years	0.46	0.31	.00	1.67	0.33	0.48
BCL, 4.5 years	0.47	0.34	.00	2.00	0.62	1.21
SDQ, 8.5 years	0.22	0.22	.00	1.40	0.22	0.22
TSAB, 12.5 years	0.07	0.12	.00	0.67	2.35	5.40
TSAB, 14.5 years	0.07	0.13	.00	0.89	3.07	12.12
EAS Emotionality, t1	2.42	0.72	1.00	5.00	0.46	0.18
EAS Activity, t1	2.16	0.72	1.75	5.00	-0.70	-0.01
EAS Sociability, t1	4.02	0.52	1.50	5.00	-0.40	0.34
EAS Shyness, t1	4.24	0.61	1.00	5.00	0.58	0.48
HSCL-23, t1	1.35	0.34	1.00	3.65	1.80	4.82
Family stress, t1	1.27	1.28	.00	5.00	0.82	-0.11
Support partner, t1	4.43	0.73	1.00	5.00	-1.49	1.93
Support fam & friend, t1	4.18	0.67	1.33	5.00	-0.98	0.82
Maternal education, t1	5.94	1.45	1.00	8.00	-0.62	0.31
Maternal age, t1	30.0	4.72	18.9	45.9	0.24	-0.20
Live without partner, t1	8.1%	-	-	-	-	-
Siblings, t1	51.9%	-	-	-	-	-
Child gender, boys, t1	49.0%	-	-	-	-	-

Table 3

Class Regression Effects and Overall Likelihood Ratio Test for Class Discrimination for Unconstrained Model, 24 Estimated Effects

Class contrast	Maternal Depression	Family Stress	Maternal Birth Year	Child Female	Siblings	Emotionality
HS vs						
MCL	-1.19*	-0.25*	-1.10**	0.49	-0.74*	-0.38
HCL	0.88	-0.22	-1.52	1.22	-1.17	3.79***
AO	-0.74	-0.28*	-0.72**	-0.43	-0.49	-1.09***
LS	-3.03***	-0.58***	-1.13	0.65	0.02	-2.12***
LS vs						
MCL	1.84*	0.33	0.02	-0.16	-0.76*	1.74***
HCL	3.91***	0.36	-0.40	0.57	-1.19	5.91***
AO	2.29**	0.30	0.40	-1.08***	-0.51	1.03***
AO vs						
MCL	-0.45	0.03	-0.38	0.92***	-0.25	0.71**
HCL	1.62	0.06	-0.80	1.65*	-0.68	4.88***
MCL vs						
HCL	-2.07*	-0.04	0.42	-0.73	0.44	-4.17***
Overall LRT (4df)	24.55***	24.84***	14.04**	13.47**	10.47*	171.20***

Notes. LRT = likelihood ratio test, *$p < .05$ **$p < .01$ ***$p < .001$. Class contrasts 1-4 vs. 5 estimated and the others derived from model estimates. HS = high stable, MCL = medium childhood limited, HCL = high childhood limited, AO = adolescent onset, LS = low stable.

Table 4

Class Regression Effects for Constrained Model, 9 Estimated Effects

Class contrast HS vs	Maternal Depression	Family Stress	Maternal Birth Year	Child Female	Siblings	Emotionality
MCL	-0.87***	-0.29**	-1.09***	0.51***	-0.74**	0.00
HCL	0.87***	-0.29**	-1.09***	0.51***	-0.74**	3.63***
AO	-0.87***	-0.29**	-1.09***	-0.51***	-0.74**	-0.71*
LS	-3.48***	-0.29**	-1.09***	0.51***	0.00	-1.83***

Notes. LRT constrained vs. unconstrained = *p < .05 **p < .01 ***p < .001. HS = high stable, MCL = medium childhood limited, HCL = high childhood limited, AO = adolescent onset, LS = low stable.

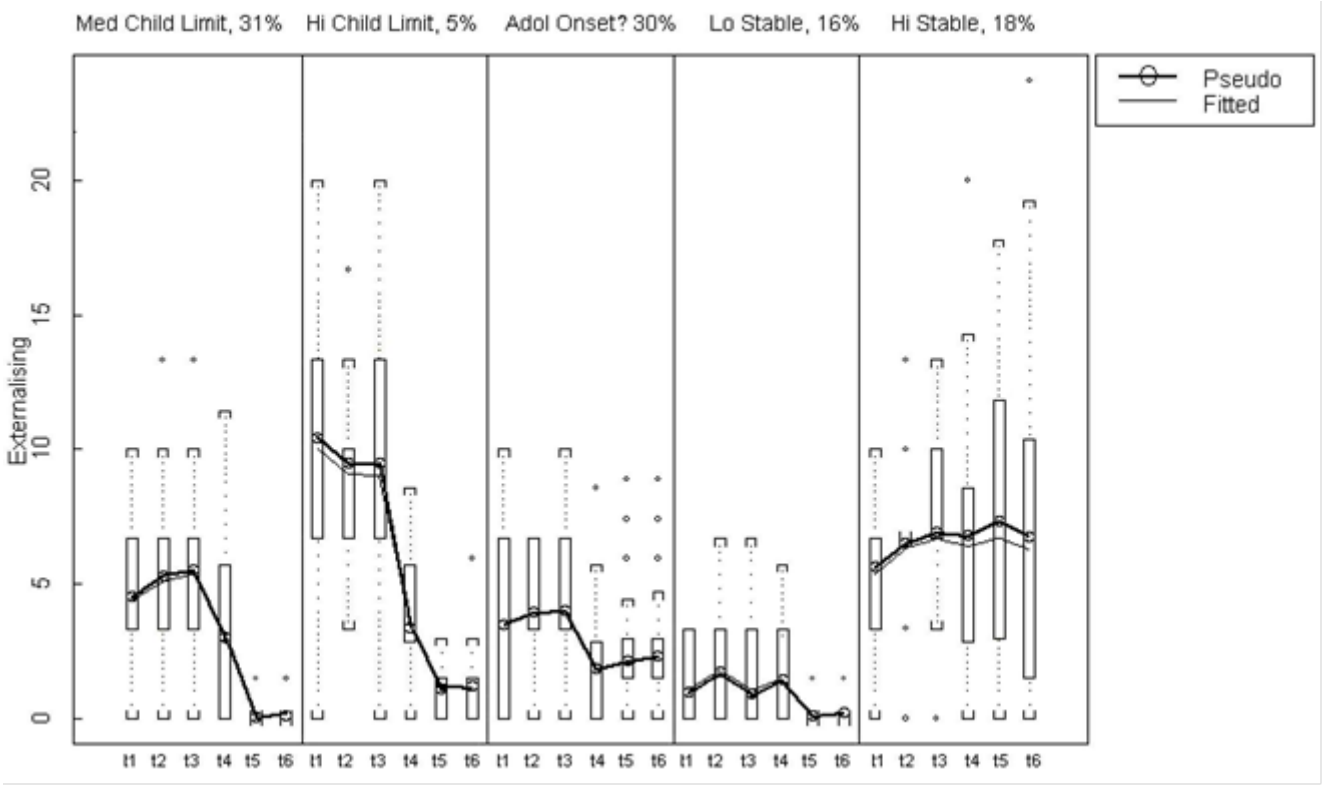

Figure 1. Boxplots with pseudo-class and fitted trajectories for latent classes of externalising behaviour problems from ages 18 months to 14.5 years from the final multi-predictor model. The grey boxes indicate the 25th to 75th percentiles, the black bar is the median, the large black circle is the mean and the small circles are outliers. Due to change in measures and rescaled variables only relative change across groups can be interpreted, not absolute (developmental) change.

Article title:

Longitudinal profiles of externalising behaviour from infancy to mid-adolescence: Predicting internalising symptoms and well-being in late adolescence

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Abstract

This prospective study aimed to examine the long-term prediction of internalising symptoms and subjective well-being from longitudinal profiles of externalising behaviour problems in 921 children from a population based sample. We found that a High stable profile of externalising behaviour from infancy (age 1.5) to mid-adolescence (age 14.5) predicted higher levels of depressive symptoms (boys) and anxiety symptoms (girls) compared to the same gender in the Low stable profile in late adolescence (age 18.5). The High stable externalising profile did also predict lower well-being scores for both girls and boys, compared to the Low stable profile over the study period. The findings are noteworthy as they document how a person–oriented typological study of externalising behaviour problems with its staring point in infancy can predict internalising and well-being in late adolescence. The findings underline the importance of early identification and prevention efforts.

Keywords: longitudinal profiles, externalising, internalising, well-being, infancy, late adolescence

Introduction

An extensive research effort has broadened the understanding of the development and consequences of having externalising behaviour problems (Broidy et al., 2003; Wiesner, Kim, & Capaldi, 2005; Odgers et al., 2008). However, there is still a lack of knowledge about to what extent the development of externalising problems from infancy onwards is linked to various long-term outcomes. Increased knowledge about distal outcomes of longitudinal patterns of externalising starting already in early childhood is important because it may inform early preventive and intervention efforts. The current study aims to increase the knowledge of the degree to which longitudinal profiles of externalising behaviour from infancy (age 1.5) to mid-adolescence (age 14.5) predict internalising symptoms and well-being in late adolescence (age 18.5).

Externalising behaviour problems are one of the most common mental health problems in childhood and adolescence (Wichstrom et al., 2012; Heiervang et al., 2007; Kessler et al., 2012; Reigstad, Jorgensen, & Wichstrom, 2004), and studies have shown that the way externalising behaviour develops has a great impact on adaptation later in life (e.g., Odgers et al., 2008; Wiesner et al., 2005). Different developmental patterns of externalising behaviour throughout childhood has been found to be associated with mental health outcomes in adolescence and adulthood in different ways (e.g., Broidy et al., 2003; Odgers et al., 2008; Reef, Diamantopoulou, van Meurs, Verhulst, & van der Ende, 2010). Factor analytic studies (e.g., Achenbach & Edelbrock, 1978) and diagnostic schemes (American Psychiatric Association, 2000) have identified externalising behaviour problems as a multi-faceted developmental phenomenon. Since prevention and early intervention efforts aim to address this broad and developing constellation of behaviour, it is valuable to utilise measures that capture the breadth of the phenomenon in research. Further, core indicators of externalising behaviour problems differ across age, and such a shift is clear, for example, in

wide-spread measures of externalising such as CBCL 1 1/2 -5 (Achenbach & Rescorla, 2000) and CBCL 6-18 (Achenbach & Rescorla, 2001). These age-variations in externalising behaviour pose challenges for longitudinal studies, as indicators of the externalising construct may have to change with age in order to capture the heterotypic continuity within externalising behaviour problems across childhood.

Children with high levels of externalising behaviour problems have been found to be at increased risk for a range of unfortunate outcomes, like depressive symptoms (Mesman, Bongers, & Koot, 2001; Pihlakoski et al., 2006; Nilsen, Gustavson, Kjeldsen, Røysamb, & Karevold, 2013), anxiety disorders (Angold, Costello, & Erkanli, 1999; Zoccolillo, 1992), and later academic underachievement (Masten et al., 2005; Burt & Roisman, 2010). High levels of externalising in childhood is also related to an increased risk for later juvenile delinquency (e.g. Broidy et al., 2003), exertion of serious violence, and problems regarding mental and physical health, and economy, in adulthood (Odgers et al., 2008). The high prevalence of externalising behaviour problems and the severity of the consequences highlight the importance of developing a better understanding of how externalising behaviour from early childhood onwards is linked to long-term outcomes. An improved and early identification of pathways to both high-risk and well-functioning adjustment in late adolescence is important in order to inform preventive and early intervention efforts.

Longitudinal patterns of externalising behaviour problems and early detection of risk

Previous longitudinal studies have identified qualitatively different trajectories of externalising problems (e.g. Broidy et al., 2003; Odgers et al., 2008; Campbell, Spieker, Vandergrift, Belsky, & Burchinal, 2010). The utilisation of person-oriented approaches to examine the development of externalising problems have identified groups of children characterised by variations around patterns of high stable levels of externalising behaviour,

externalising limited to childhood, adolescent onset of externalising, or by low stable levels of externalising, respectively (Nagin & Tremblay, 1999; Broidy et al., 2003; Côté, Vaillancourt, LeBlanc, Nagin, & Tremblay, 2006; Odgers et al., 2008; Barker & Maughan, 2009). These studies have also identified predictors (Nagin & Tremblay, 1999; Odgers et al., 2008; Barker & Maughan, 2009) and outcomes (Broidy et al., 2003; Odgers et al., 2009; Campbell et al., 2010) of different longitudinal patterns. However, to our knowledge, only five studies (three using the same sample of children) have examined developmental patterns over longer periods starting from before age three (National Institute of Child Health and Human Development, 2004; Shaw, Lacourse, & Nagin, 2005; Campbell, Spieker, Burchinal, & Poe, 2006; Côté et al., 2006; Fanti & Henrich, 2010). In one of these, the NICHD team (2004) examined late childhood outcomes of the trajectories. In their study of 1200 children, outcomes at age nine years were predicted from memberships in trajectory groups based on aggression scores measured six times between the ages two and nine. This study found that high and the moderate high trajectories predicted lower social skills and academic functioning, and more internalising and peer problems compared to two low problem classes. Campbell and colleagues (2006) reported that the same trajectory solution also predicted social skills, academic achievement and child internalising at age 9 through 12. There is a specific need for extended knowledge about to what extent longitudinal patterns starting in infancy can predict long term developmental outcomes (beyond age 12 years).

The direction of the longitudinal relationship between externalising and internalising problems is difficult to disentangle. Considerable research has focused on whether externalising tends to precede internalising, internalising precedes externalising, or to what degree both may be a function of a common dysregulation of behaviour and affect (Rutter, Kim-Cohen, & Maughan, 2006). A genetic influence for the association between

externalising and internalising has been identified (Gjone & Stevenson, 1997b; Cosgrove et al., 2011). In a comprehensive discussion of the issue, Rutter and colleagues (2006) argued that present evidence indicates that the effect of externalising on later internalising is stronger than the effect of internalising on later externalising. This underlines the importance of increasing and nuancing our knowledge of developmental pathways from externalising to internalising behaviour.

Internalising symptoms as outcome of longitudinal patterns of externalising

Anxiety and depression are among the most prevalent mental disorders during adolescence (Cohen et al., 1993; Kessler et al., 2012). To implement effective preventive actions and establish adequate treatment procedures, we need to examine what may contribute to the development of depression and anxiety symptoms. Currently, there is a lack of knowledge about precursors and developmental pathways to anxiety and depression in late adolescence (McClure & Pine, 2006; Rutter, 2003). Research indicates that adolescents with sub-threshold levels of depression may be no different from adolescents diagnosed with Major Depressive Disorder (MDD) with regards to both risk for adult depression and suicidal ideation, and rates of treatment for depression (Fergusson, Horwood, Ridder, & Beautrais, 2005; Lewinsohn, Rohde, Klein, & Seeley, 1999; Pine, Cohen, Cohen, & Brook, 1999).

Three comprehensive studies have reported conflicting results when focusing on symptoms of depression and depressive disorder, respectively, as developmental outcomes of different longitudinal patterns of externalising starting from mid-childhood or early adolescence. On one hand, an increased risk for depressive symptoms at age 19 was found for both genders among children on an increasing pattern of delinquent behaviour from ages 12 to 18, but not for those having chronic high or desisting patterns of delinquency (Miller, Malone, & Dodge, 2010). A somewhat similar finding came from the Australian

Temperament Project that used cut-off scores to form groups with different developmental patterns of antisocial behaviour between ages 13-18. They found that a late onset group had somewhat more depressive symptoms than a low/non group at ages 19-20, while a persistent antisocial group did not have significantly more depressive symptoms than the low/non group (Smart et al., 2005). However, on the other hand, Odgers and colleagues (Odgers et al., 2008) reported from the Dunedin Multidisciplinary Health and Development Study that increased risk of MDD at age 32 was predicted from a high stable trajectory pattern of antisocial behaviour between ages 7 and 26 for males and ages 7 and 15 for females. Classification into groups with childhood limited and adolescent onset trajectory patterns, respectively, was not linked to increased risk for MDD (Odgers et al., 2008).

Findings from longitudinal studies have also reported conflicting results regarding anxiety disorders and anxiety symptoms as developmental outcomes of externalising trajectories starting from mid-childhood or early adolescence. For example, researchers from the Dunedin study used person-oriented methods to predict anxiety diagnosis and found an increased risk of anxiety disorders at age 32 among members in a group with a high stable trajectory pattern of antisocial behaviour between the ages 7 and 26 for males and ages 7 and 15 for females. The childhood limited and adolescent onset trajectory patterns were linked to increased risk for later anxiety disorder in males, but not in females (Odgers et al., 2008). However, using cut-off scores to form groups with different patterns of antisocial behaviour between ages 13-18 years, researchers from the Australian Temperament Project found that children in the persistent antisocial group did not have significantly more anxiety symptoms than the low/non group at ages 19-20. However, the late onset group did have somewhat more symptoms of anxiety than those in a low/non group (Smart et al., 2005). Finally, using a continuous symptom measure based on antisocial behaviour data collected when the Dunedin study participants were between the ages 13 and

18, anxiety symptoms were predicted in both men and woman at age 21 (Moffitt, Caspi, Rutter, & Silva, 2001).

The current knowledge of the relationship between longitudinal patterns of externalising problems and later internalising symptom development seems to be sparse and equivocal. Further, we have not been able to locate longitudinal studies utilising externalising patterns from early childhood and onwards that predict symptoms of anxiety and depression in late adolescence.

Well-being as outcome of longitudinal patterns of externalising behaviour

Well-being is an important, but often overlooked, aspect of mental health. There are two traditions within the field of well-being which are often referred to as the subjective well-being (or Hedonic) tradition and the psychological well-being (or Eudaimonic) tradition (Ryan & Deci, 2001). The construct of life satisfaction, focusing on a person's satisfaction with life as a whole, is important within the subjective well-being approach (Pavot & Diener, 2008). Further, constructs like self-acceptance, positive relations, purpose of life, and personal growth are central within the psychological well-being approach (Ryan & Deci, 2001; Ryff & Keyes, 1995). Researchers have for decades wondered whether studies of well-being can add something more, or different, than studies of problem outcomes. This question addresses the issue of whether positive and negative emotions operate inversely, i.e. as opposite poles on the same continuum, or are relatively independent constructs (Mathiesen & Prior, 2006; Nes et al., 2012). Nes and colleagues (2012) concluded that most studies report moderate correlations between positive and negative emotions and that this supports a partly independent model where indicators of positive mental health are adding a distinct dimension.

To our knowledge few, if any, longitudinal studies have reported explicitly on well-being as a long-term outcome of externalising development throughout childhood. According to Olino, Seeley, & Lewinsohn (2010), it is surprising that life satisfaction has received so little attention in this context. Typically, research on children has tended to examine indirect indicators of psychological well-being, such as absence of internalising and externalising problems rather than direct subjective assessment of well-being (Diener & Diener McGavran, 2008; Suldo & Huebner, 2004). Externalising problems and life satisfaction were found to be inversely related in early-, mid-, and late adolescence (Suldo & Huebner, 2004). The genetic and environmental risk factors for externalising behaviour, in that study restricted to alcohol related problems and smoking, were found to be negatively related to well-being (Kendler, Myers, & Keyes, 2011). Finally, externalising behaviour was found to be negatively related to important outcomes regarding physical health, mental health, partner relationships, education, and employment (e.g. Odgers et al., 2009). Thus, even though we have not identified studies that have examined the impact of longitudinal patterns of externalising from as early as the current study, we expect high stable externalising across childhood to be linked to low well-being later on.

Gender differences

Boys are generally more involved in externalising behaviour than girls (e.g. Moffitt et al., 2001). But for some behaviour, like stealing and lying, the genders may be equal (Tiet, Wasserman, Loeber, McReynolds, & Miller, 2001). Despite the gender difference in most behavioural types, it seems that boys and girls follow corresponding developmental patterns but that the proportions of boys and girls vary across the respective patterns (Miller et al., 2010).

Boys may be expected to have worse outcomes of externalising development due to higher prevalence of neuropsychological difficulties (Moffitt, 1993), or girls may be expected to have worse outcomes due to a gender paradox effect where the gender with the lowest prevalence rate tends to be more affected in terms of problem outcomes (Loeber & Keenan, 1994; Diamantopoulou, Verhulst, & van der Ende, 2011). Relatively few studies have examined the relationships between longitudinal patterns of externalising and internalising outcomes in samples with both genders, since many longitudinal studies have included samples of boys only (e.g., Loeber et al., 2001; Farrington, 1995; Wiesner et al., 2005; Nagin & Tremblay, 1999; Shaw et al., 2005), or have focused on long-term outcomes limited to the externalising field (e.g., Broidy et al, 2003; Schaeffer et al., 2006). However, as reported above, two comprehensive studies have reported similar associations for males and females between membership in trajectory groups with a high stable externalising pattern and symptoms of depression in young adulthood and at age 32 (Miller et al., 2010; Odgers et al., 2008). However, Moffitt (2001) used a continuous measure of antisocial behaviour and found an increased risk for symptoms of depression among females only. The current evidence thus seems scarce and mixed, and is based on studies from mid-childhood and onwards. The approach of the current study is that we expect internalising symptoms as outcomes of high risk externalising development for both genders, and that it is not given that the levels of internalising symptoms will be equal for boys and girls.

Finally, the literature indicates few gender differences in well-being (Huebner, 2004; Clench-Aas, Nes, Dalgard, & Aaro, 2011), but there is a lack of knowledge about the differential long term impact on well-being for boys and girls that have followed developmental patterns of externalising problems throughout childhood. Thus, the analyses of the relationship between longitudinal patterns of externalising and internalising and well-being outcomes will be conducted separately for boys and girls.

Aims

The current study builds upon a previous latent profile analysis from the TOPP-study (The Tracking Opportunities and Problem Project) on mother-reported externalising behaviour collected in six waves from age 1.5 years through to age 14.5. This analysis revealed five longitudinal profiles: a "High stable" profile, a "High childhood limited" profile, a "Medium childhood limited" profile, a possible "Adolescent onset" profile, and a "Low stable" profile (Kjeldsen, Janson, Stoolmiller, Torgersen, & Mathiesen, submitted 2013). The longitudinal profile solution is presented in Figure 1. The current study will investigate to what extent these longitudinal profiles differ in adolescent self-reported internalising problems (i.e. symptoms of depression and anxiety) and well-being at age 18.5, and to address whether there are gender-specific patterns in these associations. The study thus aims to expand upon previous studies by using an earlier starting point, a longer time span, including both genders, and also by assessing positive, in addition to problem oriented, indicators of mental health.

We hypothesise that:

- Individuals with a High stable longitudinal pattern of externalising behaviour starting already in the second year of life will have elevated levels of internalising symptoms and reduced levels of well-being in late adolescence compared to individuals with a Low stable pattern.
- Individuals who follow Childhood limited and Adolescent onset longitudinal patterns will also, but to a lesser degree, have elevated levels of internalising symptoms and reduced levels of well-being compared to the children with Low stable pattern.

- We have also examined for gender differences. However, as the field has showed very mixed results, we did not have any a priori hypotheses on gender.

Method

Sample and procedure

We used data from The Tracking Opportunities and Problems study (TOPP), an eight-wave longitudinal population-based prospective study starting in 1993. More than 95% of Norwegian families with children attend public health services for 8-12 health screenings during the first four years of the child's life. Every family who visited a child health clinic within six municipalities in eastern Norway in 1993 for the scheduled 18 months vaccination visit was invited to complete a questionnaire. Of the 1,081 eligible families, the parents of 939 children participated at Time 1 (t1). These parents received a similar questionnaire when the children were 2.5 years of age (t2), 4.5 years (t3), 8.5 years (t4), 12.5 years (t5), 14.5 years (t6), 16.5 years (t7) and 18.5 years (t8). At the three first waves, questionnaires were handed out by, and given back to, the health-care station personnel. From the fourth wave, questionnaires were sent by mail. The parents chose whether the mother or father completed the questionnaire at t1-t4 (mainly mothers answered), at t5 the mothers were encouraged to answer, and at t6 –t8 separate maternal and paternal questionnaires were mailed out. Since so few fathers participated across the first five waves the paternal questionnaires were not included in the current study. The children/adolescents themselves completed questionnaires from age 12.5 (t5) to age 18.5 (t8). The number of children that mothers reported on was, at t1: 921 (85% of the invited families); t2: 784 (85% of mothers participating at t1), t3: 737 (80%), t4: 512 (56%); t5: 594 (65%); t6: 481 (52%); t7: 441 (46%) and t8: 522 (57%). The number of participating adolescents was at t5: 566 (61% of the mothers participating at t1); t6: 458 (50%); t7: 375 (41%) and t8: 442 (48%).

Mother-reported data from t1 to t6, and adolescent self-reported data at t8, were used in the current study.

The child health care areas were overall representative of the diversity of social environments in Norway: 28% of the families lived in cities, 55% in towns or densely populated areas, and 17% in rural areas. Gender of children in the sample was nearly evenly divided, with 48.9% (n=450) boys at t1. Maternal age ranged from 19 to 46 years at t1, with a mean of 30 years (SD = 4.7). At t1, 49% of the families had only one child, 37% had two, and 15% had three or more children. The participating families were predominantly ethnic Norwegians with middle class SES, which is representative of the majority of Norwegian families. In 1993 only 2.3% of the Norwegian population came from non-Western cultures (Statistics Norway, 2012). Data from the child health clinics showed that the non-participants at t1 did not differ significantly from the study participants with respect to maternal age, education, employment status, number of children, or marital status (Mathiesen, Tambs, & Dalgard, 1999).

Analyses of sample attrition from t1 to t7 (i.e., child age 16.5 years) showed that the families who dropped out were not significantly different from the families who completed questionnaires at t7 in terms of maternal symptoms of depression and anxiety, maternal age, financial status, chronic stress or social support at t1 (Gustavson, von Soest, Karevold, & Roysamb, 2012). However, the drop out sample was significantly different from the remaining sample at t1 in that a greater proportion of mothers with low education had left the study. Education level is commonly found as a predictor of attrition in longitudinal studies (Tambs et al., 2009; Torvik, Rognmo, & Tambs, 2012). Additional analyses for the current study showed that child externalising behaviour at t1 did not predict study drop out at t7 (OR = 1.1, p = 0.15, 95% CI = 0.97-1.26). Further, multiple logistic analyses of adolescent participation showed that only three of 18 variables at t1: adolescent female

gender (OR = 1.90, p < .001), high maternal education (OR = 1.46, p < .001), and mother's temperamental activity (OR = 1.23, p < .05), predicted adolescent participation at t8. The remaining: maternal age, whether they lived with the child's father or not, whether they worked or not, the family's financial situation, maternal symptoms of anxiety and depression, maternal temperamental sociability or emotionality, criticism from partner, their reported daily stressors, their child's internalising and externalising problems, their child's temperament (emotionality, shyness, sociability or activity), did not predict t8 adolescent participation. After Bonferroni correction for the high number of tests, only maternal education level and the adolescents' gender predicted adolescent participation.

Measures

Externalising data used in the longitudinal profiles

Core aspects of mother-reported child and adolescent externalising problems were measured at all six waves with items rated on a three point scale: 0 (*no difficulties*), 1 (*moderate difficulties*), or 2 (*substantial difficulties*). At ages 18 months, 2.5 years, and 4.5 years the average of three items from the Behaviour Checklist (Richman & Graham, 1971) was used to measure temper tantrums, manageability, and irritability. Internal consistency (Cronbach's alpha) was .41, .46, and .49, at t1, t2, and t3, respectively, for the three-item scale. The average inter-item correlation was .21, .23, and .25 at the three time points, comparable to the average inter-item correlation of .25 for the 24-items of the Externalising syndrome grouping of the CBCL for 1.5 -5 years (Achenbach & Rescorla, 2000) in a large study with a Norwegian sample of 4-year-olds – the Trondheim Early Secure Study (L. Wichstrøm, personal communication, June 10, 2011).

At age 8.5 years, the Conduct Problem subscale from the Strengths and Difficulties Questionnaire (Goodman, 1994) was used to measure tempers, obedience, fighting, lying,

and stealing. The reliability and construct validity of the SDQ has been established in a Norwegian sample (Van Roy, Veenstra, & Clench-Aas, 2008). The average of the five items was calculated, and the internal consistency for the SDQ Conduct Problem subscale was .48. The alpha for the Conduct Problem subscale is similar to the findings from other studies (Van Roy, Veenstra, & Clench-Aas, 2008).

At ages 12.5 and 14.5 we used the TOPP Scale on Antisocial Behaviour (TSAB) as a measure of externalising problems in adolescence. The reason for the change of measures was the need for a broader and more comprehensive measure of externalising, covering a wider range of behaviour than the five-item SDQ subscale. The 18-item scale was constructed for the current project given the absence of an age and culture sensitive measure of problem behaviours ranging from relatively normative to serious through adolescence. The TSAB is presented in Table 2. The specific behaviours are included with reference to Loeber and colleagues' model of three developmental pathways in child disruptive behaviour (Loeber et al., 1993). The items measuring inter-personal aggression refer to "overt behaviour" in the Loeber et al. model, stealing and vandalism to "covert behaviour", and loitering to "authority conflict/avoidant behaviours". The TSAB combines items from other Scandinavian scales (Bendixen & Olweus, 1999; Mahoney & Stattin, 2000; Rossow & Bø, 2003). The averages of the 18 items were calculated, and the alpha coefficients for the TSAB scales were .69 and .77 at t5 and t6, respectively. Due to a change of wording for three items at t6 (excluding aggressive behaviour among siblings) the measure of physical aggression at t6 may be underestimated compared to t5. Time-to-time correlations (i.e. t1 to t2, t2 to t3, etc.) were .46, .50, .32, .29, and .43 for the externalising measures, with the lowest correlations corresponding to the longest intervals between waves.

Adolescent self-reported outcomes age 18.5

Depressive symptoms were measured with the Short Mood and Feeling Questionnaire (SMFQ; Angold et al., 1995). SMFQ is a one-dimensional scale consisting of 13 questions, designed for epidemiological studies of childhood and adolescence. The scale measures affective and cognitive symptoms of depression (e.g., "didn't enjoy anything at all", "felt miserable or unhappy") taken from the original 34-item Mood and Feelings Questionnaire. The answers range on a 3-point Likert scale ranging from 0 (*not true*) to 2 (*true*). First an average score was calculated in order to include participants with partial data (i.e., all participants with data on half of the items or more were included), then the average score was multiplied with the number of items in the scale in order to form a total SMFQ score on the original scale format. Chronbach alpha was .88.

Anxiety symptoms were measured with the Anxiety Scale from the Depression, Anxiety and Stress Scale (DASS; Lovibond & Lovibond, 1995). The Anxiety Scale consists of 14 items measuring autonomic arousal, skeletal muscular effects, situational anxiety, and subjective experiences of anxious affect. The items are scored on a four-point scale ranging from 0 (*did not apply at all*) to 3 (*applied very much, or most of the time*). A total DASS Anxiety score was created using the same procedure as described for the total SMFQ score. Chronbach alpha was .90.

Well-being was measured with two different scales: the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) and the recent Flourishing Scale (Diener et al., 2010). SWLS represents the Hedonic tradition, and has a one-dimensional structure and is metric invariant across sexes (Clench-Aas et al., 2011). The five items are scored on a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The Flourishing scale represents the Eudaimonic tradition, and measures the presence of positive relationships, feeling of competence, and the experience of having

meaning and purpose in life. The Flourishing scale consists of eight items scored on a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Total SWLS and Flourishing scores were calculated using the same procedure as describes for the total SMFQ score. Internal consistencies (Cronbach alphas') for the two scales were .89 and .91, respectively.

Analytic approach

As described above, a latent profile solution with five distinct profiles of externalising behaviour problems from infancy to mid-adolescence was identified in an earlier study (Kjeldsen et al., submitted 2013). The solution was based on mother-reported externalising problems collected at child ages 18 months (t1), 2.5 (t2), 4.5 (t3), 8.5 (t4), 12.5 (t5) and 14.5 (t6) years[1]. The externalising mean scores at each assessment were rescaled to have approximately equal variance at every time point. We used a Maximum likelihood estimator allowing individuals with partial data to be included in the analyses. The longitudinal profile solution of externalising behaviour problems is presented in Figure 1.

Means on the 18.5 years outcomes were estimated across the longitudinal profiles with a latent profile model in Mplus 6.11 (Muthén & Muthén, 2011). The latent profile solution was constrained to be identical with the model in the original study, by fixing the means and variances for each externalising variable in each latent class in accordance with the original model, thus preventing the scores on the outcomes at 18.5 year from influencing the model. The outcome variables were regressed on gender within each latent class. Significance testing of difference scores (e.g., High Stable class versus Low Stable class) was done by dividing the difference score by the standard error of the difference score (Cohen, Cohen, West, & Aiken, 2003).

[1] Later analyses in Kjedsen et al (2013) incorporated t1predictors into a further model, which is not relevant for the current analyses.

Results

Descriptive statistics of the outcomes at age 18.5 are presented in Table 2. Overall, girls had significantly higher levels of depressive and anxiety symptoms than boys, while there was no gender difference in the two well-being measures.

Table 3 presents the estimated class means for depressive and anxiety symptoms at age 18.5 by longitudinal profile class and gender. As hypothesised, the boys in the High stable (HS) class had elevated levels of depressive symptoms compared to that of boys in the Low stable (LS) class, with a difference score/SE ratio at 2.61 ($p < .01$, Cohen's *d* .63). The depressive symptoms among boys in the Adolescent onset (AO) and High childhood limited (HCL) classes were not significantly elevated compared to the boys in the LS class. Girls in all five profile classes had relatively high mean scores on depressive symptoms, compared to girls age 12-17 from two US general population samples who had mean SMFQ score at 3.8 (Angold, Erkanli, Silberg, Eaves, & Costello, 2002), and there were not much variation in mean scores across the classes. Thus, contrary to the study hypotheses, girls in the HS class did not have more depressive symptoms than girls in the LS class, even though this class contrast (HS versus LS for girls) went in the expected direction. The LS girls had actually higher depressive symptom scores than the HS boys, which illustrates the differences in depressive symptoms across genders. The class contrasts including the AO and the HCL girls with the LS girls, respectively, were also non-significant.

Turning to anxiety symptoms, boys in all profile classes had low anxiety scores, and there was not much variation in mean levels across the different classes. Thus, the study hypotheses regarding class differences on anxiety symptoms for boys were not met, although the class contrasts (HS versus LS for boys) went in the expected directions. For the girls there was more variation in anxiety symptom level across the classes. As hypothesised,

girls in the HS class had more anxiety symptoms compared to girls in the LS class, with a difference score/SE ratio at 2.29 ($p<.05$, Cohen's *d* .87). The mean score for the HS girls corresponds to a 91 percentile ranking (i.e., a moderate score) when compared to a UK general population adult sample (Crawford & Henry, 2003). The contrasts between the girls classified into the AO and the HCL classes and the girls in the LS classes, respectively, were non-significant.

Table 4 presents the estimated means for the two well-being measures at age 18.5 by longitudinal profile class and gender. Overall, the levels of well-being were similar for boys and girls. In accordance with the study hypotheses, membership in the HS class predicted significantly lower scores on the Satisfaction with Life Scale compared to membership in the LS class. This contrast holds for both girls and boys, with difference scores/SE ratios at 2.80 ($p<.01$, Cohen's *d* .76), and 2.2 ($p<.05$, Cohen's *d* .72), respectively. The mean levels correspond to "average" scores for the HS boys and girls, and "high" scores for the LS boys and girls (Pavot & Diener, 2008; Diener, 2006). Further, boys in the HCL class had lower life satisfaction than the boys in the LS class. The difference score was significant despite large confidence intervals, with ratio difference score/SE at 2.52 ($p<.05$, Cohen's *d* 1.84). Neither the AO - LS contrast for the boys, nor the AO - LS nor the HCL - LS contrasts for the girls, were significant.

The same pattern of findings was identified for both genders on the Flourishing scale. Both boys and girls in the HS class had significantly reduced Flourishing compared to the boys and girls in the LS class, with difference scores/SE ratios at 2.52 ($p<.05$, Cohen's *d* .78) and 2.00 ($p<.05$, Cohen's *d* .49), respectively. Flourishing was not reduced for the AO and HCL boys or girls. The High stable adolescent's average score on Flourishing was at the 33th percentile, while the Low stable adolescent's average score was at the 60th percentile ranking, compared with norms from US college students (Diener et al., 2010).

Discussion

The aim of the current study was to examine to what extent individuals that followed different longitudinal profiles of maternal reported externalising problems from infancy to mid-adolescence (ages 1.5 to 14.5) differed on self-reported internalising symptoms (symptoms of depression and anxiety) and well-being in late adolescence (age 18.5). To our knowledge, this study was the first to study these relationships from very early childhood onwards. The results show that longitudinal profiles of externalising behaviour with its starting point in infancy can predict internalising problems and well-being in late adolescence. We found that boys with a High stable profile of externalising problems across childhood had higher levels of depressive symptoms in late adolescence, and that girls with a High stable profile had higher levels of anxiety symptoms in late adolescence, compared to same gender children with Low stable levels of externalising. Further, lower levels of life satisfaction and flourishing in late adolescence were identified for both girls and boys that had followed a High stable profile of externalising behaviour from infancy onwards. Boys with a High childhood limited profile had reduced life satisfaction, while children with a possible Adolescent onset pattern of externalising did not differ significantly from those with low levels of externalising across time.

Girls from all five longitudinal profiles had relatively high depression scores in late adolescence, and the High stable (HS) versus Low stable (LS) contrast for the girls did not meet the level of significance. This was somewhat surprising. Earlier studies within this field either reported depression as a long-term outcome of a stable high pattern of externalising behaviour for both genders (Miller et al., 2010; Odgers et al., 2009), or, in a study using variable-oriented methods, found that there were positive associations between levels of antisocial behaviour and depression for girls only (Moffit et al., 2001). However,

these studies were not covering the same developmental periods as the current study. The higher prevalence of depression generally found in girls from early adolescence and onwards (Cyranowski, Frank, Young, & Shear, 2000), may have contributed to the current finding. In addition to the tested developmental path to adolescent depression (i.e., a heterotypic path from early externalising to later internalising), there are other pathways to depression symptoms in adolescence, like homotypic paths (i.e., from early depression to later depression) that have been identified in several studies (Pihlakoski et al., 2006; Rutter et al., 2006). Such alternative developmental pathways, where adolescent depression is not preceded by externalising behaviour, may have the potential to blur the effect of externalising trajectory class on later depression outcomes. The lack of a significant class contrast on depression for girls may also be related to our use of a broad encompassing measure of externalising problems in adolescence, making it possible for HS girls to get an elevated score from involvement in other (less severe) types of externalising problems than HS boys. Post hoc analyses (t-test of gender differences within the HS class) indicate that the boys in the HS class were on average more involved in aggressive behaviour than the HS girls at ages 12.5 and 14.5 years. It is likely that following an externalising pattern characterized by aggressive behaviour at the adolescent end-point (i.e. the HS boys) is linked to more severe outcomes. Results from a longitudinal study of twins between the ages of 7-17 indicate that there might be a stronger genetic liability for aggressive behaviour than for delinquent behaviour (Gjone & Stevenson, 1997a), or alternatively, that there may be two discrete dimensions of genetic risk behind overt aggressive and rule-breaking behaviour, respectively (Kendler, Aggen, & Patrick, 2012). These different types of externalising behaviour may also create different responses from parents and significant others, where aggressive behaviour may be perceived as less acceptable and thus elicit harsher reactions, than covert (loitering and stealing) externalising behaviour types.

Girls with a high stable pattern of externalising behaviour from early childhood onwards had, as expected, more anxiety symptoms in late adolescence than girls with a low stable pattern of externalising. However, this prediction did not hold for the boys. There may be different reasons for this. It can reflect the lower rates of anxiety symptoms in boys versus girls in general (Cohen et al., 1993), suggesting a lower vulnerability for anxiety problems among boys than among girls. Another explanation may be that since being a boy predicted study drop-out, the results may be explained by fewer boys and less power in the analyses. However, as we identified associations between externalising and later depressive symptoms for boys, this is less likely. Relationships covering the same developmental periods are not studied earlier, thus, more studies are warranted.

Moffitt's taxonomic theory (1993) provides a frame for understanding anxiety and depression as outcomes of externalising problems with onset in childhood. Moffitt postulated that neurobiological difficulties or deficits combined with dysfunctional parent-child interactions may lead to stable high levels of externalising problems. Wiesner and colleagues (2005) takes this further and discus how externalising behaviour with onset in early childhood is likely to lead to cascades of secondary problems, including emotional problems. Each secondary problem may cause new detrimental consequences or developmental failures in later periods of life. Stable high levels of externalising problems across childhood may contribute to developmental failures in both academic and social contexts.

We identified lower well-being in late adolescence for those that followed a longitudinal profile with stable high levels of externalising problems from very early childhood onwards. This was the case for boys and girls, and for both the life satisfaction and flourishing dimensions of well-being. These results indicate that well-being somehow is "stolen" from individuals that have followed a developmental process with high

externalising across time. Both satisfaction with life as a whole, as well as flourishing, which involves positive relationships, feeling of competence, and the experience of having meaning and purpose in life, were affected. The mechanisms of these relationships are not known. As with externalising behaviour (Kendler et al., 2012), and internalising problems (Zavos, Rijsdijk, & Eley, 2012), a substantial heritability factor for well-being is identified (Nes et al., 2012; Kendler, Myers, Maes, & Keyes, 2011). The genetic and environmental risk factors for externalising behaviour, in that study defined as alcohol related problems and smoking, were found to be negatively related to well-being (Kendler et al., 2011). Externalising problems in children may be a result of coercive parent-child interactions (Reid, Patterson, & Snyder, 2002). This implies that children who learn coercive strategies will encounter failures in significant relationships with peers, teachers and romantic partners, while they are carrying the pattern of coercion forward (Reid et al., 2002). Thus, relational, academic and economic failures are likely to influence well-being.

These findings also tell a story about plasticity in development. Satisfaction with life and flourishing were reduced for children in the High stable class compared to the Low stables, but were still average (for life satisfaction) and at the 33th percentile ranking (for flourishing). Thus, our findings indicate that adolescents that had followed a high stable pattern of externalising problems from very early childhood onwards were still reasonable satisfied with many domains in their lives. However, the relationship between externalising development and future well-being has not been studied over such a long time span earlier, and our findings need to be replicated in future research.

The current study is the first to report on the degree to which longitudinal patterns of externalising behaviour problems from infancy (age 1.5) to mid-adolescence (age 14.5) predict internalising symptoms and well-being in late adolescence (age 18.5). The study used validated and well-regarded indicators of internalising symptoms and well-being

measured in late adolescence when examining the relationship between these indicators and different longitudinal patterns of externalising problems from very early childhood onwards. Using adolescent self- reported data to validate externalising patterns based on maternal report minimise the uncertainty connected to possible effects of measurement dependency. The current findings are noteworthy as they are the first to document how a person-oriented typological study of externalising behaviour problems with its starting point in infancy can predict internalising problems and well-being in late adolescence. Further, the time frame from age 18 months to 18.5 years is very wide and encompassing in the context of child and adolescent development.

The study has some limitations. Earlier levels of internalising symptoms and well-being were not controlled for in the analysis. It is therefore possible that the identified heterotypic continuity from early externalising to later internalising may reflect an underlying co-occurrence between internalising, externalising and well-being in the different developmental periods covered by the study. However, the findings that the different developmental patterns of externalising are related to internalising and well-being in late adolescence still inhabit predictive value for prevention and intervention. In their comprehensive discussion of the interrelationship between externalising and internalising problems across child development, Rutter and colleagues (2006) argued that present evidence indicates that the effect of externalising on later internalising is stronger than the effect of internalising on later externalising. The same is also identified in a recent study based on TOPP data (Nilsen et al., 2013). Thus, we believe that the approach of the current study is justifiable.

Due to attrition, there are few individuals left at age 18.5 in some latent classes (for the High childhood limited class this is especially the case), thus reducing the study's ability to detect potential important results. Further, attrition analyses showed that the mothers that

participated in the study were slightly higher educated over time. Regarding the adolescents own participation, boys did also drop out at a higher rate than girls. The somewhat higher drop out among the boys in the current study could potentially have resulted in low power to detect differences among boys, but not among girls. The finding that all classes of late adolescent girls in the study have somewhat elevated depression mean scores may be an indication of selective participation or attrition. It may be possible that HS girls that are depressed are participating to a lesser extent. It may also be possible that LS girls that are depressed participate to a higher extent as study participation may reflect an attitude of conscientiousness that again could be related to depressive symptoms. All analyses were carried out using full information maximum likelihood estimation, which includes subjects with partial data and minimizes biases due to attrition.

The low Chronbach's alphas of the early externalising measures could pose a problem, but these estimates are not likely to represent true estimates of the reliability in the current study. Another limitation is that the longitudinal profile model is based on different measurement instruments, meaning that the externalising construct is not identical through all developmental phases. Thus, only relative change, and not absolute (developmental) change, can be inferred from the profile shapes. Our externalising measures, however, are developmental appropriate at all measurement time-points, and the combination of different externalising types in one model is done with reference to heterotypic continuity within externalising behaviour problems across development. Thus, we perceive that the longitudinal profile solution is appropriate for identifying different patterns of externalising development across time.

The results from the current study contribute to the literature showing prediction to several long-term mental health outcomes from longitudinal profiles of externalising behaviour problems with its starting point in infancy. We have used a broad measure of

externalising problems in adolescence, and focused on gender differences in a community sample from the general population. The results add to the existing literature showing that a high stable externalising pattern across childhood is linked to high levels of depressive symptoms for boys and anxiety symptoms for girls, and decreased well-being for both genders, compared to a stable low longitudinal pattern. The current findings are noteworthy as they are the first to document how externalising problems as early as in infancy can be included as a starting point of a person-oriented longitudinal pattern approach in order to predict internalising problems and well-being in late adolescence. Replication of these findings is warranted, due to the paucity of studies in this area of research. Although the findings highlight a plasticity in development, they also point to the need for preventive interventions to start very early in life as it may prevent internalising problems, and promote well-being, many years later.

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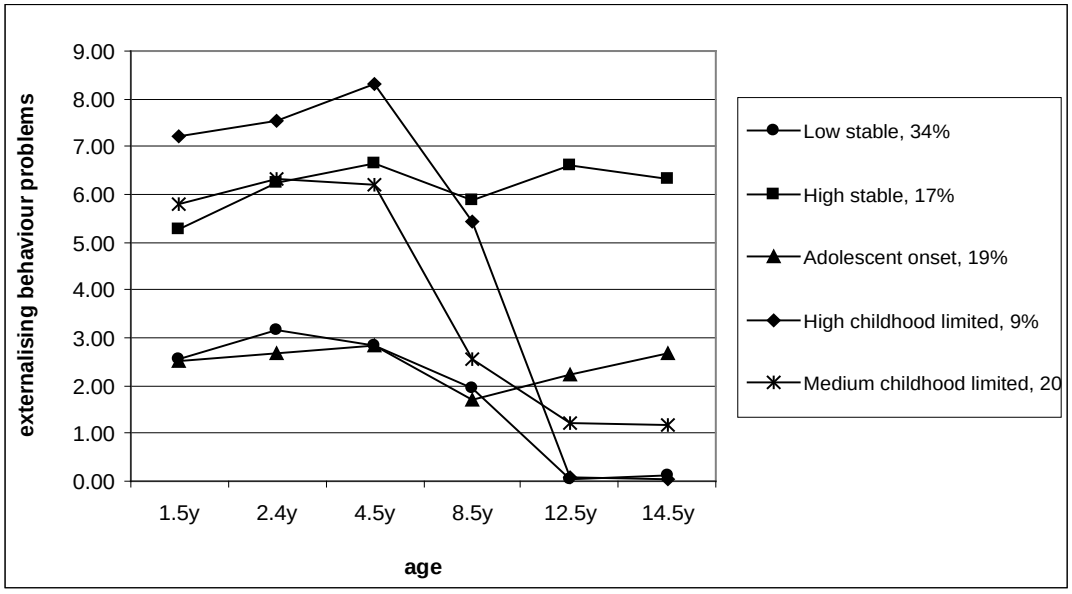
Figure 1

Longitudinal Profile Classes of Mother Reported Externalising Behaviour Problems from Age 18 months to 14.5 years



Note. Due to change in measures and rescaled variables only relative change across classes can be interpreted and not absolute (developmental) change.

Table 1

The TOPP Scale on Antisocial Behaviour

Domain	Item
Stealing	Refrained from paying at cinema, bus, train or similar
	Taken money from someone in family, without permission
	Taken goods from shopping mall, shop or kiosk without paying
	Stolen things from somebody's pocket or purse, when the owner was not around
	Broken into a shop, house, or apartment in order to steal
Inter-personal aggression	Scratched someone or pulled someone's hair*
	Threatened to hit or hurt somebody*
	Hit or kicked somebody*
	Been in a fist fight at school or other places
	Been in a fight using weapon (knife, bat, or similar) or other items.
Loitering	Been truant from school one or two hours
	Been truant from school a whole day
	Hung out in other places than was allowed to
	Stayed out much later in the evening or at night, than was allowed to
Vandalism	On purpose destroyed or broke windows, benches, telephone boxes, mailboxes, garden plants, or similar
	On purpose destroyed chairs, tables, or other things that belongs to school
	On purpose destroyed seats in bus, at the cinema or other places
Mixed	Threatened or forced somebody to give away money or other things
	Carried weapon (knife, bat or similar) or items that can be used as weapon, at school or other places

Note. *indicates that "not between siblings" was added at t6

Table 2

Descriptive Statistics Adolescent Self-Reported Outcomes Age 18.5 years

	Total sample					Boys			Girls			
Measure	N	min	max	M	SD	n	M	SD	n	M	SD	Sig.
SMFQ Depression symptoms	439	0	24	6.14	5.32	177	4.58	4.41	260	7.21	5.64	.000
DASS Anxiety symptoms	439	0	31	4.19	5.73	177	2.63	3.45	260	5.22	6.64	.000
SWLS Life satisfaction	437	5	35	26.54	6.27	177	26.68	6.15	258	26.42	6.36	ns
Flourishing Scale	439	8	56	46.33	7.72	177	46.44	7.22	260	46.21	8.06	ns

Table 3

Means for Internalising Symptoms at Age 18.5 by Longitudinal Profile Class and Gender

	Depressive symptoms				Anxiety symptoms				N*		
	Boys		Girls		Boys		Girls				
	M	95% CI	M	95% CI	M	95% CI	M	95% CI	Total	Boys	Girls
Low Stable	**3.5**	(2.5 - 4.4)	6.8	(5.7 - 8.0)	2.5	(1.5 - 3.4)	**4.9**	(3.4 - 6.4)	169	65	104
High Stable	**6.3**	(4.4 - 8.2)	7.4	(4.8 - 10.0)	2.7	(1.6 - 3.9)	**10.6**	(5.9 - 15.3)	60	25	35
Ado Onset	4.9	(3.3 - 6.6)	7.9	(4.7 - 11.0)	2.9	(1.9 - 3.9)	3.0	(1.8 - 4.1)	79	40	39
Hi Child Limit	7.2	(2.2- 12.1)	8.5	(4.9 - 12.1)	3.2	(0.8 - 5.4)	5.4	(2.8 - 7.9)	31	8	23
Med Child Limit	3.8	(2.9 - 4.7)	6.2	(4.1 - 8.2)	2.3	(1.5 - 3.1)	3.2	(2.3 - 4.1)	89	36	53

Note. *N based on pseudo-class membership, while class membership is used as a latent variable in the analyses.
Boldface indicates the significant contrasts between High Stable versus Low Stable boys on depression symptoms ($p<.01$, Cohen's *d* .63) and between High Stable versus Low Stable girls on anxiety symptoms ($p<.05$, Cohen's *d* .87).

Table 4

Means for Well-Being at Age 18.5 by Longitudinal Profile Class and Gender

	Life satisfaction				Flourishing				N*		
	Boys		Girls		Boys		Girls				
	M	95% CI	M	95% CI	M	95% CI	M	95% CI	Total	Boys	Girls
Low Stable	**28.3**	(27.0 - 29.7)	**27.6**	(26.5 - 28.7)	**48.0**	(46.3 - 49.7)	**47.3**	(45.5 - 49.1)	169	65	104
High Stable	**23.7**	(20.7 - 26.6)	**23.0**	(19.0 - 27.0)	**42.3**	(38.3 - 46.4)	**43.3**	(40.0 - 46.7)	60	25	35
Ado Onset	27.0	(25.3 - 28.8)	27.1	(24.4 - 29.9)	47.2	(45.3 - 49.0)	48.3	(46.4 - 50.1)	79	40	39
Hi Child Limit	**17.0**	(8.4 - 25.7)	26.2	(22.9 - 29.4)	43.4	(35.2 - 51.6)	45.1	(38.6 - 51.5)	31	8	23
Med Child Limit	28.4	(26.9 - 29.9)	26.7	(23.5 - 29.9)	47.3	(45.5 - 49.0)	46.0	(42.2 - 49.8)	89	36	53

Note. *N based on pseudo-class membership, while class membership is used as a latent variable in the analyses.
Boldface indicates the following significant contrasts: Low Stable (LS) boys versus High Stable (HS) boys on life satisfaction ($p<.01$, Cohen's *d* .76) and flourishing ($p<.05$, Cohens' *d* .78); LS boys versus High Childhood limited boys on life satisfaction ($p<.05$, Cohen's *d* 1.84); and LS girls versus HS girls on life satisfaction ($p<.05$, Cohen's *d* .72) and flourishing ($p<.05$, Cohen's *d* .49).

TILDELT NR. |__|__|__|__|__|__| 1 - 6

BOLIGOMRÅDE |__| 7

SMÅBARNFORELDRENES

TRIVSEL, HELSE OG LEVEKÅR

(barn i alder 16 - 18 mndr.)

HELSESTASJONSNR. |__| 8

SPØRRESKJEMA TIL BRUK I PROSJEKTET

"ROBUSTE BARN - BESKYTTENDE MILJØ"

Tildelt nr..... |__|__|__|__|__|__|

Dato for utfylling/intervju..... |__|__|__|__|__|__| 9-14

Barnets fødselsdato..... |__|__|__|__|__|__| 15-20

Barnets kjønn..... |__| **gutt** (1) |__| **pike** (2) 21

SKAL KLIPPES VEKK PÅ SENTER FOR SOSIALT NETTVERK OG HELSE OG OPPBEVARES I LÅST SKAP.

Tildelt nummer..... |__|__|__|__|__|__|

Barnets fulle navn.....

Adresse.....

Er du barnets 1 ☐ Mor 2 ☐ Far — 22

Hvilket år er du født? ☐☐ Årstall — 23-24

Har du norsk som morsmål? 1 ☐ Ja 2 ☐ Nei — 25

Hvis nei, hvilket morsmål har du? _____ — 26-28

* *FAMILIEFORHOLD* *

	1	2	
Er det andre barn som også bor hos deg?	☐ Ja	☐ Nei	29
Hvis ja, hvor mange?	☐ Antall		30
Hvis ja, hvilket årstall er de født?	☐☐ ☐☐ ☐☐ ☐☐		31-38

Hvem bor sammen med deg og barnet/ barna?

1 ☐ Ingen
2 ☐ Ektefelle/samboer
3 ☐ Foreldre
4 ☐ Andre

39

Er du

1 ☐ Gift
2 ☐ Ugift
3 ☐ Separert/skilt
4 ☐ Enke/enkemann

40

Bor det slektninger i nærheten av deg; i tilfelle hvem?
(Du kan krysse av for flere)

☐ Nei — 41
☐ Mor — 42
☐ Far — 43
☐ Søsken — 44
☐ Svigerforeldre — 45
☐ Søsken til samboer/ektefelle — 46
☐ Fjernere slektninger — 47

Bor du i

1 ☐ Blokk/leilighet
2 ☐ Tomannsbolig/rekkehus
3 ☐ Enebolig
4 ☐ Annet

48

Bor du i

1 ☐ By
2 ☐ Tettsted
3 ☐ Spredt bebyggelse

49

* *UTDANNING OG ARBEID* *

Hvilken utdanning har du fullført?
Oppgi bare høyest fullførte utdanning

1	☐	7-årig folkeskole eller mindre.	
2	☐	Framhaldsskole	
3	☐	9-årig grunnskole	
4	☐	Realskole, grunnskolens 10. år	50
5	☐	Ett- eller toårig videregående skole.	
6	☐	Artium, økonomisk gymnas eller treårig videregående skole	
7	☐	Høyskole/universitet, mindre enn 4 år.	
8	☐	Høyskole/universitet, 4 år eller mer	

Er du for tiden i lønnet arbeid?
(Sett kryss bare i én rute)

1	☐	Nei	51
2	☐	Ja, deltidsarbeid	
3	☐	Ja, heltidsarbeid	

Hvis du ikke er i fullt lønnet arbeid, er du:
(Her kan du krysse av for flere)

☐	Heltids husmor/hjemmeværende	52
☐	Svangerskapspermisjon	53
☐	Langvarig sykemeldt	54
☐	I attføring	55
☐	Arbeidsløs/permittert	56
☐	På pensjon/trygd/stønad	57
☐	Under utdanning	58
☐	Annet	59

Hvis du er i arbeid utenfor hjemmet, hvem ser oftest etter barnet mens du er på jobb?
(Sett kryss i bare én rute)

1	☐	Ektefelle/samboer	
2	☐	Annen familie	
3	☐	Dagmamma	60
4	☐	Barnehage	
5	☐	Andre	

Hvis du kunne velge helt fritt, hvem ville du <u>helst</u> skulle se etter barnet?
(Sett kryss i bare én rute)

1	☐	Meg selv	
2	☐	Ektefelle/samboer	
3	☐	Annen familie	61
4	☐	Dagmamma	
5	☐	Barnehage	
6	☐	Andre	

Er din eventuelle partner for tiden i lønnet arbeid?
(Sett bare kryss i én rute)

1	☐	Har ingen partner nå	62
2	☐	Han er ikke i lønnet arbeid	
3	☐	Ja, heltidsarbeid	
4	☐	Ja, deltidsarbeid	

Hvis han ikke er i lønnet arbeid på heltid, er han:
(Her kan du krysse av for flere)

☐	Husmor/hjemmeværende	63
☐	Langvarig sykemeldt	64
☐	I attføring	65
☐	Arbeidsløs/permittert	66
☐	På pensjon/trygd/stønad	67
☐	Under utdanning	68
☐	I militærtjeneste	69
☐	Annet	70

	1 Ja	2 Nei		
Har du spesielle omsorgsoppgaver som tilsyn eller pleie av:	☐	☐	Gamle	71
	☐	☐	Andre voksne	72
	☐	☐	Funksjonshemmede/ langvarig syke barn	73

* *Økonomi*

Hvordan klarer du/familien seg med den økonomien du/dere har?

1	☐	Vi klarer oss svært dårlig
2	☐	Vi klarer oss dårlig
3	☐	Vi klarer oss
4	☐	Vi klarer oss bra
5	☐	Vi klarer oss meget bra

74

Har du, eller noen i husholdningen din, fått økonomisk støtte fra sosialkontoret i løpet av <u>de siste 12 mndr.?</u>

1	☐	Ja
2	☐	Nei
3	☐	Vet ikke

75

Hvor stort lån har du/dere i forhold til brutto inntekt?

1	☐	Har ikke lån
2	☐	Mindre enn to ganger brutto inntekt
3	☐	Ca. to ganger brutto inntekt
4	☐	Mer enn to ganger brutto inntekt

76

* *SVANGERSKAP, FØDSEL OG BARSELTID*

Har det vært følgende forhold ved svangerskapet eller ved fødselen?

Sykdommer i svangerskapet?

1	☐	Ja
2	☐	Nei

77

Nevn i tilfelle hvilke: 78

Behandlet med medikamenter?

1	☐	Ja
2	☐	Nei

79

Nevn i tilfelle hvilke: 80

Yrkesaktiv?

1	☐	Ja
2	☐	Nei

81

Stoppet å arbeid i _____ mnd. av svangerskapet 82

Fødselskomplikasjoner? 1 ☐ Ja 2 ☐ Nei — 83

Nevn i tilfelle hvilke: — 84

Barnets fødselsvekt _____ — 85-87

Har barnet i de tre første levemånedene:

Hatt spesielt slapp muskulatur — 1 ☐ Ja 2 ☐ Nei 3 ☐ Vet ikke — 88

Hatt spesiell stiv muskulatur — 1 ☐ Ja 2 ☐ Nei 3 ☐ Vet ikke — 89

Virket "overfølsomt", måtte håndteres svært forsiktig for ikke å skrike eller snu seg vekk. — 1 ☐ Ja 2 ☐ Nei 3 ☐ Vet ikke — 90

Har det vært spesielle problemer i forbindelse med barnets spising i de 3 første måneder? (Utenom evt. ammeproblemer) — 1 ☐ Ja 2 ☐ Nei — 91

Har du søkt råd hos lege, kiropraktor eller andre i barnets 3 første levemåneder på grunn av bekymringer med barnet? — 1 ☐ Ja 2 ☐ Nei — 92

I tilfelle ja, nevn hva var det som særlig bekymret deg: — 93

I tilfelle ja, hvilken yrkesgruppe tok du kontakt med: — 94

** BARNETS FYSISKE HELSE **

Har barnet funksjonsvansker som antas å bli langvarige? — 1 ☐ Ja 2 ☐ Nei 3 ☐ Under utredning 4 ☐ Er bekymret for at det kan være noe galt. — 95

Hvis ja, muligens eller bekymret, kan du angi hvilke typer vansker barnet viser tegn på?
(du kan krysse av for flere):

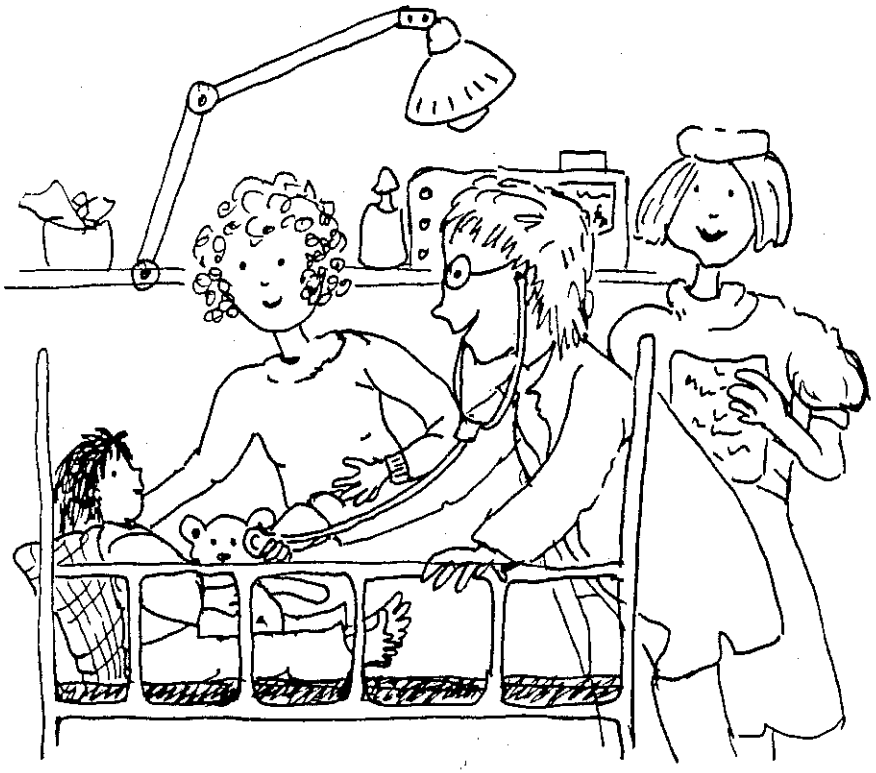
☐	Synsvansker	96
☐	Hørselsvansker	97
☐	Cerebral parese	98
☐	Hjertefeil	99
☐	Leppe/ganespalte	100
☐	Downs syndrom (mongolisme)	101
☐	Hoftefeil	102
☐	Andre, nevn hvilke:	103

Har barnet en <u>sykdom</u> som antas å bli langvarig?

1	☐	Ja	
2	☐	Nei	
3	☐	Under utredning	104
4	☐	Er bekymret for at det kan være noe galt.	

Hvis ja, muligens eller bekymret, kan du angi hvilken sykdom barnet viser tegn på?
(Du kan krysse av for flere)

☐	Allergisk eksem	105
☐	Astma	106
☐	Andre allergiske lidelser	107
☐	Diabetes	108
☐	Tarm/fordøyelsseslidelser	109
☐	Brokk	110
☐	Andre, nevn hvilke:	111



Nå vil vi gå over til akutte sykdommer og skade, sykdommer som stadig gjentar seg og symptomer som kan være nærmest kroniske.

Tenk på de siste 12 mndr. Har barnet vært sykt eller blitt skadet i løpet av denne **perioden?** 1 ☐ Ja 2 ☐ Nei 112

Hvis ja, kan du angi hva det var som feilte barnet, hvor mange sykdomsperioder barnet har hatt og om du har kontaktet helsepersonell for dette?
(Du kan krysse av for flere):

	1	2	3	4	5	6	
TYPE LIDELSE	ANTALL EPISODER						
	1	2-4	5-10	Mer enn 10	Stadig eller vedvarende	Har kontaktet helsepers.	
Halsesyke, forkjølelse, luftveis-infeksjoner, bronkitt, influensa o.l.							113
Ørebetennelse o.l.							114
Øyenkatarr o.l.							115
Barnesykdom, som f.eks. vannkopper, meslinger o.l.							116
Falsk krupp med pustevansker							117
Anemi (blodfattig)							118
Hudbetennelse							119
Urinveisinfeksjon							120
Plagsomt bleieutslett							121
Diaré							122
Forstoppelse							123
Kolikk							124
Brekninger (gulping regnes ikke med)							125
Sprutbrekninger							126
Moderat feber							127
Høy feber							128
Feberkrampe							129
Skader som trengte medisinsk behandling (brudd, forbrenning, forgiftninger, kutt o.a.)							130
Andre lidelser, hvilke?							131

*

TILHØRIGHET TIL NABOLAGET

Hvor mange ganger har du flyttet de siste 5 årene?

☐☐ Ganger — 132

Hvor mange år har du bodd i det nærmiljøet du bor nå?

☐☐ År — 133-134

Føler du tilhørighet til det stedet du bor nå?

1 ☐ I stor grad
2 ☐ I noen grad
3 ☐ Vet ikke — 135
4 ☐ I liten grad
5 ☐ Ikke i det hele tatt

Er det steder i ditt nærmiljø hvor naboer naturlig møter hverandre for å slå av en prat?

1 ☐ Ja, mange
2 ☐ Ja, noen — 136
3 ☐ Nei

*

BARNS LEKEMILJØ

Synes du dette nabolaget er et godt sted å bo for småbarnsfamilier?

1 ☐ Veldig bra
2 ☐ Nokså bra
3 ☐ Ikke særlig bra — 137
4 ☐ Absolutt ikke bra
5 ☐ Vet ikke

Hvor mange småbarnsfamilier bor det i ditt nabolag?

1 ☐ Ingen
2 ☐ 1
3 ☐ 2-5 — 138
4 ☐ Fler enn 5
5 ☐ Vet ikke

Er det i ditt nabolag lekeplasser, løkker, bakgårder hager o.l. hvor små barn kan leke relativt trygt uten tilsyn?

1 ☐ Ja, mange
2 ☐ Ja, noen — 139
3 ☐ Nei

Blir det av og til organisert aktiviteter i nabolaget som f.eks. 17.mai-fester e.l.?

1 ☐ Ja, for voksne
2 ☐ Ja, for barn og voksne — 140
3 ☐ Nei
4 ☐ Vet ikke

Hvilke problemer mener du går ut over småbarnsfamiliens trivsel og helse der du bor? (Her kan du krysse av for flere)

- ☐ Mye ut- og innflytting — 141
- ☐ Lite sosialt fellesskap — 142
- ☐ Dyre boliger — 143
- ☐ Lite offentlig kommunikasjon — 144
- ☐ Manglende barnehagetilbud — 145
- ☐ Mye pendling — 146
- ☐ Mye biltrafikk, støy osv. — 147
- ☐ Lang reisevei til arbeidet — 148
- ☐ Manglende sikring av farlige steder i omgivelsene; trafikk, vann, skrenter osv. — 149
- ☐ Mye alkohol- og rusmisbruk — 150

Annet som_____ — 151

* ***NABOER***

Hvor mange naboer stopper du og tar en prat med hvis du møter dem tilfeldig?

1 ☐ Ingen
2 ☐ 1
3 ☐ 2 — 152
4 ☐ 3-4
5 ☐ 5 eller fler

Hvor mange av disse naboene kjenner du ved navn?

1 ☐ Ingen
2 ☐ 1
3 ☐ 2 — 153
4 ☐ 3-4
5 ☐ 5 eller fler

Hvor mange familier/husstander i nabolaget kjenner du så godt at du besøker dem av og til?

1 ☐ Ingen
2 ☐ 1
3 ☐ 2 — 154
4 ☐ 3-4
5 ☐ 5 eller fler

Hvor mange naboer regner du som dine nære venner?

1 ☐ Ingen
2 ☐ 1
3 ☐ 2 — 155
4 ☐ 3-4
5 ☐ 5 eller fler

Er du og naboene til hjelp for hverandre, f.eks. når det gjelder å:
(Her kan du sette kryss ved flere)

- ☐ Er ikke til praktisk hjelp for hverandre. 156
- ☐ Vanne blomster, ta inn post, når noen er bortreist. 157
- ☐ Låne daglige ting. 158
- ☐ Se etter hverandres barn som leker ute. 159
- ☐ Være barnevakt for hverandre om kvelden. 160
- ☐ Passe hverandres barn på dagtid om dere f.eks. skal i butikken, til tannlege, frisør osv. 161
- ☐ Annen praktisk hjelp. 162

Har du deltatt i barselgruppe på helsestasjonen?

- 1 ☐ Ja 163
- 2 ☐ Nei

Hvis ja, ble du kjent med andre som du fremdeles besøker en gang iblant?

- 1 ☐ Ja 164
- 2 ☐ Nei

Vi vil nå gå over til spørsmål om barnets temperament og væremåte.

* *BARNETS TEMPERAMENT*

Se skjema på neste side!

Husk å sette ett kryss på hver linje.

Kryss av på alle linjer 1 2 3 4 5

	Veldig typisk	Ganske typisk	Både/ og	Lite typisk	Ikke typisk	
Barnet blir lett sjenert.						165
Det skal lite til før barnet gråter.						166
Barnet like å være sammen med andre mennesker.						167
Barnet er alltid på farten.						168
Barnet vil heller leke med andre enn å leke for seg selv.						169
Barnet viser lett følelser.						170
Når barnet flytter seg, beveger det seg ofte langsomt.						171
Barnet like å være sammen med andre barn.						172
Barnet er i aktivitet og løper omkring med en gang det våkner om morgenen.						173
Barnet synes at andre mennesker er morsommere enn noe annet.						174
Barnet sutrer og gråte mye.						175
Barnet er veldig sosialt.						176
Barnet er full av energi.						177
Det tar lang tid før barnet blir vant til fremmede.						178
Det skal lite til før barnet hisser seg opp eller blir lei seg.						179
Barnet foretrekke å være alene.						180
Barnet foretrekker rolige, stillesittende leker fremfor mer aktive.						181
Barnet liker ikke å være alene.						182
Barnet reagerer intenst når det blir opphisset.						183
Barnet er veldig vennlig og tillitsfullt mot fremmede.						184
Barnet leker mye mindre nå enn hva det gjorde for en stund siden.						185
Barnet sitter ofte å pille på småting, vifter med hendene, vagger fra side til side o.l.						186
Barnet vrir seg bort med én gang når jeg har lyst til å kose eller prate.						187
Barnet tilkaller meg ofte ved å skrike eller rope.						188
Barnet kommer sjelden etter meg når jeg går ut på kjøkkenet o.l.						189
Barnet finner sjelden noe å leke med av seg selv.						190
Barnet kommer ofte bort til meg for å leke/prate/kose.						191
Barnet blir tydelig opphisset når det får ros (ler, hopper, skriker o.l.)						192
Barnet reagerer kun svakt om et annet barn tar hans/hennes leke (rynker brynene, smiler o.l.)						193
Det er ofte vanskelig å vite hva barnet vil eller ikke vil.						194
Barnet er lett å avlede.						195

* ***BARNETS VÆREMÅTE***

Ut fra hvert spørsmål skal du sette kryss i den ruten som passer best for ditt barn ***nå for tiden.*** *(Kryss av for alle områdene)*

Har vanligvis god matlyst.	1	☐	
Har noen ganger dårlig matlyst.	2	☐	196
Har nesten alltid dårlig matlyst.	3	☐	
Spiser all slags mat.	1	☐	
Har noen favorittretter, vil ikke spise enkelte ting.	2	☐	197
Er veldig kresen, vil ikke spise variert mat.	3	☐	
Sover som regel svært lite i løpet av et døgn.	1	☐	
Sover noen ganger svært lite.	2	☐	198
Sover hverken lite eller mye.	3	☐	
Sover som regel svært mye	4	☐	
Er lett å legge og sovner greit.	1	☐	
Har litt vansker med å roe seg ved sengetid.	2	☐	199
Tar ofte mer enn én time på å roe seg i sengen.	3	☐	
Våkner nesten aldri om natten.	1	☐	
Våkner noen ganger om natten, men roer seg lett.	2	☐	200
Våkner ofte og er vanskelig å roe.	3	☐	
Er rolig om natten og sover derfor nesten aldri sammen med oss på grunn av uro.	1	☐	
Er av og til urolig om natten og sover derfor noen ganger hos oss.	2	☐	201
Er ofte urolig og sover derfor ofte sammen med oss.	3	☐	
Er ikke tilstrekkelig aktiv.	1	☐	
Er ikke spesielt aktiv.	2	☐	202
Er svært aktiv.	3	☐	
Er for aktiv, vil ikke sitte stille ved bordet eller andre steder mer enn i 5 minutter.	4	☐	
Leker svært ofte intenst når hun/han er alene.	1	☐	
Inni mellom leker hun/han intenst for seg selv.	2	☐	203
Leker sjelden intenst med noe når hun/han er alene.	3	☐	
Leker konsentrert inne i mer enn ett kvarter om gangen.	1	☐	
Konsentrerer seg vanligvis i 5-15 minutter, alt etter som.	2	☐	204
Leker nesten aldri konsentrert inne i mer enn i 5 minutter.	3	☐	

Tar hele tiden i bruk nye ord og væremåter etter hvert som hun/han lærer dem.	1 ☐	
Oppfører seg noen ganger som da han/hun var yngre.	2 ☐	205
Bruker som regel de samme ord og væremåter som da hun/han var yngre.	3 ☐	
Er ikke sjenert, kan godt overlates til andre som hun/han kjenner.	1 ☐	
Blir urolig når hun/han er borte fra meg, men kommer over det.	2 ☐	206
Er svært klengete, kan ikke overlates til andre.	3 ☐	
Er selvstendig, ber om lite oppmerksomhet.	1 ☐	
Ber noen ganger om mye oppmerksomhet og følger etter meg hele dagen.	2 ☐	207
Krever for mye oppmerksomhet, følger etter meg hele dagen.	3 ☐	
Er lett å oppdra.	1 ☐	
Er noen ganger vanskelig å oppdra og å sette grenser for.	2 ☐	208
Er ofte svært vanskelig å oppdra og å sette grenser for.	3 ☐	
Har ikke raserianfall.	1 ☐	
Har noen ganger raserianfall som varer i noen minutter	2 ☐	209
Har hyppige, eller langvarige raserianfall	3 ☐	
Er vanligvis glad og fornøyd med unntak av korte perioder hvor hun/han f.eks. er trøtt.	1 ☐	
Er noen ganger urolig eller irritabel.	2 ☐	210
Er ofte urolig eller irritabel	3 ☐	
Virker sjelden lei seg eller ulykkelig.	1 ☐	
Virker noen ganger, eller i korte perioder, lei seg eller ulykkelig.	2 ☐	211
Virker ofte, eller i lengre perioder, lei seg eller ulykkelig.	3 ☐	
Er sjelden eller aldri bekymret og engstelig.	1 ☐	
Er noen ganger bekymret og engstelig i korte perioder.	2 ☐	212
Er engstelig for svært mange ting; nye omgivelser, endringer i måten å gjøre ting på, for å skade seg, farlige dyr, troll osv.	3 ☐	
Blir sjelden skremt av brå lyder eller av ting som skjer rundt oss.	1 ☐	
Blir av og til skremt av brå lyder og uventede ting.	2 ☐	213
Blir ofte skremt av brå lyder eller av ting som skjer rundt oss.	3 ☐	

0 Går godt sammen med sine søsken. 0 (1) ☐
1 Har noen vansker med å være sammen med søsken. 1 (2) ☐ 214
2 Går dårlig sammen med sine søsken. 2 (3) ☐
3 Barnet har ikke søsken. (4) ☐

0 Går godt sammen med andre barn. 0 (1) ☐
1 Har noen vanske med å leke med, eller ved siden av, andre barn. 1 (2) ☐ 215
2 Leker sjelden sammen med, eller ved siden av, andre barn. 2 (3) ☐

Har sjelden smerter eller vondt (magen, hodet, kaster opp). 1 ☐
Har smerter eller vondt en gang i blant. 2 ☐ 216
Har ofte smerter eller vondt. 3 ☐

Bruker mer enn 10 ord på forståelig måte. 1 ☐
Bruker 2 eller 3 ord på en forståelig måte. 2 ☐ (1) 217
Bruker foreløpig ikke ord som er lette å forstå. 3 ☐

Kan vise oss hvordan vanlige ting som hårbørste, spiseskje, o.l. skal brukes. 1 ☐ Ja 218
2 ☐ Nei

Kan peke på kroppsdeler, f.eks. nese, øyne, hår o.l. 1 ☐ Ja 219
2 ☐ Nei

Setter sammen to enkle ord og bruker disse, f.eks.: mer melk, pappa gått, se ball osv. 1 ☐ Ja 220
2 ☐ Nei

* *VÆREMÅTE PÅ FREMMEDE STEDER OG OVERFOR UKJENTE*

Når fremmede kommer hjem til oss pleier barnet **vanligvis** først å:
(Sett bare kryss i en av rutene)

Trekke seg unna og avvise kontakt. 1 ☐
Nøle og vente. 2 ☐
Titte litt, men fortsette med det som hun/han holdt på med. 3 ☐ 221
Være vennlig og blid. 4 ☐
Gå bort til den besøkende og klatre opp på fanget, strekke ut armene o.l. 5 ☐

Når barnet er på besøk på et nytt sted for første gang, pleier barnet **vanligvis** å:

Klynge seg til meg. 1 ☐
Utforske det nye stedet, men kommer tilbake til meg med jevne mellomrom. 2 ☐ 222
Utforske det nye stedet på selvstendig måte. 3 ☐

Hvis barnet klynger seg til **deg**, klynger det seg også til andre i slike situasjoner? (Du kan krysse av for flere)

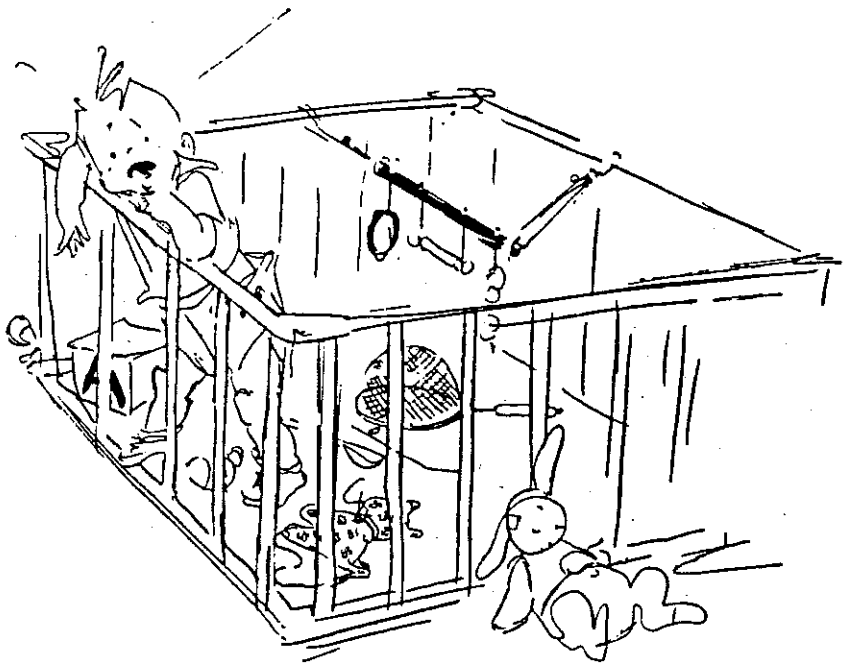
Nei, bare til meg	☐	223
Ja, også til faren	☐	224
Ja, også til besteforeldre	☐	225
Ja, også til søsken	☐	226
Ja, også til andre. Nevn hvem:	☐	227

Hvis barnet må oppmuntres til å utforske det nye stedet, lar det seg også oppmuntre av andre enn deg? (Du kan krysse av for flere)

Nei, bare av meg	☐	228
Ja, også av faren	☐	229
Ja, også av besteforeldre	☐	230
Ja, også av søsken	☐	231
Ja, også av andre. Nevn hvem:	☐	232

Hvis barnet gråter og vil ha trøst, er det andre enn deg som kan roe det? (Du kan krysse av for flere)

Nei, bare meg	☐	233
Ja, også faren	☐	234
Ja, også besteforeldre	☐	235
Ja, også søsken	☐	236
Ja, også av andre. Nevn hvem:	☐	237



* ***VÆREMÅTE - SAMMENLIGNET MED BARN FLEST***

Alt i alt, hvordan vil du beskrive barnets temperament? Sammenlign henne / ham med andre barn på samme alder som du kjenner og kryss av for hva du mener passer best for ditt barn?

Barnet viser sterke følelser (glede, sinne, angst)	1 ☐	Mer enn barn flest	
	2 ☐	Omtrent vanlig	238
	3 ☐	Mindre enn barn flest	
Barnet er aktivt	1 ☐	Mer enn barn flest	
	2 ☐	Omtrent vanlig	239
	3 ☐	Mindre enn barn flest	
Barnet tar kontakt med andre mennesker	1 ☐	Mer enn barn flest	
	2 ☐	Omtrent vanlig	240
	3 ☐	Mindre enn barn flest	
Barnet sier selv fra når det vil noe.	1 ☐	Mer enn barn flest	
	2 ☐	Omtrent vanlig	241
	3 ☐	Mindre enn barn flest	
Det er lett å skjønne hva barnet vil og ønsker.	1 ☐	Mer enn barn flest	
	2 ☐	Omtrent vanlig	242
	3 ☐	Mindre enn barn flest	
Barnets humør er stort sett	1 ☐	Positivt	
	2 ☐	Variabelt	243
	3 ☐	Negativt	

Jevnt over, vil du si at barnet er:

- Klart lettere å ha med å gjøre enn barn flest	1 ☐	
- Litt lettere å ha med å gjøre enn barn flest	2 ☐	244
- Litt vanskeligere å ha med å gjøre enn barn flest	3 ☐	
- Klart vanskeligere å ha med å gjøre enn barn flest	4 ☐	

Nå skal vi forlate barnet og gå over til spørsmål om deg selv.

DIN OPPLEVELSE AV STRESS SISTE UKE

Nedenfor er det liste over problemer eller plager folk av til har. Vurder hvor mye hvert problem var til plage eller ulempe for deg ***siste uke (til og med i dag).*** *Sett* ***ett*** *kryss på hver linje.*

	1	2	3	4	
	Ikke i det hele tatt	Litt	En god del	Svært mye	
1. Blir plutselig skremt uten grunn					245
2. Føler deg engstelig					246
3. Føler deg svimmel eller kraftløs					247
4. Er nervøs eller urolig					248
5. Har hjertebank					249
6. Skjelver					250
7. Føler deg anspent eller opphisset					251
8. Har hodepine					252
9. Har anfall av redsel eller panikk					253
10. Er rastløs, kan ikke sitte rolig					254
11. Føler deg slapp og uten energi					255
12. Anklager deg selv for ting					256
13. Har lett for å gråte					257
14. Har dårlig apetitt					258
15. Har vanskelig for å sove					259
16. Har lite håp for framtiden					260
17. Føler deg nedfor					261
18. Føler deg ensom					262
19. Følelse av å være fanget					263
20. Bekymrer deg for mange ting					264
21. Har ikke interesse for noe					265
22. Føler alt er anstrengende					266
23. Føler at du ikke er noe verd					267

* *LANGVARIGE BELASTNINGER OG VIKTIGE HENDELSER DET SISTE ÅRET*

Har du i løpet av de siste 12 mndr. hatt mer langvarige vanskeligheter knyttet til følgende belastninger? (Angi hvor stor belastningen har vært ved å sette kryss på hver av linjene)

GRAD AV BELASTNING	1	2	3	4	
	Nei	Noe	Ganske stor	Svært stor	
Boligproblem (vedlikehold, leieforhold o.l.)					268
Arbeid (arbeidsløshet, usikkert arbeid, vanskelige arbeidsforhold)					269
Problem med barnepass (barnehage, dagmamma, syke barn)					270
Økonomi (betaling av husleie, lån, forpliktelse o.l.)					271
Fysisk helse (funksjonshemming, kroppslig sykdom)					272
Samlivsproblemer (mye krangel, alvorlige samlivsproblemer, separasjon, skilsmisse					273
Alkoholproblemer hos noen i husholdningen					274
Helseproblemer hos ektefelle (fysisk eller psykisk)					275
Helseproblemer hos barn (funksjonshemming, sykdom)					276
Problemer med barn (tilsyn, oppdragelse, skole, disiplin)					277
Problem med å tilpasse yrkesliv med barnecomsorg					278
Annet, som:					279

Vi er nå interessert i å få vite noe om hva slags hendelser du har opplevd i løpet av de siste 12 måneder. Kryss av om du har opplevd noen av hendelsene som er listet opp under, og kryss deretter av for om du har opplevd hendelsen som svært negativ / vond, med blandete følelser, positivt / godt eller svært positivt / godt.

		1	2	3	4	5	
	Ja	Svært negativt /vondt	Negativt/ vondt	Blandete følelser	positivt/ godt	svært positivt/ godt	
Flytting							280
Fått nye venner							281
Problem i forhold til venner eller familie							282
Skilsmisse eller separasjon							283
Ny samboer eller giftemål							284
Graviditet eller fødsel							285
Abort							286
Mistet barnepass							287
Fått barnepass							288
Fått ny jobb							289
Mistet arbeidet							290
Akutt sykdom eller skade hos meg selv							291
Akutt sykdom eller skade hos noen som står meg nær							292
Dødsfall hos noen som står meg nær							293
Psykisk, fysisk eller seksuell mishandling							294
Har påført andre skade eller bekymring							295
Har hendt meg noe som jeg ikke orker å si til noen							296
Annet, som							297

Har du for tiden belastninger eller plager som hindrer deg i:	1 **Ja**	2 **Nei**	
Å klare de praktiske gjøremål hjemme på en brukbar måte.	☐	☐	298
Å ha overskudd overfor barn og ektefelle/samboer	☐	☐	299
Å være sammen med venner	☐	☐	300
Å drive med aktiviteter på fritiden	☐	☐	301

Tenk på et problem eller hendelse som har plaget deg, eller som du har tenk mye på, i løpet av den siste måneden.

Beskriv med få ord hva det dreier seg om:_____ 302-303

_____

_____

Angi hvorledes du opplevde problemet eller hendelsen:
(Kryss av på alle linjene)

	1	2	3	4	
	Ikke i det hele tatt	Litt	En del	Ganske mye	
Gjorde problemet deg nervøs eller engstelig?					304
Gjorde problemet deg trist eller deprimert?					305
Gjorde problemet deg sint eller rasende?					306
Generelt, var dette en type problem du kunne endret eller gjort noe med?					307
Generelt, var dette en type problem du bare måtte akseptere, eller bli vant til?					308
Generelt, var dett en type problem som du måtte vite mer om før du kunne handle?					309
Generelt, var dette en type problem hvor du måtte la være å gjøre det som du hadde mest lyst til?					310

Hva gjorde du for å mestre problemet / hendelsen?
Vær vennlig å sett et kryss i de rutene som best forklarer hva du gjorde. Husk å krysse av på alle linjene.

	HVOR OFTE GJORDE DU DETTE?				HVOR MYE HJALP DET?					
	Ikke i det hele tatt	Av og til	Mange ganger	Omtr. hele tiden	Ikke i det hele tatt	Litt	Av og til	Gan-ske mye	Vel-dig mye	
Jeg tenkte på noe annet, prøvde å glemme det og/eller gjorde noe annet, som f.eks å se på TV, for å få det ut av hodet.	0	1	2	3	0	1	2	3	4	311,312
Jeg unngikk andre mennesker, holdt følelsene mine for meg selv og prøvde å løse problemet selv.	0	1	2	3	0	1	2	3	4	313,314
Jeg prøvde å se det positive i situasjonen og/eller tenke på noe godt som kunne komme ut av situasjonen.	0	1	2	3	0	1	2	3	4	315,316
Jeg innså at jeg hadde forårsaket problemet selv og bebreidet meg selv for å ha stelt det i stand.	0	1	2	3	0	1	2	3	4	317,318
Jeg innså at det var andre som hadde skapt problemet og bebreidet dem for å la meg oppleve dette.	0	1	2	3	0	1	2	3	4	319,320
Jeg tenkte på mulige måter å løse situasjonen på, snakket med andre for å få mer informasjon om problemet og/eller prøvde å løse problemet.	0	1	2	3	0	1	2	3	4	321,322
Jeg snakket om hvordan jeg følte meg, ropte, skrek eller kastet ting.	0	1	2	3	0	1	2	3	4	323,324
Forsøkte å roe meg ned ved å snakke til meg selv, be, gå en tur eller bare ved å forsøke å slappe av.	0	1	2	3	0	1	2	3	4	325,326
Jeg fortsatte å tenke og å ønske at dette aldri hadde hendt, og/eller at jeg kunne endre det som hadde hendt.	0	1	2	3	0	1	2	3	4	327,328
Jeg oppsøkte familie, venner og andre for å få støtte og hjelp til å føle meg bedre.	0	1	2	3	0	1	2	3	4	329,330
Jeg bare aksepterte problemet fordi jeg visste at jeg ikke kunne gjøre noe med det.	0	1	2	3	0	1	2	3	4	331,332

* *HELSESPØRSMÅL*

	Ja (1)	Nei (2)		
Har du selv en mer langvarig sykdom eller funksjonshemming?	☐	☐		333
I tilfelle ja, nevn hvilken:				334

Er det lenge siden du sist hadde kontakt med lege for annet enn forhold knyttet til svangerskapet?	1 ☐	Aldri	335
	2 ☐	0-3 mndr.	
	3 ☐	6 mndr.	
	4 ☐	1 år	
	5 ☐	2-3 år	
	6 ☐	4 år eller mer	
Er det lenge siden du sist hadde kontakt med psykiater/psykolog?	1 ☐	Aldri	336
	2 ☐	0-3 mndr.	
	3 ☐	6 mndr.	
	4 ☐	1 år	
	5 ☐	2-3 år	
	6 ☐	4 år eller mer	

Har du, eller ektefelle/samboer, i løpet av **de siste 12 mndr.** hatt kontakt med (kryss av på alle linjene):	**Ja** (1)	**Nei** (2)		
	☐	☐	Hjemmesykepleie	337
	☐	☐	Hjemmehjelp	338
	☐	☐	Husmorvikar	339
	☐	☐	Annen sosial hjelp	340
	☐	☐	Arbeidskontor	341
	☐	☐	Annet	342

Har du vært innlagt på sykehus	**Siste 12 mndr.** (1)	**Tidligere** (2)		
	☐	☐	Vanlig sykehus	343
	☐	☐	Psykiatr. sykehus/ klinikk	344
	☐		Har aldri vært innlagt på sykehus	345

Har du vært syk i løpet av de siste 12 måneder?	1 ☐	Ja	346
	2 ☐	Nei	
Hvis ja, hva var det som feilte deg:			347,348
Har du de siste 12 mndr. vært utsatt for ulykker eller blitt skadet?	1 ☐	Ja	349
	2 ☐	Nei	

Hvor ofte har du i løpet av den siste måneden brukt medikamenter som er

	A Smerte-stillende	B avslappende/ beroligende		
1	☐	☐	Daglig	
2	☐	☐	Hver uke, men ikke hver dag	350 A
3	☐	☐	Sjeldnere enn hver uke	351 B
4	☐	☐	Aldri	

Hvordan anser du helsen din **for tiden** å være?

1	☐	Dårlig
2	☐	Ikke helt god
3	☐	God
4	☐	Svært god

352

VI VIL NÅ GÅ OVER TIL SPØRSMÅL OM DIN KONTAKT MED ANDRE.

Hvor ofte ser du, eller snakker med i telefonen, følgende personer:
(Kryss av på alle linjene)

	1	2	3	4	5	6	7	
	Ingen kontakt	Sjelden/ aldri	1-2 ganger i året	3-11 ganger i året	Månedlig	Ukentlig	Daglig	
Foreldre								353
Søsken								354
Svigerfamilie								355
Annen slekt								356
Venner								357

Har du noen fortrolige (utenom ektefelle/ samboer) som du kan snakke med om det meste?

1	☐	Jeg har ingen andre fortrolige
2	☐	Jeg har 1 fortrolig
3	☐	Jeg har 2 fortrolige
4	☐	Jeg har flere fortrolige

358

Har du noen (utenom ektefelle/samboer) som du kan regne med å få praktisk hjelp fra hvis du har problemer av betydning?

1	☐	Nei, ingen
2	☐	Ja, én
3	☐	Ja, 2
4	☐	Ja, 3 - 5
5	☐	Ja, 5 eller fler

359

FAMILIE OG SLEKT

Når folk beskriver forholdet til ektefelle/samboer, bruker de ofte setninger som nedenfor. Hvordan stemmer disse beskrivelsene for deg?

Jeg har for tiden ingen ektefelle/samboer ☐ 360

Vi hjelper og støtter hverandre.	helt enig 1 2 3 4 5 uenig helt	R	361
Det er en følelse av samhold mellom oss.	helt enig 1 2 3 4 5 uenig helt	R	362
Vi viser sjelden åpent sinne hjemme.	helt enig 1 2 3 4 **5** uenig helt	(R)	363 R
Vi kritiserer hverandre ofte.	helt enig **1** 2 3 4 5 uenig helt	R (÷R)	364
Når vi er uenige anstrenger vi oss for å glatte over og holde fred.	helt enig **1** 2 3 4 **5** uenig helt	(R)	365 R
Vi gjør sjelden noe på egen hånd i vår familie.	helt enig **1** 2 3 4 5 uenig helt	R (÷R)	366
Vi har selvstendige meninger i vår familie.	helt enig **1** 2 3 4 5 uenig helt		367
Jeg føler meg nær knyttet til min ektefelle/samboer.	helt enig 1 2 3 4 5 uenig helt		368 R
Min partner legger rimelig vekt på mine meninger.	helt enig 1 2 3 4 5 uenig helt		369 R
Det forekommer at jeg føler meg utenfor, selv hjemme hos meg selv.	helt enig **1** 2 3 4 **5** uenig helt	R	370

Når folk beskriver sin <u>opprinnelige familie</u> (sine foreldre, og evt. søsken), bruker de ofte setninger som nedenfor. Hvordan stemmer disse beskrivelsene alt i alt for deg?

Jeg føler meg nær knyttet til min familie	helt enig 1 2 3 4 5 uenig helt	371
Min familie legger rimelig vekt på mine meninger	helt enig 1 2 3 4 5 uenig helt	372
Det forekommer at jeg føler meg utenfor selv i min egen familie	helt enig 1 2 3 4 5 uenig helt	373

* *VENNER*

Omtrent hvor mange venner har du nå for tiden som du kan stikke innom eller ringe til bare for å prate? 374

1 ☐ Ingen
2 ☐ 1
3 ☐ 2
4 ☐ 3-4
5 ☐ 5 eller fler

Kjenner dine venner hverandre? 375

1 ☐ Ja, de fleste
2 ☐ Ja, noen
3 ☐ Nei, nesten ingen
4 ☐ Nei, ingen

Hvor viktig er det for deg å treffe nære venner ofte? 376

1 ☐ Svært viktig
2 ☐ Ganske viktig
3 ☐ Hyggelig, men ikke så viktig
4 ☐ Ikke viktig

Har noen av dine venner små barn? 377

1 ☐ Ja
2 ☐ Nei

Hvis det er noe med barnets væremåte eller oppdragelse som bekymrer deg, hvem finner du det mest naturlig å snakke med?
(Du kan krysse av for flere)

☐ Ingen 378
☐ Ektefelle/samboer 379
☐ Nær venn 380
☐ Nær slektning 381
☐ Arbeidskollega 382
☐ Nabo 383
☐ Dagmamma/barnehage 384
☐ Andre som er i samme situasjon 385
☐ Helsesøster 386
☐ Lege 387
☐ Andre 388

Er det ofte at andre spør deg om råd når de har problemer **de** strir med? 389

1 ☐ Aldri
2 ☐ Sjelden
3 ☐ Ofte
4 ☐ Svært ofte

Hender det at andre folks behov for å snakke med deg kan oppleves som en belastning? 390

1 ☐ Aldri
2 ☐ Sjelden
3 ☐ Ofte
4 ☐ Svært ofte

Når folk beskriver **sine venner**, bruker de ofte setninger som nedenfor. Hvordan stemmer disse beskrivelsene for deg?

Jeg føler meg nær knyttet til mine venner	helt enig 1 2 3 4 5 helt uenig	391
Mine venner legger rimelig vekt på mine meninger	helt enig 1 2 3 4 5 helt uenig	392
Det forekommer at jeg føler meg utenfor selv blant venner	helt enig 1 2 3 4 5 helt uenig	393

* ***ALT I ALT***

Alt i alt, synes du at du får tilstrekkelig:

Kontakt med andre	Ja 1 2 3 4 5 Nei	394
Omsorg/støtte	Ja 1 2 3 4 5 Nei	395
Forståelse/respekt	Ja 1 2 3 4 5 Nei	396
Praktisk hjelp med barnet	Ja 1 2 3 4 5 Nei	397
Annen praktisk hjelp	Ja 1 2 3 4 5 Nei	398
Følelse av å høre til i et fellesskap	Ja 1 2 3 4 5 Nei	399

Hvor ofte har du følelsen av at det er lite mening i det du driver med til daglig?	Meget ofte 1 2 3 4 5 6 7 Meget sjelden eller aldri	400
Føler du stort sett at forhold du ikke er herre over styrer livet ditt?	Meget ofte 1 2 3 4 5 6 7 Meget sjelden eller aldri	401
Slik som det nå er blitt, synes du at du stort sett kan bruke dagene dine slik som du selv vil?	Meget ofte 1 2 3 4 5 6 7 Meget sjelden eller aldri	402

* *SPØRSMÅL OM DITT EGET TEMPERAMENT*

Kryss av i de ruter som du mener er karakteristisk for deg.

Kryss på alle linjene.

	1	2	3	4	5	
	Veldig typisk	Ganske typisk	Både/og	Lite typisk	Ikke typisk	
Jeg liker å være sammen med andre mennesker.						403
Jeg er vanligvis på farten.						404
Jeg blir lett skremt.						405
Jeg blir ofte lei meg.						406
Når jeg ikke er fornøyd sier jeg fra med én gang.						407
Jeg er litt av en einstøing.						408
Jeg liker å være travelt opptatt hele tiden.						409
Jeg regnes for å vær varmblodig og hissig.						410
Jeg blir ofte frustrert.						411
Jeg lever i høyt tempo.						412
Vanlige hendelser plager og bekymrer meg.						413
Jeg føler meg ofte usikker.						414
Det er mange ting som ergrer meg.						415
Når jeg blir skremt blir jeg nærmest panisk.						416
Jeg vil heller samarbeide med andre enn å jobbe alene.						417
Jeg blir lett følelsesmessig oppskaket.						418
Jeg føler meg ofte fylt av virketrang.						419
Det skal mye til for å gjøre meg sint.						420
Jeg redd for færre ting enn folk flest.						421
Jeg synes at andre mennesker er mer stimulerende enn noe annet.						422

TILDELT NR. |___|___|___|___|___|___| 1-6

4. kartlegging

SMÅBARNFORELDRES

TRIVSEL, HELSE OG LEVEKÅR

- BARN MELLOM ÅTTE OG NI ÅR

KOMMUNENUMMER |__| 7

SPØRRESKJEMA TIL BRUK I FJERDE RUNDE I PROSJEKTET

"MESTRING OG BESKYTTELSE"

Tildelt nr.....|___|___|___|___|___|___|

Dato for utfylling/intervju.....|___|___|___|___|___|___| 8 - 13

Barnets fødselsdato..... |___|___|___|___|___|___| 14 - 19

Barnets kjønn.....|___| Gutt |___| Pike 20
1 2

Er du barnets.....|___| Mor |___| Far 21
1 2

Hvilket år er du født?.....|___|___| Årstall 22 - 23

Kan vi kontakter deg med spørsmål om fortsatt deltakelse dersom .....|___| Ja |___| Nei 24
det skal sendes ut en ny runde med spørreskjemaer om 4-5 år? 1 2

Hvis du har tvillinger, er det fint om du anvender to skjemaer når du skal besvare spørsmål som angår hver av barna. Mens det ene spørreskjemaet skal fylles ut på vanlig måte, er det bare nødvendig å besvare noen av spørsmålene på det andre (se eget ark som angir hvilke spørsmål som skal fylles ut på skjema nr. to).

* FAMILIEFORHOLD *

Er det andre barn som også bor hos deg? 1 |___| Ja 2 |___| Nei 25

Hvis ja, hvor mange *andre* barn? |___| Antall 26

Hvis ja, hvilke årstall er det/de andre barna født? |___|___| |___|___| |___|___| |___|___| 27-34

Hvem bor sammen med deg og barnet/ barna?
(Kryss gjere av for flere)

1 |___| Ingen andre
2 |___| Ektefelle/samboer
3 |___| Foreldre 35
4 |___| Andre

Er du:

1 |___| Gift
2 |___| Ugift
3 |___| Separert/skilt 36
4 |___| Enke/enkemann

Har du norsk som morsmål? 1 |___| Ja 2 |___| Nei 37

Hvis nei; hvilket morsmål har du? _____ 38-39

Er foreldrene dine norske? 1 |___| Begge 2 |___| En av dem 3 |___| Ingen 40

Bor du i:

1 |___| Blokk/leilighet
2 |___| Tomannsbolig/rekkehus 41
3 |___| Enebolig
4 |___| På gård
5 |___| Annet

Bor du i:

1 |___| By
2 |___| Tettsted 42
3 |___| Spredt bebyggelse

* UTDANING OG ARBEID *

Hvilken utdanning har du?
Oppgi bare høyest fullførte utdanning

1 |___| 9-årig grunnskole eller mindre. 43
2 |___| Ett eller to år på videregående skole (10-11 år).
3 |___| Artium, økonomisk gymnas, treårig videregående skole.
4 |___| Høyskole/universitet, mindre enn 4 år.
5 |___| Høyskole/universitet, 4 år eller mer.

Er du for tiden i lønnet arbeid?
(*Sett bare kryss i én rute*)

1 |___| Nei: Hjemmearbeidende/under utdanning/trygdet
2 |___| Ja, deltidsarbeid (mindre enn 50%) 44
3 |___| Ja, deltidsarbeid (50-80%)
4 |___| Ja, heltidsarbeid (80-100%)

Hvilken utdanning har din partner?
Oppgi bare høyest fullførte utdanning

1 |___| 9-årig grunnskole eller mindre. 45
2 |___| Ett eller to år på videregående skole (10-11 år).
3 |___| Artium, økonomisk gymnas, treårig videregående skole.
4 |___| Høyskole/universitet, mindre enn 4 år.
5 |___| Høyskole/universitet, 4 år eller mer.

Er din eventuelle partner for tiden i lønnet arbeid?
(*Sett bare kryss i én rute*)

1 |___| Har ingen partner nå 46
2 |___| Nei, hjemmearbeidende/under utdanning/trygdet
3 |___| Ja, deltidsarbeid (mindre enn 50%)
4 |___| Ja, deltidsarbeid (50-80%)
5 |___| Ja, heltidsarbeid (80-100%)

Har du spesielle omsorgsoppgaver som tilsyn eller pleie av:

1 Ja	2 Nei		
|___|	|___|	Gamle	47
|___|	|___|	Andre voksne	48
|___|	|___|	Funksjonshemmede/ langvarig syke barn	49

* ØKONOMI *

Hvordan klarer du/familien seg med den økonomien du/dere har?

1 |___| Vi klarer oss svært dårlig
2 |___| Vi klarer oss dårlig
3 |___| Vi klarer oss 50
4 |___| Vi klarer oss bra
5 |___| Vi klarer oss meget bra

Har du, eller noen i husholdningen din, fått økonomisk støtte fra sosialkontoret i løpet av *de siste 12 mndr.*?

1 |___| Ja
2 |___| Nei 51
3 |___| Vet ikke

Kan du *anslå omtrent* hvor høy inntekt du/dere hadde siste år?
(*Samlet brutto årsinntekt før skatt og fradrag er trukket*)

1 |___| Ingen inntekt
2 |___| Under100 000
3 |___| 100 - 150 000
4 |___| 150 - 200 000 52
5 |___| 200 - 300 000
6 |___| 300 - 400 000
7 |___| 400 - 500 000
8 |___| 600 eller mer

* BARNETS FYSISKE HELSE *

Har barnet *funksjonsvansker* som antas å bli langvarige?

1 |___| Ja. 53
2 |___| Nei.
3 |___| Under utredning.
4 |___| Er bekymret for at det kan være noe galt.

Hvis ja, muligens eller bekymret, - kan du angi hvilke typer vansker barnet viser tegn på å ha: (*Du kan krysse av i flere ruter*)

|___| Synsvansker 54
|___| Hørselsvansker 55
|___| Cerebral parese 56
|___| Uspesifikke tegn på hjerneskade 57
|___| Downs syndrom (mongoloid) 58
|___| Ryggmargsbrokk 59
|___| Talevansker 60
|___| Leppe/ganespalte 61
|___| Hjertefeil 62
|___| Hoftefeil 63
|___| Tarm/fordøyelses lidelser 64
|___| Brokk 65
|___| Andre, nevn hvilke: 66

Nå vil vi se på sykdommer som *stadig gjentar* seg og mer *akutt* sykdom og skade.

Har barnet vært plaget av en eller flere av følgende sydommer det siste året? Kryss både av for *hva* det var som feilte barnet, om sykdommen har vært *langvarig* og om barnet har vært henvist til spesialist eller ikke. (Med *langvarig* menes her enten at tilstanden har vart i mer enn tre måneder eller at det har vært hyppige episoder (3-4 ganger) i løpet av en tremåneders periode).

TYPE LIDELSE	HAR HATT SYKDOMMEN?			VARIGHET?		HENVIST TIL SPESIALIST?		
	Nei 1	*Ja* 2	*Usikker - under utredning* 3	*Langvarig (over 3 mnd. m.v.)* 1	*Kortvarig (enkelt-episoder)* 2	*Nei* 1	*ja* 2	
Astma								67,68,69
Eksem								70,71,72
Høysnue								73,74,75
Bronkitt/lungebetennelse								76,77,78
Ørebetennelse								79,80,81
Urinveisinfeksjon (blærekatarr eller nyrebekkenbetennelse)								82,83,84
Kramper								85,86,87
Magesmerter								88,89,90
Oppkast/diare/forstoppelse								91,92,93
Hodepine								94,95,96
Ledd-/muskelsmerter								97,98,99
Feber/forkjølelse								100,-01,-02
Feber/forkjølelse med øreverk								103,-04,-05
Feber/forkjølelse med halsesyke								106,-07,-08
Diabetes (sukkersyke)								109,-10,-11
Barnesykdom, som f.eks. vannkopper, meslinger o.l.								112,-13,-14
Skader som trengte medisinsk behandling (brudd, forbrenning, forgiftninger, hjernrystelse, kutt)								115,-16,-17
Andre lidelser, nevn hvilke:								118-19,-20

Har du inntrykk av at barnet er:

1 |___| Friskere enn andre barn på samme alder
2 |___| Mer sykt enn andre barn på samme alder 121
3 |___| Omtrent like friskt/sykt som andre

Om barnet bruker medisiner: Hvor ofte - *i løpet av den siste måneden* - har han/hun brukt medikamenter som er:

	1 *Aldri*	2 *Sjeldnere enn hver uke*	3 *Hver uke, men ikke daglig*	4 *Daglig*	
Smertestillende					122
Avslappende eller beroligende					123
Sovemedisiner					124
Andre, nevn hvilke					125

* *SNAKKING I FORSKJELLIGE SITUASJONER* *

Mange barn er litt forsiktige med å snakke når de møter mennesker de ikke kjenner. De fleste begynner å snakke etter hvert, mens noen barn ikke gjør dette. Disse barna snakker bare med mennesker de kjenner veldig godt og er tause overfor andre. Hjemme snakker de vanligvis til nærmeste familie, og kanskje til noen få venner, mens de kan være helt tause i barnehagen eller på skolen. Noen kan snakke til de andre barna i barnehagen eller på skolen, men ikke til de voksne.

Har ditt barn hatt det slik? 1 |___| Ja, tydelig 2 |___| Ja, muligens 3 |___| Nei 126

I tilfelle ja:

hvor gammel var han/hun da det begynnte? |___| Antall år |___| Antall mnd 127-29

er han/hun slik nå? 1 |___| Ja 2 |___| Nei 130

hvis det er gått over, hvor lenge varte det? |___| Antall år |___| Antall mnd. 131-33

* TILHØRIGHET TIL NABOLAGET *

Hvor mange ganger har du flyttet i løpet av de siste 5 årene?

|___| Ganger 134

Hvor lenge har du bodd i det nærmiljøet du bor i nå?

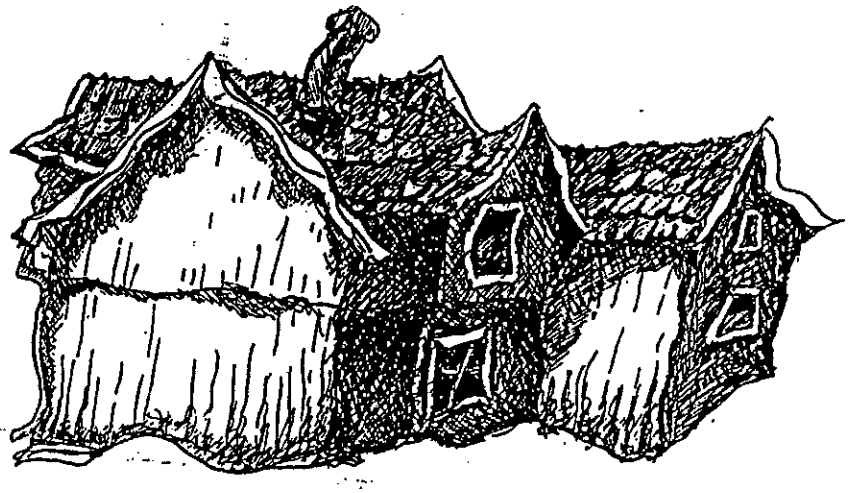
|___|___| År |___|___| Evt. mnd. 135-136

Føler du tilhørighet til det stedet du bor nå?

1 |___| I stor grad
2 |___| I noen grad
3 |___| I liten grad 137
4 |___| Ikke i det hele tatt
5 |___| Vet ikke

Er det steder i ditt nærmiljø hvor naboer naturlig møter hverandre for å slå av en prat?

1 |___| Ja, mange
2 |___| Ja, noen 138
3 |___| Nei



* BARNS LEKEMILJØ *

Synes du dette nabolaget er et godt sted å bo for barnefamilier?

1 |___| Veldig bra
2 |___| Nokså bra
3 |___| Ikke særlig bra 139
4 |___| Absolutt ikke bra
5 |___| Vet ikke

Hvor mange andre barnefamilier bor det i ditt nabolag?

1 |___| Ingen
2 |___| 1
3 |___| 2-5 140
4 |___| Fler enn 5
5 |___| Vet ikke

Er det i ditt nabolag lekeplasser, løkker, bakgårder hager o.l. hvor barn kan leke relativt trygt uten tilsyn?

1 |___| Ja, mange
2 |___| Ja, noen 141
3 |___| Nei

Blir det av og til organisert aktiviteter i nabolaget som f.eks. 17.mai-fester, dugnader, e.l.?

1 |___| Ja, for voksne
2 |___| Ja, for barn og voksne 142
3 |___| Nei
4 |___| Vet ikke

Hvilke problemer mener du går ut trivselen og helsen til barne-familiene der du bor? (*Her kan du krysse av for flere*)

1 **Ja**	2 **Nei**		
|___|	|___|	Mye ut- og innflytting	143
|___|	|___|	Lite sosialt fellesskap	144
|___|	|___|	Dyre boliger	145
|___|	|___|	Lite offentlig kommunikasjon	146
|___|	|___|	Manglende tilbud om skole-fritidsordning	147
|___|	|___|	Mye pendling	148
|___|	|___|	Mye biltrafikk, støy osv.	149
|___|	|___|	Luftforurensning	150
|___|	|___|	Lang reisevei til arbeidet	151
|___|	|___|	Manglende sikring av farlige steder i omgivelsene; trafikk, vann, skrenter osv.	152
|___|	|___|	Mye alkohol- og rusmiddelmisbruk	153

Annet som_____ 154

* BARNETS FORHOLD TIL ANDRE *

Hvor ofte er han/hun sammen med andre barn i fritiden (utenom eventuelle søsken)?

1 |___| Daglig
2 |___| Flere ganger i uken
3 |___| Ukentlig 155
4 |___| Hver måned
5 |___| Sjeldnere

Hvor mange barn kjenner han/hun så godt at de leker sammen utenom skoletid flere ganger i uken?

1 |___| Ingen
2 |___| En eller to
3 |___| Tre til fem 156
4 |___| Fler enn fem

Har barnet andre voksne enn deg/dere som han/hun er *nært knyttet til*? (*Her kan du krysse av for flere*).

|___| Ingen andre 157
|___| Besteforeldre 158
|___| Tanter/onkler/annen slekt 159
|___| Venner av meg/oss 160
|___| Naboer 161
|___| Lærere på skolen 162
|___| Andre 163

Hvor ofte besøker barnet andre voksne på fritiden uten at du/dere er med?

1 |___| Daglig
2 |___| Flere ganger i uken
4 |___| Flere ganger i måneden 164
5 |___| Omlag hver måned
6 |___| Sjeldnere enn hver måned
7 |___| Aldri

Nedenfor følger en rekke beskrivelser av hvorledes barn oppfører seg. Vi ber deg først om å krysse av for *hvor ofte* du mener at barnet ditt, nå for tiden, gjør det som er beskrevet. Dernest ber vi deg vurdere *hvor viktig* du mener at hver av handlingene er for barnets utvikling

(Husk å krysse av på alle linjene).	1	2	3	4	1	2	3	
	Aldri	**Av og til**	**Ofte**	**Svært ofte**	**Ikke så viktig**	**Viktig**	**Svært viktig**	
Bruker fritiden hjemme på en positiv måte								165
Holder rommet sitt ryddig uten å bli bedt om det								166
Snakker i ordentlig tone hjemme								167
Gir rimelig uttrykk for skuffelse når han/hun ikke lykkes								168
Presenterer seg uoppfordret når han/hun møter nye mennesker								169
Reagerer forståelig hvis andre barn dytter eller slår								170
I butikken ber hun/han ekspeditøren om hjelp eller informasjon								171
Lytter til det som sies på møter, for eksempel i en klubb eller en kirke								172
Avviser på en høflig måte hvis andre ber om noe urimelig								173
Inviterer andre barn hjem								174
Roser andre i familien når de har lykkes med noe								175
Får lett venner								176
Har mange interesser								177
Unngår situasjoner som kan skape problemer								178
Rydder leker, egne ting eller annet i huset								179
Tilbyr seg å hjelpe andre i familien								180
Tåler kritikk								181
Svarer greit i telefonen								182
Hjelper deg/dere med husarbeidet uten å bli bedt om det								183
Protesterer mot regler i hjemmet, hvis de virker urimelige								184

	Aldri	Av og til	Ofte	Svært ofte	Ikke så viktig	Viktig	Svært viktig	
Forsøker først å gjøre pliktene sine i huset selv, før han/hun ber deg om hjelp								185
Kan styre sinnet sitt i konflikter med andre barn								186
Blir godt likt av andre								187
Starter samtaler heller enn å vente på at andre skal snakke til ham/henne								188
Avslutter konflikter med deg på en fredelig måte								189
Kan styre sinnet sitt i konflikter med deg								190
Sier positive ting til venner eller andre barn i familien								191
Utfører sine plikter i huset innen rimelig tid (Har ikke plikter |___|)								192
Ber om lov før hun/han bruker noe som tilhører andre i familien								193
Virker trygg på seg selv når han/hun er sammen med andre barn								194
Ber om lov før hun/han går ut når dette er forventet								195
Reagerer forståelig på erting fra jevnaldrende venner eller slektninger								196
Bruker tiden fornuftig i påvente av hjelp med lekser eller andre oppgaver								197
Godtar vennenes forslag til lek								198
Skifter lett fra en aktivitet til en annen								199
Samarbeider med andre i familien uten å bli bedt om det								200
Kan melde fra om uhell eller ulykker til rette vedkommende								201
Kan ta imot ros eller skryt fra venner								202
Er glad i å gå på skolen								203
Arbeidet ordentlig med hjemmeleksene								204
Lære fort nye ting på skolen								205
Blir fort forlegen og flau når han/hun skal gjøre eller si ting alene mens andre ser og hører på (svare høyt i klassen, opptre, hilse, ol.)								206

* DINE NABOER *

Hvor mange naboer stopper du og tar en prat med hvis du møter dem tilfeldig?

1 |___| Ingen
2 |___| 1
3 |___| 2
4 |___| 3-4
5 |___| 5 eller fler

207

Hvor mange av disse naboene kjenner du ved navn?

1 |___| Ingen
2 |___| 1
3 |___| 2
4 |___| 3-4
5 |___| 5 eller fler

208

Hvor mange familier/husstander i nabolaget kjenner du så godt at du besøker dem av og til?

1 |___| Ingen
2 |___| 1
3 |___| 2
4 |___| 3-4
5 |___| 5 eller fler

209

Hvor mange naboer regner du som dine nære venner?

1 |___| Ingen
2 |___| 1
3 |___| 2
4 |___| 3-4
5 |___| 5 eller fler

210

		1 **Ja**	2 **Nei**	
Er du og naboene til hjelp for hverandre f.eks når det gjelder å: *(her kan du sette* Kryss ved flere)	Vanne blomster, ta inn post, for hverandre når noen er bortreist.	|___|	|___|	211
	Låne daglige ting.	|___|	|___|	212
	Se etter hverandres barn som leker ute.	|___|	|___|	213
	Være barnevakt for hverandre om kvelden.	|___|	|___|	214
	Passe hverandres barn om ettermiddagen om dere skal bort	|___|	|___|	215
	Annen praktisk hjelp.	|___|	|___|	216

Vi vil nå gå over til spørsmål om barnets temperament og væremåte.

* BARNETS TEMPERAMENT *

*Husk å sette ett kryss på **hver** linje.*

	1 **Veldig typisk**	2 **Ganske typisk**	3 **Både/ og**	4 **Lite typisk**	5 **Ikke typisk**	
Barnet blir lett sjenert						217
Barnet har lett for å gråte						218
Barnet liker å være sammen med andre mennesker						219
Barnet er alltid på farten						220
Barnet vil heller leke med andre enn å leke alene						221
Barnet viser lett følelser						222
Barnet beveger seg vanligvis i et rolig tempo						223
Barnethar lett for å få venner						224
Barnet er i aktivitet og løper omkring med en gang det våkner om morgenen						225
Barnet synes at andre mennesker ermer spennende enn noe annet						226
Barnet sutrer og gråte ofte						227
Barnet er veldig sosialt						228
Barnet er full av energ						229
Det tar lang tid før barnet blir trygg på fremmende						230
Barnet har lett for å bli oppskaket						231
Barnet foretrekker å være alene						232
Barnet foretrekker stillesittende, rolige leker fremfor mer aktive						233
Barnet mistrives når det er alene						234
Barnet reagerer intenst når det blir opphisset						235
Barnet er veldig tillitsfullt mot fremmede						236
Barnet leker mye mindre nå enn hva det gjorde for en stund siden.						237
Barnet sitter ofte og piller på småting, vifter med hendene, vugger fra side til side o.l.						238
Har smerter eller vondt (magen, hodet, kaster opp).						239

	1 **Veldig typisk**	2 **Ganske typisk**	3 **Både/ og**	4 **Lite typisk**	5 **Ikke typisk**	
Barnet mitt er veldig redd for å dumme seg ut.						240
Om barnet mitt har "dummet seg ut", er det tydelig at han/hun blir skamfull.						241
Når barnet begynner å bygge noe eller å legge puslespill, holder han/hun på med dette helt til det er ferdig, uansett om det tar lang tid.						242
Barnet mitt liker å gjøre seg ferdig med en oppgave eller aktivitet før han/hun begynner med noe annet.						243
Barnet mitt vil ikke gå fra en lek eller en aktivitet som han/hun ikke har gjort ferdig.						244
Barnet mitt holder på med den samme aktiviteten (f.eks. puslespill, byggesett, lesing) i lang tid.						245
Når en lek eller et spill er vanskelig, begynner barnet mitt fort å gjøre noe annet.						246
Barnet mitt øver seg på en aktivitet (f.eks. en ny sang, puslespill, skriving) helt til han/hun får det til.						247
Barnet mitt blir opptatt av rolige aktiviteter som å lese eller se i bøker, tegne og lignende.						248
Når barnet mitt blir irritert på, eller lei av, en oppgave, kaster hun/han ting, gråter, slamrer med dører osv.						249
Hvis barnet mitt ønsker en leke, eller godterier, når vi handler, godtar hun/han lett å få noe annet i stedet.						250
Hvis barnet mitt først har protestert på noe, slik som å børste håret, vil hun/han fortsette å motsette seg dette i noen måneder.						251
Når barnet mitt er sint for noe, er det vaskelig å avlede henne/ham						252
Hvis jeg ikke kjøper det barnet mitt vil ha (for eksempel godterier eller klær) når vi er på handletur sammen, gråter og skriker hun/han.						253
Det er vanskelig å trøste barnet mitt når hun/han er ute av seg.						254
Barnet mitt blir tydelig oppskaket hvis en favorittleke eller et favorittspill ikke fungerer.						255
Når barnet mitt protesterer mot å ha på seg visse klesplagg, argumenter han/hun høylytt eller gråter.						256
Hvis barnet begynner å leke med noe og jeg vil at hun/han skal holde opp, er det vanskelig å vende hennes/hans oppmerksomhet mot noe annet.						257
Når barnet mitt er veldig opptatt av hva adre synes om ham/henne.						258
Barnet mitt like godt å være midtpunkt.						259
Barnet mitt trives med å få oppmerksomhet fra barn eller voksne selv om han/hun ikke kjenner dem så godt.						260

* BARNETS VÆREMÅTE *

Her er det meningen at du skal angi hvor godt hvert av utsagnene stemmer på ditt barn: 'Stemmer ikke', 'Stemmer delvis' eller 'Stemmer helt'. Prøv å svare på alt selv om du ikke er helt sikker eller synes utsagnet virker rart. Svar på grunnlag av barnets oppførsel ***de siste seks månedene eller dette skoleåret.***

	1 *Stemmer ikke*	2 *Stemmer delvis*	3 *Stemmer helt*	
Er omtenksom, tar hensyn til andre menneskers følelser				261
Er rastløs, overaktiv, kan ikke være lenge i ro				262
Klager ofte over hodepine, vondt i magen eller kvalme				263
Deler gjerne med andre barn (godter, leker, andre ting)				264
Har ofte raserianfall eller dårlig humør				265
Er ganske ensom, leker ofte alene				266
Er som regel lydig, gjør vanligvis det voksne ber om				267
Har mange bekymringer, virker ofte bekymret				268
Er hjelpsom hvis noen er såret, lei seg eller føler seg dårlig				269
Er stadig urolig eller i bevegelse				270
Har mistet en god venn				271
Slåss ofte med andre barn eller mobber dem				272
Er ofte lei seg, nedfor, eller på gråten				273
Blir vanligvis likt av andre barn				274
Er lett å avlede, mister lett konsentrasjonen				275
Er nervøs eller klengete i nye situasjoner, blir lett utrygg				276
Er snill mot yngre barn				277
Lyver eller jukser ofte				278
Blir plaget eller mobbet av andre barn				279
Tilbyr seg ofte å hjelpe andre (foreldre, lærere, andre barn)				280
Tenker seg om før hun/han handler (gjør noe)				281
Stjeler hjemme, på skolen eller andre steder				282
Kommer bedre overens med voksne enn med barn				283
Er redd for mye, lettskremt				284
Fullfører oppgaver, har god konsentrasjonsevne				285
Om du har andre kommentarer eller bekymringer, nevn disse:				286

Samlet, synes du at barnet ditt har hatt vansker på ett eller eller flere av følgende områder: med følelser, konsentrasjon, oppførsel, eller med å komme overens med andre menneseker?

1 |___| Nei 2 |___| Ja, små vansker 3 |___| Ja, tydelige vansker 4 |___| Ja, alvorlige vansker 287

Hvis du har svart "Ja" på dette, er det fint om du også vil svare på de fire følgende spørsmålene:

1. Hvor lenge har disse vanskene vært tilstede?

1 |___| Mindre enn en måned
2 |___| 1-5 måneder 288
3 |___| 6-12 måneder
4 |___| Mer enn ett år

2. Blir barnet selv forstyrret eller plaget av vanskene?

1 |___| Ikke i det hele tatt
2 |___| Bare litt 289
3 |___| En god del
4 |___| Mye

3. Påvirker vanskene barnets dagligliv på noen av de følgende områdene?

	1 *Ikke i det hele tatt*	2 *Bare litt*	3 *En god del*	4 *Mye*	
					290
Hjemme/i familien					291
Forholdet til venner					292
Læring på skolen					293
Fritidsaktiviteter					294

4. Er vanskene en belastning for deg eller for familien som helhet?

1 |___| Ikke i det hele tatt
2 |___| Bare litt 295
3 |___| En god del
4 |___| Mye

* *VÆREMÅTE – SAMMENLIGNET MED BARN FLEST* *

Alt i alt, hvordan vil du beskrive barnets temperament? Sammenlign henne/ham med andre barn på samme alder som du kjenner og kryss av for hva du mener passer best for ditt barn.

Han/hun har *sterke følelser* (glede, sinne, angst).

1 |___| Mye mer enn barn flest
2 |___| Litt mer enn barn flest
3 |___| Omtrent som vanlig 296
4 |___| Litt mindre enn barn flest
5 |___| Mye mindre enn barn flest

Han/hun foretar seg en rekke ting og er stort sett *i aktivitet* hele tiden.

1 |___| Mye mer enn barn flest
2 |___| Litt mer enn barn flest
3 |___| Omtrent som vanlig 297
4 |___| Litt mindre enn barn flest
5 |___| Mye mindre enn barn flest

Han/hun er *utadvendt,* er snar til å ta kontakt og snakke med andre mennesker.

1 |___| Mye mer enn barn flest
2 |___| Litt mer enn barn flest
3 |___| Omtrent som vanlig 298
4 |___| Litt mindre enn barn flest
5 |___| Mye mindre enn barn flest

Han/hun er *sjenert og engstelig* når dere er i ukjente omgivelser eller møter nye mennesker.

1 |___| Mye mer enn barn flest
2 |___| Litt mer enn barn flest
3 |___| Omtrent som vanlig 299
4 |___| Litt mindre enn barn flest
5 |___| Mye mindre enn barn flest

Barnets *humør* er stort sett

1 |___| Mye bedre enn hos barn flest
2 |___| Litt bedre enn hos barn flest
3 |___| Omtrent som vanlig 300
4 |___| Litt mer variabelt enn hos barn flest
5 |___| Mye mer variabelt enn hos barn flest

***Jevnt over*, vil du si at barnet er:**

- Klart lettere å ha med å gjøre enn barn flest. 1 |___|
- Litt lettere å ha med å gjøre enn barn flest. 2 |___|
- Omtrent vanlig. 3 |___| 301
- Litt vanskeligere å ha med å gjøre enn barn flest. 4 |___|
- Klart vanskeligere å ha med å gjøre enn barn flest. 5 |___|

Nå skal vi forlate barnet og gå over til spørsmål som omhandler deg selv.

* *DIN OPPLEVELSE AV STRESS SISTE UKE* *

Nedenfor er en liste over problemer eller plager folk av og til har. Vurder hvor mye av de følgende plager eller ulemper du har hatt *siste uke* *(til og med i dag)* *Sett ett kryss på hver linje.*

	1	2	3	4	
	Ikke i det hele tatt	*Litt*	*En god del*	*Svært mye*	
Blir plutselig skremt uten grunn					302
Føler deg engstelig					303
Føler deg svimmel eller kraftløs					304
Er nervøs eller urolig					305
Har hjertebank					306
Skjelver					307
Føler deg anspent eller opphisset					308
Har hodepine					309
Har anfall av redsel eller panikk					310
Er rastløs, kan ikke sitte rolig					311
Føler deg slapp og uten energi					312
Anklager deg selv for ting					313
Har lett for å gråte					314
Har dårlig appetitt					315
Har vanskelig for å sove					316
Har lite håp for framtiden					317
Føler deg nedfor					318
Føler deg ensom					319
Har tanker om å ta ditt eget liv					320
Følelse av å være fanget					321
Bekymrer deg for mange ting					322
Har ikke interesse for noe					323
Føler at alt er anstrengende					324
Føler at du ikke er noe verd					325

* LANGVARIGE BELASTNINGER OG VIKTIGE HENDELSER DET SISTE ÅRET *

Har du i løpet av de siste 12 mndr. hatt *mer langvarige* vanskeligheter knyttet til følgende områder?
(Angi hvor stor belastningen har vært ved å sette kryss på *hver av* linjene.)

GRAD AV BELASTNING

	1 Ingen	2 Noe	3 Ganske stor	4 Svært stor	
Boligproblem *(vedlikehold, leieforhold o.l.)*					326
Problemer med arbeid *(arbeidsløshet, usikkert arbeid, vanskelige arbeidsforhold)*					327
Problem med barnepass *(barnehage, dagmamma, syke barn)*					328
Økonomiske problemer *(betaling av husleie, lån, forpliktelse o.l.)*					329
Problemer med egen fysiske helse *(funksjonshemming, kroppslig sykdom)*					330
Samlivsproblemer *(mye krangel, alvorlige samlivsproblemer, separasjon, skilsmisse)*					331
Alkoholproblemer hos noen i husholdningen					332
Helseproblemer hos ektefelle *(fysiske eller psykiske)*					333
Helseproblemer hos barn *(funksjonshemming, sykdom)*					334
Problemer med barn *(tilsyn,oppdragelse, skole, disiplin)*					335
Problem med å tilpasse yrkesliv med barneomsorg					336
Annet, som:					337

Vi er nå interessert i å få vite noe om hva slags hendelser du har hatt i løpet av **de siste 12 månedene.** Kryss av for om du har opplevd noen av hendelsene som er listet opp under, og kryss deretter av for om du opplevde hendelsen som svært negativ/vond, med blandede følelser, positiv/god eller svært positiv/god.

	1 *Ja*	2 *Nei*	1 *Svært negativt /vondt*	2 *Negativt/ vondt*	3 *Blandede følelser*	4 *Positivt /godt*	5 *Svært positivt /godt*	
Flytting								338,39
Fått nye venner								340,41
Problem i forhold til venner eller familie								342,43
Skilsmisse eller separasjon								344,45
Ny samboer eller giftemål								346,47
Graviditet eller fødsel								348,49
Abort								350,51
Mistet barnepass								352,53
Fått barnepass								354,55
Fått ny jobb								356,57
Mistet arbeidet								358,59
Akutt sykdom eller skade hos meg selv								360,61
Akutt sykdom eller skade hos noen som står meg nær								362,63
Dødsfall hos noen som står meg nær								364,65
Psykisk, fysisk eller seksuell mishandling								366,67
Har påført andre skade eller bekymring								368,69
Har hendt meg noe som jeg ikke orker å si til noen								370,71
Annet, som:								372,73

Har du for tiden belastninger eller plager som hindrer deg i å:	1 **Ja**	2 **Nei**	
Klare de praktiske gjøremål hjemme på en brukbar måte.	☐	☐	374
Ha overskudd overfor barn og ektefelle/samboer.	☐	☐	375
Være sammen med venner.	☐	☐	376
Drive med aktiviteter på fritiden.	☐	☐	377

* VANLIGE REAKSJONSMÅTER *

Når du får et problem, eller det skjer noe du tenker mye på, vil du si at du er en person som *vanligvis* reagerer med å: (Sett et kryss i de rutene som best forklarer *hvor ofte* du pleier å reagere på de følgende måter. Husk å krysse av på alle linjene.)

	1 *Aldri*	2 *Av og til*	3 *Ofte*	4 *Nesten hele tiden*	
Jeg prøver bare å *glemme det* ved å tenke på noe annet; gjøre noe annet.					378
Jeg prøver å *unngå andre* mennesker; holder følelsene mine for meg selv.					379
Jeg prøver å se det *positive* i situasjonen; tenke på noe godt som kan komme ut av den.					380
Jeg innser at jeg selv er skyld i problemet og *bebreider* meg selv.					381
Jeg mener at andre er skyld i problemet og *bebreider dem.*					382
Jeg tenker på mulige måter å se på situasjonen på; prøver *aktivt* å løse problemet.					383
Jeg snakker om hvordan jeg føler meg; *gråter, skriker, blir sint* og kaster ting.					384
Jeg forsøker *å roe meg* ned ved å snakke til meg selv, be, gå en tur eller bare slappe av.					385
Jeg prøver å *forestille meg at dette aldri har hendt*; drømmer om at ting hadde vært annerledes					386
Jeg *oppsøker venner*, familie og andre for å få støtte og hjelp					387
Jeg bare *aksepterer* problemet fordi jeg vet at det er lite jeg kan gjøre med det.					388

* HELSESPØRSMÅL *

Har du selv en mer langvarig sykdom eller funksjonshemming?
1 |___| Ja
2 |___| Nei
389

I tilfelle ja, *nevn hvilken*:
390-91

Har du hatt mer akutt sykdom i løpet av de siste *12 måneder?*
1 |___| Ja
2 |___| Nei
392

Hvis ja, *nevn hva* det var som feilte deg:
393-94

Har du *de siste 12 mndr.* vært utsatt for ulykker eller blitt skadet?
1 |___| Ja
2 |___| Nei
395

Hvis ja, nevn hvilke skader du fikk:
396-97

Har du vært innlagt på sykehus (utenom i forbindelse med barnefødsler)? (*Du kan sette kryss i flere ruter*)

	Vanlig sykehus		Psykiatrisk sykehus/klinikk		
	1 *Ja*	2 *Nei*	1 *Ja*	2 *Nei*	
Siste 12 mnd					398-99
Tidligere					400-01

Er det lenge siden du sist hadde kontakt med *lege* (for annet enn forhold knyttet til svangerskap og barn)?
1 |___| Aldri hatt slik kontakt.
2 |___| 0 - 3 mndr.
3 |___| 3 - 6 mndr.
4 |___| 6 mnd. - 1 år
5 |___| 1 - 3 år
6 |___| 3 år eller mer
402

Om du har hatt kontakt med *psykiater eller psykolog*, angi hvor lenge det er siden siste kontakt:

1 |___| Aldri hatt slik kontakt
2 |___| 0-3 mndr.
3 |___| 3 - 6 mndr. 403
4 |___| 6 mnd - 1 år
5 |___| 1 - 3 år
6 |___| 3 år eller mer

Hvordan anser du helsen din å være for tiden?

1 |___| Dårlig
2 |___| Ikke helt god 404
3 |___| God
4 |___| Svært god

Hvor ofte har du *i løpet av den siste måneden* brukt medikamenter som er:

	1 *Daglig*	2 *Hver uke, men ikke daglig*	3 *Sjeldnere enn hver uke*	4 *Aldri*	
Smertestillende					405
Avslappende eller beroligende					406
Sovemedisiner					407
Andre, nevn hvilke:					408

* BARNEOPPDRAGELSE *

De følgende setningene beskriver noen aspekter ved barneoppdragelse. Vær snill å angi hvor ofte beskrivelsene gjelder for deg ved å sette et kryss i en av rutene utenfor hver påstand. Det er ingen svar som er riktige eller gale. Det er viktig at du er så ærlig som mulig når du setter kryss slik at svarene til sammen skal kunne gi et variert bilde av holdninger foreldre har til barneoppdragelse.

	1 *Nesten aldri*	2 *Sjelden*	3 *Noen ganger*	4 *Ofte*	5 *Nesten alltid*	
Jeg sørger for at mitt barn gjør som det får beskjed om, uten å forklare nærmere.						409
Jeg tror at det er riktig å fike til barnet mitt for å få det til å oppføre seg bedre.						410
Jeg gir barnet mitt trøst og forståelse når han/hun er redd eller oppskaket.						411
Jeg lar barnet mitt få lov til å vise følelsene sine når han/hun blir straffet eller satt grenser for.						412
Når jeg straffer barnet mitt, ber jeg det om å gå på rommet sitt og være der i fem minutter						413
Jeg viser barnet kjærlighet ved å klemme, kysse og holde rundt det.						414
Jeg sørger for at barnet mitt adlyder foreldrene sine uten spørsmål.						415
Jeg fiker, eller smekker til, barnet for å sette grenser for det						416
Jeg klemmer ofte barnet mitt, eller omfavner det, uten noen spesiell grunn.						417
Jeg foretrekker å ikke ha meg med barnet når jeg driver med noe eller går ut.						418
Jeg skriker til barnet mitt når jeg straffer det.						419
Jeg forsøker å forklare for barnet mitt hvorfor det er nødvendig å gjøre en del ting						420
Jeg forteller til barnet mitt hvor lykkelig han/hun gjør meg.						421
Når jeg straffer barnet mitt, sender jeg det på rommet med lite eller ingen forklaring.						422
Jeg forventer at barnet mitt gjør som han/hun blir bedt om uten at å protestere eller argumentere						423
Barnet mitt og jeg har varme og fortrolige stunder sammen.						424
Jeg fjerner privilegier fra barnet når det oppfører seg dårlig.						425

	Nesten aldri	*Sjelden*	*Noen ganger*	*Ofte*	*Nesten alltid*	
Jeg forventer ikke lydighet fra barnet mitt uten å gi ham/henne en forklaring.						426
Jeg liker å høre på barnet mitt og å gjøre ting sammen med det.						427
Jeg trekker meg unna barnet mitt når jeg misfornøyd med han/henne.						428
Jeg bruker fysisk avstraffelser, for eksempel en ørefik, når han/hun oppfører seg spesielt dårlig.						429
Jeg forklarer barnet mitt hvorfor han/hun blir straffet eller satt grenser for.						430
Jeg liker å klemme og kysse barnet mitt.						431
Jeg tror at den beste måten å oppdra barnet mitt på er å anvende fysisk avstraffelser.						432
Jeg føler meg nær knyttet til barnet mitt både når han/hun er glad og når han/hun er bekymret.						433
Jeg forklarer barnet mitt konsekvensene av han/hennes handlinger						434
Jeg forklarer barnet mitt hvorfor han/hun må følge regler.						435
Jeg legger vekt på å begrunne regler.						436
Når barnet oppfører seg dårlig tar jeg tar dette opp, og diskuterer det, med han/henne.						437
Jeg gir barnet ris når det er ulydig.						438
Jeg spøker og leker med barnet mitt						439

Vi vil nå gå over til spørsmål om:

* DIN KONTAKT MED ANDRE *

Hvor ofte ser du, eller snakker med i telefonen, følgende personer? (*Kryss av på alle linjene*):

	1	2	3	4	5	6	
	Nesten daglig	*Hver uke*	*Hver måned*	*Sjeldnere enn hver måned*	*Ingen kontakt*	*Har ingen*	
Foreldre							440
Søsken							441
Svigerfamilie							442
Annen slekt							443
Venner							444

* FAMILIE *

Når folk beskriver sin *opprinnelige familie* (sine foreldre, og evt. søsken), bruker de ofte setninger som nedenfor. Hvordan stemmer disse beskrivelsene alt i alt for deg? (*Sett ring, på hver linje, rundt det tallet som best forklarer din opplevelse.)*

Jeg føler meg nær knyttet til min familie.	Helt enig	1	2	3	4	5	Helt uenig	445
Min familie legger rimelig vekt på mine meninger.	Helt enig	1	2	3	4	5	Helt uenig	446
Det forekommer at jeg føler meg utenfor selv i min egen familie.	Helt enig	1	2	3	4	5	Helt uenig	447

Får du praktisk hjelp og avlastning fra nære slektninger (*utenom ektefelle samboer)?*

1 |___| Ja, svært ofte
2 |___| Ja, nokså ofte
3 |___| Ja, av og til 448
4 |___| Sjelden
5 |___| Nei, aldri

* VENNER *

Når folk beskriver *sine venner,* bruker de ofte setninger som nedenfor. Hvordan stemmer disse beskrivelsene for deg? (*Sett ring, på hver linje, rundt det tallet som best beskriver din opplevelse.*)

Jeg føler meg nær knyttet til mine venner.	Helt enig	1	2	3	4	5	Helt uenig	449
Mine venner legger rimelig vekt på mine meninger.	Helt enig	1	2	3	4	5	Helt uenig	450
Det forekommer at jeg føler meg utenfor selv blant venner.	Helt enig	1	2	3	4	5	Helt uenig	451

Omtrent hvor mange venner har du nå for tiden som du kan stikke innom eller ringe til bare for å prate?

1 |___| Ingen
2 |___| 1
3 |___| 2 452
4 |___| 3 eller fler

Kjenner dine venner hverandre?

1 |___| Ja, de fleste
2 |___| Ja, noen
3 |___| Nei, nesten ingen 453
4 |___| Nei, ingen

Får du praktisk hjelp og avlastning fra venner?

1 |___| Ja, svært ofte
2 |___| Ja, nokså ofte
3 |___| Ja, av og til 454
4 |___| Sjelden
5 |___| Nei, aldri

* FORHOLDET TIL EKTEFELLE/SAMBOER/FAST PARTNER *

Jeg har for tiden ingen ektefelle/samboer/fast partner |___| 455

Når folk beskriver forholdet til partneren, bruker de ofte setninger som nedenfor. Hvordan stemmer disse beskrivelsene for deg? (*Sett ring, på hver linje, rundt det tallet som best beskriver din opplevelse.)*

Jeg føler meg nær knyttet til min ektefelle/samboer.	Helt enig	1	2	3	4	5	Helt uenig	456
Min partner legger rimelig vekt på mine meninger.	Helt enig	1	2	3	4	5	Helt uenig	457
Det forekommer at jeg føler meg utenfor, selv hjemme hos meg selv.	Helt enig	1	2	3	4	5	Helt uenig	458

I de fleste forhold er det ting man er uenige om. Vennligst indiker, så godt du kan, i hvilken grad du og din partner er enige eller uenige om de temaene som er angitt under.

	1 *Alltid enige*	2 *Nesten alltid enige*	3 *Av og til uenige*	4 *Ofte uenige*	5 *Nesten alltid uenige*	6 *Alltid uenige*	
Hvordan vi ser på livet							459
Hvordan vi skal ordne økonomien							460
Hvilke ting vi synes er viktige							461
Hvordan vi skal bruke ferier og fritid							462
Forholdet til våre foreldre/svigerforeldre							463
Hvor mye tid vi bør tilbringe sammen							464

Hvor ofte vil du si at du og din partner gjør følgende:

	1 *Aldri*	2 *Sjeldnere enn hver måned*	3 *En til tre ganger i måneden*	4 *En eller to ganger i uken*	5 *Hver dag*	
Snakker sammen om viktige og interessante ting						465
Diskuterer ting på en rolig og avslappet måte						466
Arbeider sammen med en felles oppgave						467

Den følgende tallrekken representerer ulik grad av tilfredshet i parforhold. Det midterste punktet, (4) "lykkelig", angir den graden av tilfredshet som er vanlig i forhold flest. Vær snill å sett en ring rundt det tallet som, når alt kommer til alt, best beskriver graden av tilfredshet i ditt parforhold.

1	2	3	4	5	6	7	
Særdeles ulykkelig	Nokså ulykkelig	Litt ulykkelig	Lykkelig	Veldig lykkelig	Særdeles lykkelig	Fullkomment lykkelig	468

De fleste foreldre har perioder hvor de er uenige om hvorledes de skal oppdra barna sine eller organisere hverdagen. Noen foreldre mener det er riktigst å reagere bestemt og konsekvent, mens andre synes det er best å la barnet være mer i fred. Noen foreldre deler det ekstra husarbeidet, andre gjør ikke dette. De følgende setningene beskriver noen aspekter ved barneoppdragelse. *Tenk på hvorledes det har vært i din familie* ***i den siste måneden,*** og vær snill å angi hvor ofte beskrivelsene gjelder for deg ved å sette et kryss i en av rutene utenfor hver påstand. Det er ingen svar som er riktige eller gale. Det er viktig at du er så ærlig som mulig når du setter kryss slik at svarene til sammen gir en riktig beskrivelse av hvorledes foreldre flest oppdrar barna sine.

Jeg har for tiden ingen fast partner eller samboer og fyller derfor ikke ut den følgende tabellen |___| 469

(husk å krysse av på hver linje)

	1 Nesten aldri	2 Sjelden	3 Noen ganger	4 Ofte	5 Nesten alltid	
Det har vært uenighet om hvilke regler som skal gjelde for barn (f.eks. om leggetid eller steder hvor det er lov å leke)						470
Det har vært uenighet om hvordan vi skal sette grenser for barnet (f.eks. om hvorvidt det er ok. å fikte til barnet/barna)						471
Det har vært uenighet om hvem som bør oppdra barnet						472
Det har vært åpen krangel mens barnet (bana) har vært tilstede						473
Barna har fått forskjellige regler fra hver av oss						474
Barnet (barna) har hindret oss i å være alene						475
Det har vært uenighet om delingen av arbeidsbyrden med barnet						476
Det har vært uløselige krangler om barneoppdragelse						477
Diskusjoner om barneoppdragelse har utviklet seg til krangler						478
Vi har sabotert hverandre (ikke støttet hverandre)						479
Ett av barna har vært foretrukket framfor et annet						480
Det har manglet diskusjoner om barneoppdragelse						481
Det har manglet diskusjoner om ting i sin alminnelighet						482
En av oss er ettergivende overfor barnet (barna) og den andre tøff.						483
Barnet (barna) oppfører seg dårligere sammen med den ene av oss enn sammen med den andre						484
Det har vært uenighet om hva som skal regnes som ulydighet						485
Ingen av de overforstående tingene har forekommet						486

Helt til sist vil vi spørre deg om ditt eget temperament

* DITT EGET TEMPERAMENT *

Kryss av for de utsagn du mener best karakteriserer deg som person.

Kryss på alle linjene	1	2	3	4	5	
	Veldig typisk	*Ganske typisk*	*Både/ og*	*Lite typisk*	*Ikke typisk*	
Jeg liker å være sammen med andre mennesker.						487
Jeg er vanligvis på farten.						488
Jeg blir lett skremt.						489
Jeg blir ofte lei meg.						490
Når jeg ikke er fornøyd sier jeg fra med én gang.						491
Jeg er litt av en einstøing.						492
Jeg liker å være travelt opptatt hele tiden.						493
Jeg regnes for å vær varmblodig og hissig.						494
Jeg blir ofte frustrert.						495
Jeg lever i et høyt tempo.						496
Vanlige hendelser plager og bekymrer meg.						497
Jeg føler meg ofte usikker.						498
Det er mange ting som irriterer meg.						499
Når jeg blir skremt blir jeg nærmest panisk.						500
Jeg vil heller samarbeide med andre enn å jobbe alene.						501
Jeg blir lett følelsesmessig oppskaket.						502
Jeg føler meg ofte fylt av virketrang						503
Det skal mye til for å gjøre meg sint.						504
Jeg er mindre engstlig for ting enn mine jevnaldrende.						505
Jeg synes at andre mennesker er mer stimulerende enn noe annet.						506

Å fylle ut et så langt spørreskjema er en kjempeinnsats. Tusen takk for at du har tatt deg tid til dette!

Vi vil sende deg tilbakemelding med sammendrag av hovedfunnene fra denne fjerde innsamligsrunden så snart dataene er grovanalysert. Dette planlegger vi å være ferdig med før utgangen av 2001.

folkehelseinstituttet

SPØRRESKJEMA TIL MØDRE I SJETTE RUNDE AV PROSJEKTET "TRIVSEL OG OPPVEKST"

Tildelt nr. ..... ⌊_____⌋

8 - 13 Dato for utfylling ..... ⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋

14 - 19 Barnets fødselsdato ..... ⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋

20 Barnets kjønn ..... 0 Gutt 1 Jente

21 - 22 Hvilket år er du født? ..... ⌊_⌋⌊_⌋ Årstall

Hvis du har **tvillinger**, er det fint om du anvender ett skjema for hvert barn. For barn nr. 2 er det ikke nødvendig å besvare spørsmål om deg selv (start på side 4 og besvar spørsmålene frem til "FAMILIE OG VENNER" på side 13, samt spørsmålene på side 15 og 16).

FAMILIEFORHOLD

23 Bor du sammen med din 14-15 åring? 2 Hele tiden 1 Halve tiden 0 Mindre enn halve tiden

24 Bor det andre barn/ungdommer hos deg? 2 Ja, heltid 1 Ja, deltid 0 Nei

25-32 Hvis ja, hvilke årstall er det/de andre barna født? ⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋

33 Hvor mange barn har du foreldreansvar for? Antall ⌊_⌋

34 Hvilke voksne bor sammen med deg?

(Kryss gjerne av for flere)

1 Ingen andre
2 Barnets biologiske far
3 Annen ektefelle/samboer (bodd sammen mer enn 5 år)
4 Annen ektefelle/samboer (bodd sammen mindre enn 5 år)
5 Barnets besteforeldre
6 Andre

35 Er du:

1 Gift
2 Ugift
3 Separert/skilt
4 Enke

Hvis du bor sammen med barnets far kan du hoppe over spørsmålene i den grå rammen.

Til deg som ikke bor sammen med barnets far:

36 Hvilket år skilte dere lag? ..... (årstall)

	3 Veldig enige	2 Nokså enige	1 Nokså uenige	0 Svært uenige
37 Hvor enige var dere i begynnelsen om hvor barnet skulle bo/ hvem som skulle ha daglig omsorg?				
38 Hvor enige er dere i dag om barnets bosted?				
39 Hvor enige er dere i dag om fordelingen av foreldreansvar/foreldrerett?				

UTDANNING OG ARBEID

40 Hvilken utdanning har du?

Oppgi bare høyest fullførte utdanning

1 9-årig grunnskole eller mindre
2 Ett eller to år på videregående skole (10-11 år)
3 Artium, økonomisk gymnas, treårig videregående skole
4 Høyskole/universitet, mindre enn 4 år
5 Høyskole/universitet, 4 år eller mer

41 Er du for tiden i lønnet arbeid?

(Sett bare kryss i én rute)

1 Nei: Hjemmearbeidende/under utdanning/trygdet
2 Ja, deltidsarbeid (mindre enn 50%)
3 Ja, deltidsarbeid (50-80%)
4 Ja, heltidsarbeid (80-100%)

42 Hvilken utdanning har barnets far?

Oppgi bare høyest fullførte utdanning

1 9-årig grunnskole eller mindre
2 Ett eller to år på videregående skole (10-11 år)
3 Artium, økonomisk gymnas, treårig videregående skole
4 Høyskole/universitet, mindre enn 4 år
5 Høyskole/universitet, 4 år eller mer

På skolen skal barna lære ting de får bruk for når de skal finne en jobb de kanskje ikke trives med. Selve skoletiden går ganske fort, den tar bare 20 år.

(Xavier 8 år)

ØKONOMI

43 Hvordan klarer du/familien seg med den økonomien du/dere har?

- 1 Vi klarer oss svært dårlig
- 2 Vi klarer oss dårlig
- 3 Vi klarer oss
- 4 Vi klarer oss bra
- 5 Vi klarer oss meget bra

44 Har du, eller noen i husholdningen din, fått økonomisk støtte fra sosialkontoret i løpet av *de siste 12 mnd*.?

- 0 Nei
- 1 Ja
- 2 Vet ikke

45 Kan du anslå omtrent hvor høy inntekt du/dere hadde til sammen sist år?

(Samlet brutto årsinntekt inkludert overføringer og bidrag, før skatt og fradrag er trukket fra)

- 1 Under 200 000
- 2 200 - 349 000
- 3 350 - 549 000
- 4 550 - 749 000
- 5 750 000 eller mer

NABOLAGET OG NABOER

46 Føler du tilhørighet til det stedet du bor nå?

- 3 I stor grad
- 2 I noen grad
- 1 I liten grad
- 0 Ikke i det hele tatt

		0 Ingen	1 En	2 To	3 3-5	4 5 eller flere
47	Hvor mange i nabolaget ditt stopper du og tar en prat med hvis du møter dem tilfeldig?					
48	Hvor mange familier/husstander i nabolaget kjenner du så godt at du besøker dem av og til?					
49	Hvor mange i nabolaget ditt regner du som dine nære venner?					

Er du og naboene til hjelp for hverandre f.eks når det gjelder å: (her kan du sette kryss ved flere)

	1 Ja	0 Nei	
Vanne blomster, ta inn post for hverandre når noen er bortreist			50
Låne ting			51
Annen praktisk hjelp			52

Barnets fysiske helse

Tenk på det siste året:

	hvor ofte har barnet ditt hatt vondt i (inkl. idrettsskader):	0 Aldri	1 1 - 3 ganger pr. måned	2 1 – 3 ganger pr. uke	3 Daglig eller nesten daglig
53	Hodet:				
54	Magen:				
55	Ryggen:				
56	Armer/ben:				

57 Har barnet ditt hatt magesmerter minst én gang i måneden i tre måneder etter hverandre?
(NB! Gjelder ikke menstruasjonssmerter hos jenter) Nei 0 Ja 1

58 Hvis Ja, har magesmertene medført at barnet ditt måtte:
(Her kan du krysse av på flere)

		0	1
a)	Være hjemme fra skolen (eller avbryte skoledagen)	Nei	Ja
b)	Avslutte eller unngå hobby/aktivitet (hjemme/skolen)	Nei	Ja
c)	Ta medisiner mot smerte (f.eks Paracet, Ibux eller annet)	Nei	Ja
d)	Gå til legen	Nei	Ja
e)	Forandre/legge om kosten (maten)	Nei	Ja

59 Totalt sett i løpet av det siste året, hvor plaget har barnet ditt vært av magesmerter?

Ikke plaget	0
Litt plaget	1
Moderat plaget	2
Mye plaget	3
Svært mye plaget	4

Hvordan er barnets helse nå? 60

1 Svært dårlig
2 Litt dårlig
3 God
4 Svært god

Tar barnet ditt noen medisiner? 61

0 Nei
1 Ja
2 Hvis ja, nevn hvilke:.....
.....

62 Har barnet funksjonsvansker som er, eller antas å bli, langvarige?

0 Nei 1 Ja 2 Under utredning 3 Er bekymret for at det kan være noe galt

Hvis ja, hvilke funksjonsvansker? _____

Nå vil vi høre om sykdommer som **stadig gjentar** seg og mer **akutt** sykdom og skade.

Har barnet hatt en eller flere av følgende sydommer det siste året? Kryss både av for **hva** det var som feilte barnet, om sykdommen har vært **langvarig** og om barnet har vært henvist til **spesialist** eller ikke.

	TYPE SYKDOM	HAR HATT SYKDOMMEN?			VARIGHET?		HENVIST TIL SPESIALIST?	
		Nei 0	Ja 1	Usikker-under utredning 2	Langvarig (over 3 mnd.) 1	Kortvarig (enkelt-episoder) 2	Nei 0	ja 1
63, 64, 65	Allergi (astma, eksem, høysnue)							
66, 67, 68	Luftveisinfeksjoner (bronkitt, lungebetennelse, ørebetennelse, halsesyke)							
69, 70, 71	Urinveisinfeksjon (blærekatarr eller nyrebekkenbetennelse)							
72, 73, 74	Synsvansker							
75, 76, 77	Hørselsvansker							
78, 79, 80	Spiseforstyrrelser							
81, 82, 83	Ledd-/muskelsmerter							
84, 85, 86	Diabetes (sukkersyke)							
87, 88 ,89	Skader som trengte medisinsk behandling (brudd, forbrenning, forgiftninger, hjernerystelse, kutt)							
90, 91, 92	Andre lidelser, nevn hvilke:							

Har barnet ditt noen gang prøvd å slanke seg? (Sett bare ett kryss)

0 ☐ Nei, ikke som jeg vet om 1 ☐ Ja, tidligere 2 ☐ Ja, hele tiden 93

Hvor mye veier barnet ditt? Ca ____ kg Hvor høy er barnet ditt? Ca ____ cm 94, 95

Har barnet ditt vært til behandling i følgende helsetjenester i løpet av **de siste 12 månedene**?
(Sett ett kryss på hver linje)

	0 Nei	1 Ja, en gang	2 Ja, flere ganger	3 Vet ikke	
Skolehelsetjenesten, helsestasjon for ungdom					96
PP-tjenesten					97
Lege/legevakt					98
Psykolog, psykiater, familierådgivning eller BUP					99
Sykehusinnleggelse					100
Fysioterapeut, kiropraktor, akupunktør eller annet					101
Alternative behandlere, hva					102

Tror du ungdommen din har:

	0 Nei, aldri	1 1 gang	2 2-5 ganger	3 6-10 ganger	4 Mer enn 10 ganger	
smakt mer enn noen slurker alkohol?						103
drukket så mye alkohol at han/hun har vært synlig beruset (full)?						104
sniffet eller brukt hasj, marihuana eller andre ulovlige rusmidler?						105
brukt legemidler (tabletter) for å få rus?						106

Tror du ungdommen din røyker?

0 Aldri prøvd 1 Har prøvd 2 Røyker av og til 3 Røyker daglig 107

Skole og skolefag

Hvordan opplever du at barnet ditt greier seg på skolen sammenlignet med gjennomsnittet i klassen sin?

	1 Mye dårligere	2 Litt dårligere	3 Middels	4 Litt bedre	5 Mye bedre	
Norsk						108
Gymnastikk						109
Engelsk						110
Samfunnsfag (naturfag, historie)						111
Formingsfag						112
Matematikk						113
Alt i alt, hvordan klarer han/hun seg faglig:						114

Har ungdommen din fått ekstra støtte/undervisning i forbindelse med lese- og skrivevansker i løpet av det siste året?

0 Nei 1 Ja, noe 2 Ja, ganske mye 3 Ja, veldig mye 115

	5 Veldig bra	4 Ganske bra	3 Både og	2 Ganske dårlig	1 Veldig dårlig	
Alt i alt, hvordan trives han/hun på skolen						116

Hvor involvert er du vanligvis i hans/hennes skolearbeid?

	0 Stemmer ikke	1 Stemmer delvis	2 Stemmer	
Jeg er svært interessert i barnets skolearbeid				117
Jeg hjelper ham/henne ofte med skolearbeid				118
Jeg oppfordrer ham/henne til å ta høyere utdannelse				119
Jeg roser ham/henne ofte for skolearbeidet				120
Jeg snakker sjelden med ham/henne om skolen				121

Hvor mange dager i uken er han/hun vanligvis sammen med venner utenom skoletiden? 122

(Ikke ta med organiserte aktiviteter)

0 Ingen dager
1 1-2 dager
2 3-4 dager
3 5-6 dager
4 Hver dag

Barnets temperament og væremåte

Også denne gangen vil vi gjerne ha din beskrivelse av ham/henne.

Kryss av for hvor godt utsagnene beskriver barnet ditt (*husk å sette ett kryss på hver linje*):

	4 Stemmer veldig godt	3 Stemmer ganske godt	2 Både / og	1 Stemmer ganske dårlig	0 Stemmer veldig dårlig	
Liker å være sammen med andre mennesker						123
Er vanligvis på farten						124
Blir lett skremt						125
Blir ofte lei seg						126
Gir ikke opp selv om han/hun jobber med en vanskelig oppgave						127
Sier ifra med én gang når han/hun ikke er fornøyd						128
Trives best alene						129
Liker å være travelt opptatt hele tiden						130
Regnes for å være varmblodig og hissig						131
Har problemer med å gjøre ting ferdig						132
Blir ofte frustrert						133
Lever i et høyt tempo						134
Vanlige hendelser plager og bekymrer ham/henne						135
Føler seg ofte usikker						136
Jobber med en oppgave helt til den er fullført						137
Det er mange ting som irriterer ham/henne						138
Blir nærmest panisk når han/hun blir skremt						139
Vil heller samarbeide med andre enn å jobbe alene						140
Blir lett følelsesmessig opprørt						141
Føler seg ofte fylt av energi						142
Selv om han/hun blir avbrutt, fortsetter han/hun med oppgavene sine (som lekser og husarbeid) etterpå						143
Det skal mye til for å gjøre ham/henne sint						144
Er mindre engstelig for ting enn sine jevnaldrende						145
Synes at andre mennesker er mer stimulerende enn noe annet						146
Skifter fra en aktivitet til en annen, uten å bli ferdig med det han/hun holdt på med først						147

Nedenfor følger flere beskrivelser av hvorledes barn og ungdommer kan oppføre seg. Her skal du krysse av for **hvor godt** beskrivelsene passer på ungdommen din. Prøv å svare på alt selv om du ikke er helt sikker eller synes utsagnet virker rart:

Han/hun:	0 Stemmer svært dårlig	1 Stemmer ganske dårlig	2 Stemmer av og til	3 Stemmer ganske godt	4 Stemmer svært godt	
holder rommet sitt ryddig uten å bli bedt om det						148
presenterer seg uoppfordret når han/hun møter nye mennesker						149
reagerer forståelig hvis andre barn dytter eller slår						150
ber ekspeditøren om hjelp eller informasjon i butikker						151
lytter til det som sies på møter, for eksempel i en klubb eller en kirke						152
avviser på en høflig måte hvis andre ber om noe urimelig						153
roser andre i familien når de har lykkes med noe						154
får lett venner						155
har mange interesser						156
unngår situasjoner som kan skape problemer						157
hjelper deg/dere med husarbeidet uten å bli bedt om det						158
forsøker først å gjøre pliktene sine i huset selv, før han/hun ber deg om hjelp						159
kan styre sinnet sitt i konflikter med andre ungdommer						160
starter samtaler fremfor å vente på at andre skal snakke til ham/henne						161
avslutter konflikter med deg på en fredelig måte						162
kan styre sinnet sitt i konflikter med deg						163
utfører sine plikter i huset innen rimelig tid (Har ikke plikter |___|)						164
ber om lov før hun/han bruker noe som tilhører andre i familien						165
bruker tiden fornuftig i påvente av hjelp med lekser eller andre oppgaver						166
godtar vennenes forslag til aktiviteter						167
kan melde fra om uhell eller ulykker til rette vedkommende						168
kan ta imot ros eller skryt fra venner						169

Her ber vi deg angi hvor godt hvert av utsagnene nedenfor stemmer på barnet/ungdommen din. Svar på grunnlag av hans/hennes oppførsel **de siste seks månedene**:

	0 Stemmer svært dårlig	1 Stemmer nokså dårlig	2 Stemmer nokså godt	3 Stemmer svært godt	
Er rastløs, overaktiv, kan ikke være lenge i ro					170
Er stadig urolig eller i bevegelse					171
Er lett å avlede, mister lett konsentrasjonen					172
Tenker seg om før hun/han handler (gjør noe)					173
Fullfører oppgaver, har god konsentrasjonsevne					174

Når du sammenligner ungdommen din med ungdommer flest, vil du si at han/hun jevnt over er:

- Klart lettere å ha med å gjøre 1
- Litt lettere å ha med å gjøre 2
- Omtrent vanlig 3 175
- Litt vanskeligere å ha med å gjøre 4
- Klart vanskeligere å ha med å gjøre 5

Plagsomme følelser og tanker

Mange kan være nedfor fra tid til annen, og noen er plaget av triste tanker. Tenk på **de siste to ukene** og angi hvor godt hvert av utsagnene stemmer på barnet/ungdommen din: **(Sett ett kryss på hver linje)**

Han/hun:	0 Stemmer sjelden	1 Stemmer noen ganger	2 Stemmer ofte	
var lei seg eller ulykkelig				176
følte seg så trøtt at han/hun bare ble sittende uten å gjøre noen ting				177
var veldig rastløs				178
var ikke glad for noe				179
følte seg lite verdt				180
gråt mye				181
hatet seg selv				182
tenkte at han/hun aldri kunne bli så god som andre ungdommer				183
følte seg ensom				184
tenkte at ingen egentlig var glad i ham/henne				185
følte seg som et dårlig menneske				186
syntes han/hun gjorde alt galt				187

Barn og unge kan også være engstelige i perioder. Tenk på hvordan ungdommen din har vært **de siste månedene**:

(Sett ett kryss på hver linje)

Barnet mitt:	4 Nesten alltid	3 Ofte	2 Av og til	1 Sjelden	0 Nesten aldri	
ble veldig urolig da han/hun måtte gå fra meg eller dra hjemmefra						188
unngikk sosiale aktiviteter fordi han/hun var redd for å bli kritisert eller avvist						189
bekymret seg mye for at det skulle hende noe fælt med meg						190
var redd for å bli forlatt og måtte passe på seg selv						191
bekymret seg mye for å komme bort fra meg eller å bli kidnappet						192
hadde forferdelige mareritt						193
var for mye bekymret						194
bekymret seg for mye for å bli avvist eller kritisert						195
var redd for å gå fra meg (f.eks. når han/hun skulle på skolen)						196
var engstelig i sosiale situasjoner fordi han/hun var redd for andre mennesker						197
var redd for å gjøre nye ting i frykt for å dumme seg ut						198
hengte seg så mye opp i detaljer eller tidsplaner at han/hun glemte hva det er han/hun egentlig skulle gjøre						199
måtte stadig sjekke at han/hun hadde gjort ting på den riktige måten (som at døren var låst, gymtøyet var med)						200
hadde problemer med å få dumme eller rare tanker ut av hodet						201
måtte tenke på spesielle måter (som på bestemte tall eller ord) for å forhindre at farlige ting skulle skje						202

Brudd på regler

Her er det listet opp handlinger som har å gjøre med brudd på regler i hjem, skole og samfunn. Ofte vet ikke foreldrene om ungdommen har gjort, eller vært med på, slike handlinger. Vi vil likevel spørre deg om **du vet** at ungdommen din har gjort noe av det følgende i løpet av de siste 12 månedene?

Sett ett kryss for hver linje:

	0 Ikke gjort det	1 1 gang	2 2-3 ganger	3 4-10 ganger	4 Mer enn 10 ganger	
Lurt seg fra å betale på kino, kafè, buss, tog eller liknende						203
Tatt penger fra noen i familien uten å ha lov til det						204
Tatt varer fra kjøpesenter, butikk eller kiosk uten å betale						205
Skulket en eller to skoletimer						206
Med vilje ødelagt eller knust vindusruter, benker, postkasser, hageplanter eller liknende						207
Skulket skolen en hel dag						208
Med vilje ødelagt stoler, bord, pulter, eller andre ting som tilhører skolen						209
Klort eller lugget noen (ikke søsken)						210
Med vilje ødelagt seter på en buss, kino, eller andre steder						211
Stjålet ting fra lommer eller veske når eieren ikke var tilstede						212
Oppholdt seg på andre steder enn han/hun har lov til						213
Brutt seg inn i en butikk, hus eller leilighet, for å stjele noe						214
Vært ute mye senere på kvelden eller natten, enn han/hun har lov til						215
Truet med å slå eller skade noen (ikke søsken)						216
Vært i slåsskamp på skolen eller andre steder						217
Truet eller tvunget noen til å gi ham/henne penger eller andre ting						218
Slått eller sparket noen (ikke søsken)						219
Hatt med seg våpen (kniv, balltre,eller liknende) eller andre våpenliknende gjenstander på skolen eller andre steder						220
Vært i slåsskamp der det har vært brukt våpen (kniv, balltre eller liknende) eller andre gjenstander						221

Her kommer noen beskrivelser av hvordan ungdom kan være mot hverandre. Hvor godt passer beskrivelsene på ditt barn?

	0 Stemmer ikke	1 Stemmer sjelden	2 Stemmer ofte	3 Stemmer alltid	
Barnet mitt unngår å sladre eller snakke om andre bak deres rygg					222
Når barnet mitt misliker noen, forsøker han/hun å få andre til å mislike vedkommende også					223
Når barnet mitt er sinna på noen, overser han/hun personen og snakker ikke til vedkommende					224
Av og til forteller barnet mitt sladder videre til andre om personer han/hun ikke liker					225

Tenk på vennene som er viktige for ungdommen din.

Vet du om noen av disse:	0 Ingen	1 Èn venn	2 Flere venner	
Drikker alkohol omtrent så ofte som 1 gang i uka				226
Har prøvd hasj, marihuana eller andre ulovlige rusmidler				227
Ofte havner i slåsskamp				228
Gjør ulovlige handlinger (som tyveri, hærverk eller annet)				229

Nå skal vi forlate spørsmål om barnet og gå over til spørsmål som omhandler deg selv:

FAMILIE OG VENNER

Her tenker vi på familien du vokste opp i (foreldre, søsken). Hvordan stemmer disse beskrivelsene for deg? **(Sett ring rundt det tallet som best beskiver din opplevelse)**

Jeg føler meg nært knyttet til min familie	Helt enig	1	2	3	4	5	Helt uenig	230
Min familie legger rimelig vekt på mine meninger	Helt enig	1	2	3	4	5	Helt uenig	231
Det forekommer at jeg føler meg utenfor selv i min egen familie	Helt enig	1	2	3	4	5	Helt uenig	232

Får du praktisk hjelp og avlastning fra nære slektninger (utenom ektefelle/samboer)?

4 Ja, svært ofte
3 Ja, nokså ofte
2 Ja, av og til
1 Sjelden
0 Nei, aldri

233

Her er det vennene dine vi tenker på. Hvordan stemmer disse beskrivelsene for deg?

Jeg føler meg nært knyttet til mine venner	Helt enig	1	2	3	4	5	Helt uenig	234
Mine venner legger rimelig vekt på mine meninger	Helt enig	1	2	3	4	5	Helt uenig	235
Det forekommer at jeg føler meg utenfor selv blant venner	Helt enig	1	2	3	4	5	Helt uenig	236

Får du praktisk hjelp og avlastning fra venner?

4 Ja, svært ofte
3 Ja, nokså ofte
2 Ja, av og til
1 Sjelden
0 Nei, aldri

237

DIN OPPLEVELSE AV STRESS SISTE UKE

Nedenfor er en liste over problemer eller plager folk kan ha. Vurdér hvor mye av de følgende plager eller ulemper du har, eller har hatt, **siste uke (til og med i dag)**. Sett ett kryss på hver linje.

	0 Ikke i det hele tatt	1 Litt	2 En god del	3 Svært mye	
Blir plutselig skremt uten grunn					238
Føler deg engstelig					239
Føler deg svimmel eller kraftløs					240
Er nervøs eller urolig					241
Har hjertebank					242
Skjelver					243
Føler deg anspent eller opphisset					244
Har hodepine					245
Har anfall av redsel eller panikk					246
Er rastløs, kan ikke sitte rolig					247
Føler deg slapp og uten energi					248
Anklager deg selv for ting					249
Har lett for å gråte					250
Har dårlig appetitt					251
Har vanskelig for å sove					252
Har lite håp for framtiden					253
Føler deg nedfor					254

	0 Ikke i det hele tatt	1 Litt	2 En god del	3 Svært mye	
Føler deg ensom					255
Har tanker om å ta ditt eget liv					256
Har følelse av å være fanget					257
Bekymrer deg for mange ting					258
Har ikke interesse for noe					259
Føler at alt er anstrengende					260
Føler at du ikke er verdt noe					261

BARNEOPPDRAGELSE

Tenk på 14-15 åringen din: Hvor ofte gjør du følgende? Det er viktig at du er så ærlig som mulig når du setter kryss.

	0 Nesten aldri	1 Sjelden	2 Av og til	3 Ofte	4 Nesten alltid	
Du sier noe pent til barnet ditt eller roser når han/hun har gjort en god jobb						262
Du truer med å gi barnet ditt en straff, men gjør det ikke likevel						263
Du opplever at det å få barnet ditt til å adlyde deg innebærer så mye trøbbel at det ikke er verdt det						264
Du belønner eller gir noe ekstra når barnet ditt har gjort som du ønsker						265
Du bestemmer deg for å gi barnet ditt en straff, men barnet ditt overtaler deg til å la være						266
Du viser at du liker det når barnet ditt har gjort noe i huset						267
Du varierer straffen barnet ditt får etter hvilket humør du er i						268
Du koser eller klemmer barnet ditt når han/hun har fått til noe						269

Hvordan er forholdet ditt til barnet/ungdommen din nå for tiden?

Kryss av for den påstanden som passer best for deg.

	0 Stemmer ikke	1 Stemmer sjelden	2 Stemmer av og til	3 Stemmer ofte	4 Stemmer alltid	
Barnet mitt og jeg har et kjærlig og varmt forhold						270
Det virker som om barnet mitt og jeg alltid kjemper mot hverandre						271
Hvis barnet mitt blir opprørt, søker det trøst hos meg						272
Barnet mitt er utilpass med kjærtegn eller berøring fra meg						273
Barnet mitt setter pris på forholdet vårt						274
Når jeg roser barnet mitt, blir han/hun tydelig stolt						275

	0 Stemmer ikke	1 Stemmer sjelden	2 Stemmer av og til	3 Stemmer ofte	4 Stemmer alltid	
Barnet mitt forteller meg spontant ting om seg selv						276
Barnet mitt blir lett sint på meg						277
Det er lett å forstå hva barnet mitt føler						278
Barnet mitt fortsetter å stå på sitt etter å ha blitt irettesatt						279
Det å oppdra barnet mitt tapper meg for energi						280
Når barnet mitt er i dårlig humør, vet jeg at vi vil få en lang og vanskelig dag						281
Mitt barns følelser overfor meg kan være uforutsigbare eller skifte fort						282
Barnet mitt forsøker å lure eller manipulere meg						283
Barnet mitt deler sine følelser og opplevelser åpent med meg						284

	1 Til før 21:00	2 Til ca. 22:00	3 Til ca. 23:00	4 Til ca. 24:00	5 Til ca. 01:00	6 Til etter 01:00	
Hvor sent kan han/hun vanligvis være ute på hverdager? (mandag til torsdag)							285
Hvor sent kan han/hun vanligvis være ute i helgen? (fredag og lørdag)							286

Det kan være vanskelig å følge med på ungdommers aktiviteter. Disse spørsmålene handler om hva du som forelder vet om de tingene barnet/ungdommen din gjør.

Vet du vanligvis:

	1 Vet svært lite	2 Vet litt	3 Vet mye	4 Vet alt	
hvem barnet ditt er sammen med?					287
hvor barnet ditt er i fritiden?					288
hvordan barnet ditt bruker pengene sine?					289
hvor barnet ditt drar rett etter skolen?					290
hvor barnet ditt drar i løpet av dagen og kvelden i helgene?					291
om problemer/vanskeligheter som barnet ditt har på skolen?					292

	0 Nei	1 Én gang	2 Noen ganger	3 Minst én gang i måneden	4 Minst én gang i uken	
Tenk på det siste året: Har du tatt kontakt med foreldrene til barnets/ungdommens venner, for å sjekke hvor han/hun er og hva han/hun gjør?						293

LANGVARIGE BELASTNINGER

Her lurer vi på om du har hatt mer **langvarige** belastninger i løpet av de **siste 12 månedene**, og hvor stor belastningen har vært for deg. **Sett ett kryss pr. linje:**

	0 Ingen	1 Noe	2 Ganske stor	3 Svært stor	
Boligproblem (vedlikehold, leieforhold o.l.)					294
Problemer med arbeid (arbeidsløshet, usikkert arbeid, vanskelige arbeidsforhold)					295
Økonomiske problemer (betaling av husleie, lån, forpliktelse o.l.)					296
Problemer med egen fysisk helse (funksjonshemming, kroppslig sykdom)					297
Samlivsproblemer (mye krangel, alvorlige samlivsproblemer, separasjon, skilsmisse)					298
Problemer med alkohol eller andre rusmidler hos noen i familien					299
Helseproblemer hos ektefelle (fysiske eller psykiske)					300
Helseproblemer hos andre barn (funksjonshemming, sykdom)					301
Problemer med å strukturere barnas hverdag (vekking, deltakelse i familiens gjøremål o.l)					302
Savnet å ha mer tid sammen med barnet/barna					303
Belastninger knyttet til humørsvingninger hos barnet/barna					304
Engstelse for hva barnet/barna utsetter seg for, eller kan bli utsatt for, i fritiden					305
Problemer rundt barnas skolegang					306
Annet:					307

Hvis man får en god oppdragelse, blir man høflig. Hvis man får en dårlig oppdragelse, får man det gøy.
(Tony André 6 år)

VIKTIGE HENDELSER

Kryss av for om du har opplevd noen av de følgende hendelsene i løpet av de **siste 12 månedene**.

	1 Ja	0 Nei	
Flytting			308
Fått nye venner			309
Problem i forhold til venner eller familie			310
Skilsmisse eller separasjon			311
Ny samboer eller giftemål			312
Graviditet eller fødsel			313
Abort			314
Fått/ skaffet meg noe jeg har ønsket meg lenge			315
Brann, trafikkulykke eller annet			316
Fått ny jobb			317
Mistet arbeidet			318
Akutt sykdom eller skade hos meg selv			319
Akutt sykdom eller skade hos noen som står meg nær			320
Dødsfall hos noen som står meg nær			321
Har påført andre skade eller bekymring			322
Har hendt meg noe som jeg ikke orker å si til noen			323
Annet:			324

Har du noen gang opplevd:	0 Nei, aldri	1 Ja, som barn (under 18 år)	2 Ja, som voksen (over 18 år)	3 Ja, i løpet av det siste året	Var den som utsatte deg for dette: 1 En fremmed person	2 I slekt/ familie med deg	3 En venn eller bekjent	
at noen systematisk og over lengre tid har forsøkt å kue, fornedre eller ydmyke deg?								325, 326
at noen har truet med å skade deg eller skade noen som står deg nær?								327, 328
å bli utsatt for fysiske overgrep?								329, 330
å bli presset til seksuelle handlinger?								331, 332

Vanlige reaksjonsmåter

Hvordan reagerer du når du får et problem, eller det skjer noe som uroer deg?

(Husk å krysse av på **alle** linjene)

	0 Nesten aldri	1 Av og til	2 Ofte	3 Nesten hele tiden	
Jeg prøver bare å glemme det ved å tenke på noe annet; gjøre noe annet					333
Jeg prøver å unngå andre mennesker; holder følelsene mine for meg selv					334
Jeg prøver å se det positive i situasjonen; tenke på noe godt som kan komme ut av den					335
Jeg innser at jeg selv er skyld i problemet og bebreider meg selv					336
Jeg mener at andre er skyld i problemet og bebreider dem					337
Jeg tenker på mulige måter å se på situasjonen på; prøver aktivt å løse problemet					338
Jeg snakker om hvordan jeg føler meg; gråter, skriker, blir sint og kaster ting					339
Jeg forsøker å roe meg ned ved å snakke til meg selv, be, gå en tur eller bare slappe av					340
Jeg prøver å forestille meg at dette aldri har hendt; drømmer om at ting hadde vært annerledes					341
Jeg oppsøker venner, familie og andre for å få støtte og hjelp					342
Jeg bare aksepterer problemet fordi jeg vet at det er lite jeg kan gjøre med det					343

Helsespørsmål

Det er mange av dere som har hatt helseplager i de senere år. Noen har vært alvorlige plaget, mens andre har hatt forbigående lidelser. Har du vært innlagt på sykehus (utenom i forbindelse med barnefødsler) i løpet av de siste 3 årene?

Vanlig sykehus	1	Ja	0	Nei	344
Psykiatrisk sykehus/klinikk	1	Ja	0	Nei	345

Er det lenge siden du sist hadde kontakt med lege (unntatt forhold knyttet til svangerskap og barn)?

0		Aldri hatt slik kontakt.
1		0 - 3 mnd
2		3 - 6 mnd
3		6 mnd. - 12 mnd
4		1 - 3 år
5		3 år eller mer

346

Om du har hatt kontakt med psykiater eller psykolog, angi hvor lenge det er siden siste kontakt:

- 0 Aldri hatt slik kontakt
- 1 0-3 mnd
- 2 3 - 6 mnd
- 3 6 mnd - 12 mnd
- 4 1 - 3 år
- 5 3 år eller mer

347

Hvordan anser du helsen din å være for tiden?

- 1 Dårlig
- 2 Ikke helt god
- 3 God
- 4 Svært god

348

Hvor ofte har du i løpet av den siste måneden brukt følgende typer av medikamenter:

	3 Daglig	2 Hver uke, men ikke daglig	1 Sjeldnere enn hver uke	0 Aldri	
Smertestillende					349
Avslappende eller beroligende					350
Sovemedisiner					351
Andre, nevn hvilke:					352

FORHOLDET TIL EKTEFELLE/SAMBOER/FAST PARTNER

Hvem mener du er 14-15 åringens viktigste farsfigur?

- 1 Biologisk/adoptivfar
- 2 Samboer/ektefelle som ikke er barnets far
- 3 Tidligere samboer/ektefelle som ikke er barnets far
- 4 Bestefar eller andre

353

Har du for tiden: ektefelle/samboer 1 fast partner 2 ingen av delene 3

354

Hvis du for tiden ikke har fast partner, ektefelle eller samboer, kan du hoppe til side 22.

Når folk beskriver forholdet til partneren, bruker de ofte setninger som nedenfor. Hvordan stemmer disse beskrivelsene for deg? (Sett ring rundt det tallet som best beskriver din opplevelse)

Jeg føler meg nært knyttet til min ektefelle/samboer	Helt enig	1	2	3	4	5	Helt uenig	355
Min partner legger rimelig vekt på mine meninger	Helt enig	1	2	3	4	5	Helt uenig	356
Det forekommer at jeg føler meg utenfor, selv hjemme hos meg selv	Helt enig	1	2	3	4	5	Helt uenig	357

Hvor godt synes du at partneren din møter behovene dine?	Veldig dårlig	1	2	3	4	5	Veldig godt	358
Hvor godt er partnerforholdet ditt sammenlignet med andres partnerforhold?	Veldig dårlig	1	2	3	4	5	Veldig godt	359
Hvor ofte har du ønsket at dere ikke hadde giftet dere eller vært sammen?	Aldri	1	2	3	4	5	Veldig ofte	360
I hvilken grad har forholdet ditt blitt som forventet?	I liten grad	1	2	3	4	5	I stor grad	361
Hvor glad er du i partneren din?	Veldig lite	1	2	3	4	5	Veldig mye	362

I de fleste forhold er det ting man er uenige om.

Her vil vi gjerne at du skal angi i hvilken grad du og din partner er enige om:	1 Alltid enige	2 Ofte enige	3 Av og til enige	4 Sjelden enige	5 Aldri enige	
hvordan dere ser på livet						363
hvordan dere skal ordne økonomien						364
hvilke ting dere synes er viktige						365
hvordan dere skal bruke ferier og fritid						366
forholdet til foreldre/svigerforeldre						367
hvor mye tid dere bør tilbringe sammen						368

Det er lettere å stikke av hvis man bare bor sammen. Det vanskeligste med ekteskapet er kanskje at man må ha så mye med hverandre å gjøre. (Gabriel 8 år)

Hvis du **ikke** bor sammen med barnets far, hvordan vil du karakterisere kommunikasjonen mellom dere?

5 svært god 4 god 3 passe 2 dårlig 1 svært dårlig 0 ikke eksisterende 369

Hvor ofte vil du si at du og barnets far (samt eventuelt også du og nåværende partner):

	Barnets far					Nåværende partner, om dette er en annen enn barnets far					
	0 Aldri	1 Sjelden	2 1-3 ganger i mnd.	3 1-2 ganger i uken	4 Hver dag	0 Aldri	1 Sjelden	2 1-3 ganger i mnd.	3 1-2 ganger i uken	4 Hver dag	
har ubehagelige og stressende samtaler											370, 371
krangler											372, 373
uttrykker sinne og fiendtlighet											374, 375
har diskusjoner som ender med at noen dytter, slår eller sparker											376, 377

De fleste foreldre/par har perioder hvor de er uenige om hvorledes de skal oppdra barna sine eller organisere hverdagen. Tenk på hvordan det har vært i din familie i den **siste måneden**, og vær snill å angi hvor ofte følgende har skjedd:

	Barnets far					Nåværende partner, om dette er en annen enn barnets far					
	0 Nesten aldri	1 Sjelden	2 Noen ganger	3 Ofte	4 Nesten alltid	0 Nesten aldri	1 Sjelden	2 Noen ganger	3 Ofte	4 Nesten alltid	
Det har vært uenighet om hvilke regler som skal gjelde for barnet (f.eks. om leggetid eller steder hvor det er lov å være)											378, 379
Det har vært uenighet om hvordan vi skal sette grenser for barnet											380, 381
Barna har fått forskjellige regler fra hver av oss											382, 383
Vi har sabotert hverandre (ikke støttet hverandre)											384, 385
Det har manglet diskusjoner om ting i sin alminnelighet											386, 387
Det har vært uenighet om hva som skal regnes som ulydighet											388, 389

Ditt eget temperament

Til sist ber vi deg krysse av for de utsagn du mener best karakteriserer deg som person.

Kryss på alle linjene:

	5 Stemmer veldig godt	4 Stemmer ganske godt	3 Både/ og	2 Stemmer ganske dårlig	1 Stemmer veldig dårlig	
Jeg liker å være sammen med andre mennesker						390
Jeg er vanligvis på farten						391
Jeg blir lett skremt						392
Jeg blir ofte lei meg						393
Når jeg ikke er fornøyd sier jeg fra med én gang						394
Jeg er litt av en einstøing						395
Jeg liker å være travelt opptatt hele tiden						396
Jeg regnes for å være varmblodig og hissig						397
Jeg blir ofte frustrert						398
Jeg lever i et høyt tempo						399
Vanlige hendelser plager og bekymrer meg						400
Jeg føler meg ofte usikker						401
Det er mange ting som irriterer meg						402
Når jeg blir skremt blir jeg nærmest panisk						403
Jeg vil heller samarbeide med andre enn å jobbe alene						404
Jeg blir lett følelsesmessig oppskaket						405
Jeg føler meg ofte fylt av virketrang						406
Det skal mye til for å gjøre meg sint						407
Jeg er mindre engstelig for ting enn mine jevnaldrende						408
Jeg synes at andre mennesker er mer stimulerende enn noe annet						409

Å fylle ut et så langt
spørreskjema er en kjempeinnsats.

Tusen takk for at du har tatt deg tid til dette!

Vi vil sende deg tilbakemelding med sammendrag av hovedfunnene fra denne sjette innsamlingsrunden så snart dataene er analysert.

Strand Design

Sitatene er hentet fra "En familie består av 4 hoder, 8 armer og 8 bein" av Unni Lindell

folkehelseinstituttet

TOPP – Trivsel og Oppvekst

Kjære 18-19 åring

Du er en av omlag 900 unge som i 1993 ble med i første runde av TOPP-studien. De første gangene var det dine foreldre som svarte på spørreskjemaet. Fra du var 12-13 år har du hatt mulighet til svare på egne skjema - i 2004, 2006 og 2008. Vi håper at du tar deg tid til å svare også denne gangen! Nedenfor er det nyttig informasjon om deltakelse i studien og kontaktinformasjon. Riv av denne siden før du sender spørreskjemaet tilbake til oss.

Praktisk
Det tar ca. en halvtime å fylle ut spørreskjemaet. Vi anbefaler at du er alene når du svarer på spørreskjemaet, ettersom det inneholder noen sensitive spørsmål. Det er viktig at du svarer på så mange spørsmål som mulig. Dersom det skulle være spørsmål du synes det er vanskelig å svare på kan du eventuelt hoppe over disse. Når du har fylt ut spørreskjemaet, legger du det i konvolutten du fikk sammen med spørreskjemaet. Portoen er allerede betalt, så konvolutten kan legges rett i en postkasse uten frimerke. Som takk for innsatsen er du med i trekningen av 40 gavekort, hver til en verdi av 500 kr. Sjansen for å vinne er ganske stor ettersom det er relativt mange gavekort i forhold til antall deltakere.

Konfidensielt
Alle svarene dere gir blir som før behandlet konfidensielt. Det betyr at svarene dine ikke blir koblet til navn, personnummer eller adresse. På spørreskjemaet er navnet ditt erstattet med et ID-nummer. Listen som kobler personinformasjon og ID-nummer blir oppbevart adskilt fra spørreskjemaene, og det er kun to personer ved FHI som har tilgang til denne informasjonen.

Frivillig
Det er frivillig å delta i studien. Du kan når som helst reservere deg mot å bli kontaktet igjen. Dette gjør du ved å ta direkte kontakt med prosjektkoordinator (se kontaktinformasjon under). Endelig prosjektslutt er foreløpig satt til 2020. Opplysningene om hvem du er vil bli slettet etter at prosjektet er avsluttet. Prosjektet er meldt til Datatilsynet og er godkjent av Regional Etisk komité for medisinsk og helsefaglig forskningsetikk (REK).

Kontakt
Ikke nøl med å ta kontakt dersom du har spørsmål. Send en e-post, eller ring til vår prosjektkoordinator Frøydis Enstad (fren@fhi.no, 21 07 83 09). Du kan også ta direkte kontakt andre i forskergruppen. Nyttig informasjon om studien finner du på www.fhi.no/toppstudien.

På forhånd takk for hjelpen!

Vennlig hilsen TOPP-gruppen!

Evalill Karevold	Anne Kjeldsen	Anni Skipstein	Maren J.Helland	Wendy Nilsen	Kristin B.Gustavson	Kristin S. Mathiesen
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21078336	21078366	21078340	21078385	21078384	21078313	Prosjektleder
						21078338

T T

1 **Tildelt ID nr:**

Spørreskjema til ungdom på 18-19 år

Slik fyller du ut skjemaet
Skjemaet vil bli lest maskinelt, det er derfor viktig at du krysser av riktig:

☒ Riktig ☒ Galt ☑ Galt Hvis du krysser av i feil rute, må du fylle ruta slik: ■ og sette kryss i den riktige ruta.

Skriv tydelige tall:

Riktig 1 2 3 4 5 6 7 8 9 Galt 1 2 3 4 5 6 7 8 9

Bruk kun sort eller blå penn, bruk ikke blyant eller tusj.

Samtykkeerklæring

2 **SETT ET KRYSS**

Gir du ditt samtykke til at dataene samlet inn i TOPP-studien kan kobles med opplysninger om deg i offentlige registre*?

☐ Ja, jeg samtykker til registerkobling

☐ Nei, jeg samtykker ikke til registerkobling

* Aktuelle registre er FD-trygd (trygderegister), sysselsettingsdata, Nasjonal utdanningsbase, Norsk pasientregister (NPR), Medisinsk fødselsregister og Reseptbasert legemiddelregister.

Familieforhold

3-5 **Når er du født?** _____ *(DDMMÅÅ)*

6 **Er du jente eller gutt?** ☐ Jente ☐ Gutt

7-15 **Hvem bor du sammen med nå?**
(Sett så mange kryss som passer)

☐ Mor og far ☐ Bare mor ☐ Bare far ☐ Mor/far med ny samboer eller ektefelle

☐ Bor omtrent like mye hos mor og far ☐ Ingen (bor alene) ☐ Ektefelle/samboer

☐ Andre ungdommer (bofellesskap) ☐ Annet

Skole, utdanning og jobb

Her vil vi vite hvilken skole du går på nå, har fullført eller planlegger å begynne på.
(Sett så mange kryss som passer)

		Går på nå	Påbegynt, men sluttet før eksamen	Fullført	Planlegger å begynne på
16	Videregående skole, studieforberedende	☐	☐	☐	☐
17	Videregående skole, yrkesfaglig	☐	☐	☐	☐
18	1-2 års utdannelse etter videregående	☐	☐	☐	☐
19	3-årig høyskole/universitet	☐	☐	☐	☐
20	4 år eller mer på høyskole/universitet	☐	☐	☐	☐

21 **Har du lønnet arbeid?** ☐ Ja ☐ Nei

22 **Hvis ja, hvor mange timer arbeider du vanligvis pr. uke?** ☐☐☐ timer

23-27 **Hva har du levd av de siste 12 månedene?**
(Sett så mange kryss som passer)

☐ Forsørget av foreldrene ☐ Studielån/stipend ☐ Egen inntekt ☐ Sosialhjelp/trygd (NAV) ☐ Annet

28 **Har du vært borte fra jobb eller skole de siste 6 månedene grunnet egen sykdom?** ☐ Ja ☐ Nei

Hvis ja, hvor mange dager, uker og/eller måneder har du vært borte totalt de siste 6 månedene?

29-31 Totalt ☐☐ dager, ☐☐ uker, og/eller ☐☐ måneder

I hvilken grad vil du si at dette sykefraværet skyldes:
(Sett ett kryss på hver linje)

		Ikke i det hele tatt	I liten grad	I noen grad	I høy grad
32	Fysisk sykdom	☐	☐	☐	☐
33	Psykiske plager/vansker	☐	☐	☐	☐

Følelser og tanker

Hvor riktige er påstandene under for deg?
(Sett ett kryss på hver linje)

		Ikke riktig	Litt riktig	Nesten riktig	Helt riktig
34	Jeg klarer alltid å løse vanskelige problemer hvis jeg prøver hardt nok	☐	☐	☐	☐
35	Hvis noen motarbeider meg, så kan jeg finne måter og veier for å få det som jeg vil	☐	☐	☐	☐
36	Hvis jeg har et problem og står helt fast, så finner jeg vanligvis en vei ut	☐	☐	☐	☐
37	Jeg føler meg trygg på at jeg ville kunne takle uventede hendelser på en effektiv måte	☐	☐	☐	☐
38	Jeg beholder roen når jeg møter vanskeligheter, fordi jeg stoler på mine evner til å mestre/få til ting	☐	☐	☐	☐

Følelser og tanker *fortsetter*

Nå ønsker vi å få vite hvor fornøyd du er med livet ditt, slik som det er i dag.
Kryss av for hvor enig eller uening du er i de følgende påstandene:
(Sett ett kryss på hver linje)

		Svært uenig	Uenig	Litt uenig	Verken eller	Litt enig	Enig	Svært enig
39	På de fleste måter er livet mitt nær idealet mitt	☐	☐	☐	☐	☐	☐	☐
40	Mine livsforhold er utmerkede	☐	☐	☐	☐	☐	☐	☐
41	Jeg er tilfreds med livet mitt	☐	☐	☐	☐	☐	☐	☐
42	Så langt har jeg fått de viktige tingene jeg ønsker i livet	☐	☐	☐	☐	☐	☐	☐
43	Hvis jeg kunne leve livet på nytt, ville jeg nesten ikke forandre på noe	☐	☐	☐	☐	☐	☐	☐

Her følger en liste over forskjellige følelser og tanker man av og til kan ha. Tenk på de to siste ukene og kryss av for om du har følt eller tenkt noe av det som står nedenfor
(Sett ett kryss på hver linje)

		Stemmer	Stemmer noen ganger	Stemmer ikke
44	Jeg var lei meg eller ulykkelig	☐	☐	☐
45	Jeg følte meg så trøtt at jeg bare ble sittende uten å gjøre noen ting	☐	☐	☐
46	Jeg var veldig rastløs	☐	☐	☐
47	Jeg var ikke glad for noe	☐	☐	☐
48	Jeg følte meg lite verdt	☐	☐	☐
49	Jeg gråt mye	☐	☐	☐
50	Jeg tenkte at livet ikke var verdt å leve	☐	☐	☐
51	Jeg synes det var vanskelig å tenke klart eller konsentrere meg	☐	☐	☐
52	Jeg hatet meg selv	☐	☐	☐
53	Jeg tenkte at jeg aldri kunne bli så god som andre ungdom	☐	☐	☐
54	Jeg følte meg ensom	☐	☐	☐
55	Jeg tenkte at ingen egentlig var glad i meg	☐	☐	☐
56	Jeg følte meg som et dårlig menneske	☐	☐	☐
57	Jeg syntes jeg gjorde alt galt	☐	☐	☐
58	Jeg tenkte at fremtiden ikke hadde noe positivt å by meg	☐	☐	☐
59	Jeg tenkte på å ta livet mitt	☐	☐	☐

T T

Følelser og tanker *fortsetter*

Les gjennom alle utsagnene og kryss av for å vise i hvor stor grad du føler at utsagnet passer for deg <u>den siste uken.</u> Det er ingen svar som er riktige eller gale.
(Sett ett kryss på hver linje)

		Passer ikke i det hele tatt	Passer til en viss grad, eller noe av tiden	Passer godt, eller en god del av tiden	Passer best, eller mesteparten av tiden
60	Jeg merket at jeg var tørr i munnen	☐	☐	☐	☐
61	Jeg hadde pustevansker (f.eks. pustet altfor fort, eller ble andpusten uten fysisk anstrengelse)	☐	☐	☐	☐
62	Jeg følte meg skjelven (f.eks. følte at bena kom til å gi etter under meg)	☐	☐	☐	☐
63	Jeg opplevde situasjoner som gjorde meg så engstelig at jeg ble utrolig lettet når de var over	☐	☐	☐	☐
64	Jeg følte at jeg kom til å besvime	☐	☐	☐	☐
65	Jeg svettet mye (f.eks. i hendene) uten at det var varmt og uten fysisk anstrengelse	☐	☐	☐	☐
66	Jeg følte meg redd uten å ha særlig grunn til det	☐	☐	☐	☐
67	Jeg hadde problemer med å svelge	☐	☐	☐	☐
68	Jeg var oppmerksom på hjerterytmen min uten at jeg hadde vært i fysisk aktivitet (f.eks. følelse av økt hjerterytme, eller at hjertet hoppet over et slag)	☐	☐	☐	☐
69	Jeg følte at jeg var nær ved å få panikk	☐	☐	☐	☐
70	Jeg var redd for at selv en enkel, triviell oppgave kunne bringe meg ut av fatning	☐	☐	☐	☐
71	Jeg var livredd	☐	☐	☐	☐
72	Jeg bekymret meg for å komme opp i situasjoner der jeg kunne få panikk og dumme meg ut	☐	☐	☐	☐
73	Jeg skalv ofte (f.eks på hendene)	☐	☐	☐	☐
74	Jeg unngikk aktiviteter hvor jeg var i sentrum for andres oppmerksomhet	☐	☐	☐	☐
75	Jeg unngikk å gjøre ting eller snakke til andre av redsel for å bli flau	☐	☐	☐	☐

Nedenfor følger åtte påstander som du kan være enig eller uenig i.
(Sett ett kryss på hver linje for å indikere hvor enig eller uenig du er i hver påstand)

		Svært uenig	Uenig	Litt uenig	Verken eller	Litt enig	Enig	Svært enig
76	Jeg lever et meningsfylt liv	☐	☐	☐	☐	☐	☐	☐
77	Mine sosiale relasjoner er støttende og givende	☐	☐	☐	☐	☐	☐	☐
78	Jeg er engasjert og interessert i det jeg driver med til daglig	☐	☐	☐	☐	☐	☐	☐
79	Jeg bidrar aktivt til andres lykke og trivsel	☐	☐	☐	☐	☐	☐	☐
80	Jeg er kompetent og dyktig i de aktivitetene som er viktige for meg	☐	☐	☐	☐	☐	☐	☐
81	Jeg er en god person og lever et godt liv	☐	☐	☐	☐	☐	☐	☐
82	Jeg ser optimistisk på fremtiden min	☐	☐	☐	☐	☐	☐	☐
83	Folk respekterer meg	☐	☐	☐	☐	☐	☐	☐

T T

Venner, foreldre og fritid

Når folk beskriver forholdet til vennene sine, bruker de ofte setninger som nedenfor.
På en skala fra 1-5, hvor enig eller uenig er du i beskrivelsene nedenfor?
(Sett ett kryss på hver linje)

84	Jeg føler meg nært knyttet til mine venner	**Helt enig**	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	**Helt uenig**
85	Vennene mine hører på meningene mine	**Helt enig**	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	**Helt uenig**
86	Det hender at jeg føler meg utenfor selv blant venner	**Helt enig**	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	**Helt uenig**

Hvor ofte har du gjort følgende i løpet av den siste uken?
(Sett ett kryss på hver linje)

		Ingen ganger	**1 – 2 ganger**	**3 - 4 ganger**	**5 - 6 ganger**	**Hver dag**
87	Vært sammen med venner i fritiden (utenom skoletid, jobb og organiserte aktiviteter)	☐	☐	☐	☐	☐
88	Trent i idrettslag/klubb (fotball, friidrett, ski og lignende)	☐	☐	☐	☐	☐
89	Trent i helsestudio/treningssenter (aerobic, vekter/ apparater og lignende)	☐	☐	☐	☐	☐
90	Trent på egenhånd utendørs eller hjemme hos deg selv (jogging, vekter og lignende)	☐	☐	☐	☐	☐
91	Vært på møte, øving eller lignende i forening/lag (kor, fritidsklubb, organisasjon og lignende)	☐	☐	☐	☐	☐

Her kommer noen utsagn om hvordan ungdom kan oppleve at foreldrene er mot dem.
Kryss av for hvor godt du synes dette stemmer for deg.
(Sett ett kryss på hver linje)

	Tenk på moren din:	**Nesten aldri**	**Sjelden**	**Av og til**	**Ofte**	**Nesten alltid**
92	Jeg kan stole på at hun hjelper meg hvis jeg har problemer	☐	☐	☐	☐	☐
93	Hun oppmuntrer meg alltid til å gjøre mitt beste	☐	☐	☐	☐	☐
94	Hun oppmuntrer meg til å ta egne valg	☐	☐	☐	☐	☐

	Tenk på faren din:	**Nesten aldri**	**Sjelden**	**Av og til**	**Ofte**	**Nesten alltid**
95	Jeg kan stole på at han hjelper meg hvis jeg har problemer	☐	☐	☐	☐	☐
96	Han oppmuntrer meg alltid til å gjøre mitt beste	☐	☐	☐	☐	☐
97	Han oppmuntrer meg til å ta egne valg	☐	☐	☐	☐	☐

T T

Brudd på regler

Her er det listet opp handlinger som har å gjøre med brudd på regler i hjem, skole og samfunn. Noen handlinger gjelder ting som er ulovlige eller på grensen til det ulovlige, men som mange likevel gjør.

Har du vært med på eller gjort noe av det følgende i løpet av de siste 12 månedene?
(Sett ett kryss på hver linje)

		Ikke gjort det	1 gang	2-3 ganger	4-10 ganger	Mer enn 10 ganger
98	Lurt deg fra å betale på kino, kafè, buss, tog eller liknende	☐	☐	☐	☐	☐
99	Tatt penger fra noen i familien din uten å ha lov	☐	☐	☐	☐	☐
100	Tatt varer fra kjøpesenter, butikk eller kiosk uten å betale	☐	☐	☐	☐	☐
101	Skulket en eller to skoletimer	☐	☐	☐	☐	☐
102	Skulket en eller to timer fra jobb	☐	☐	☐	☐	☐
103	Med vilje ødelagt eller knust vindusruter, benker, postkasser, hageplanter eller liknende	☐	☐	☐	☐	☐
104	Klort eller lugget noen (ikke søsken)	☐	☐	☐	☐	☐
105	Brutt deg inn i en butikk, hus eller leilighet, for å stjele noe	☐	☐	☐	☐	☐
106	Truet med å slå eller skade noen (ikke søsken)	☐	☐	☐	☐	☐
107	Vært i slåsskamp på skolen eller andre steder	☐	☐	☐	☐	☐
108	Slått eller sparket noen (ikke søsken)	☐	☐	☐	☐	☐
109	Drukket så mye at du har følt deg tydelig beruset	☐	☐	☐	☐	☐
110	Prøvd hasj eller marihuana	☐	☐	☐	☐	☐

Livshendelser og belastninger

Har du opplevd noen av hendelsene som er listet opp nedenfor i løpet av de siste 12 månedene
(Sett ett kryss på hver linje)

		Nei	Ja
111	Foreldrene mine er blitt skilt eller separert	☐	☐
112	Jeg har blitt slått ned, overfalt eller grovt ydmyket	☐	☐
113	Jeg har blitt tatt for å ha gjort noe galt (stjålet noe eller lignende)	☐	☐
114	Noen jeg var glad i er død (slektning, god venn)	☐	☐
115	Faren eller moren min har mistet jobben	☐	☐
116	Jeg har mistet kjæledyret mitt	☐	☐
117	Det har blitt slutt med kjæresten	☐	☐
118	Jeg har opplevd noe fint som jeg ikke vil si til noen	☐	☐
119	Jeg har opplevd noe leit som jeg ikke vil si til noen	☐	☐

T T

Nedenfor har vi listet opp ting som mange ungdommer kan oppleve. Tenk på det siste året og kryss av for hvor ofte du har opplevd noe av det følgende:
(Sett ett kryss på hver linje)

		Sjelden eller aldri	Av og til	Ganske ofte	Svært ofte
120	Foreldrene mine er for mye borte hjemmefra (pga. arbeid eller annet)	☐	☐	☐	☐
121	Jeg har for mye ansvar hjemme (for småsøsken, husarbeid eller lignende)	☐	☐	☐	☐
122	En eller begge foreldrene mine prøver å kontrollere alt jeg gjør	☐	☐	☐	☐
123	Jeg hører at foreldrene mine krangler	☐	☐	☐	☐
124	Foreldrene mine slåss med hverandre	☐	☐	☐	☐
125	Familien min har hatt økonomiske problemer som har gått utover meg	☐	☐	☐	☐
126	Jeg har blitt utstøtt fra vennene mine og miljøet	☐	☐	☐	☐
	Jeg er bekymret fordi:				
127	En av mine nærmeste bruker for mye alkohol, piller eller andre rusmidler	☐	☐	☐	☐
128	En av mine nærmeste er lei seg og oppgitt	☐	☐	☐	☐
129	En av mine nærmeste er engstelig eller redd	☐	☐	☐	☐
130	En av mine venner/ søsken er i alvorlige vanskeligheter	☐	☐	☐	☐
131	Mor, far eller søsken er alvorlig syk/ alvorlig skadet	☐	☐	☐	☐

Kropp og helse

132 **Hvordan anser du helsen din å være nå for tiden?**

☐ Dårlig ☐ Ikke helt god ☐ OK ☐ God ☐ Svært god

133-134 **Hvor mye veier du?** Ca ☐☐☐ kg **Hvor høy er du?** Ca ☐☐☐ cm
(Oppgi svar i hele kilo)

Tenk på det siste året; hvor ofte har du vondt i (inkl. idrettsskader):
(Sett ett kryss på hver linje)

		Aldri	Noen ganger i året	1-3 ganger pr. måned	1-3 ganger pr. uke	Daglig eller nesten daglig
135	Hodet:	☐	☐	☐	☐	☐
136	Magen:	☐	☐	☐	☐	☐
137	Ryggen:	☐	☐	☐	☐	☐
138	Armer/ben:	☐	☐	☐	☐	☐

T T

Kropp og helse *fortsetter*

Nedenfor er en del utsagn om mat og spisevaner. Kryss av for det som passer for deg.
(Sett ett kryss på hver linje)

		Nesten alltid	Ofte	Sjelden	Nesten aldri
139	Jeg er opptatt av å bli tynnere	☐	☐	☐	☐
140	Jeg prøver å holde diett	☐	☐	☐	☐
141	Jeg føler ubehag etter at jeg har spist søtsaker	☐	☐	☐	☐
142	Jeg trimmer for å gå ned i vekt	☐	☐	☐	☐
143	Jeg kaster opp etter at jeg har spist	☐	☐	☐	☐
144	Når jeg først har begynt å spise, kan det være vanskelig å stoppe	☐	☐	☐	☐
145	Jeg bruker for mye tid til å tenke på mat	☐	☐	☐	☐
146	Jeg føler at maten kontrollerer livet mitt	☐	☐	☐	☐
147	Når jeg spiser, skjærer jeg maten opp i små biter	☐	☐	☐	☐
148	Jeg bruker lengre tid enn andre på et måltid	☐	☐	☐	☐
149	Andre mennesker synes jeg er for tynn	☐	☐	☐	☐
150	Jeg føler at andre presser meg til å spise	☐	☐	☐	☐

151 **Har du <u>noen gang</u> prøvd å slanke deg?** ☐ Nei ☐ Ja

152 **Har du prøvd å slanke deg i løpet av <u>de siste 12 månedene?</u>** ☐ Nei ☐ Ja

Hvis du har prøvd å slanke deg <u>de siste 12 månedene,</u> hva har du gjort for å slanke deg?
(Sett ett kryss på hver linje)

		Aldri	Sjelden	Ofte	Alltid
153	Jeg spiser mindre	☐	☐	☐	☐
154	Jeg faster	☐	☐	☐	☐
155	Jeg trener mer	☐	☐	☐	☐
156	Jeg kaster opp	☐	☐	☐	☐
157	Jeg tar mettende eller sultdempende midler (pulver, piller ol.)	☐	☐	☐	☐

Har du i løpet av <u>de siste 12 månedene</u> fått behandling eller blitt henvist for noen av de følgende problemene?
(Sett så mange kryss som passer)

158-160	Depresjon	☐ Nei	☐ Ja, henvist	☐ Ja, fått behandling
161-163	Angstlidelse	☐ Nei	☐ Ja, henvist	☐ Ja, fått behandling
164-167	En annen alvorlig psykisk lidelse,	☐ Nei	☐ Ja, henvist	☐ Ja, fått behandling

nevn hvilken:_____

T T

Kjærester og seksualitet

169-170 **Har du kjæreste?**

- ☐ Ja, jeg har kjæreste nå
- ☐ Nei, men jeg har hatt kjæreste tidligere
- ☐ Nei, jeg har aldri hatt kjæreste

Hvis du har kjæreste/samboer/ektefelle nå, hvor gammel er han/hun?

☐☐ år

171-172 **Hvilken seksuell legning har du?**

- ☐ Hetrofil
- ☐ Homofil
- ☐ Bifil

Har du noen gang hatt samleie?

- ☐ Ja
- ☐ Nei

Hvis du ikke har hatt samleie kan du hoppe til neste side.

173-174 **Hvor gammel var du første gang du hadde samleie?**

☐☐ år

Totalt, hvor mange har du hatt samleie med?

Totalt ☐☐ personer

175-177 **I løpet av de siste 12 månedene, hvor mange har du hatt samleie med?**

Antall ☐☐

Har du noen gang vært gravid eller gjort noen gravid?

☐ Ja ☐ Nei

Har du egne barn?

☐ Ja ☐ Nei

	Sett så mange kryss som passer	Ingen prevensjon	Kondom	P-piller/ P-sprøyte	Annen prevensjon	Vet ikke
178-182	**I løpet av de siste 12 månedene, hvilken type/typer har du/din partner brukt?**	☐	☐	☐	☐	☐
183-187	**Ved siste samleie, hvilken type prevensjon brukte du/din partner?**	☐	☐	☐	☐	☐

188 **Har du noen gang blitt behandlet for en seksuell overførbar sykdom (kjønnssykdom) som klamydia, herpes, kjønnsvorter eller lignende?**

- ☐ Ja
- ☐ Nei

Disse spørsmålene besvares kun av jenter:

189-190 **Har du noen gang tatt abort?**

- ☐ Ja
- ☐ Nei

Har du noen gang brukt "angrepille"?

- ☐ Nei
- ☐ Ja

191 **Hvis ja, hvor mange ganger har du brukt angrepille?**

Ca. ☐☐ ganger

T T

T T

Om deg selv som person

Her er noen beskrivelser av hvordan folk kan oppleve seg selv og hvordan de kan ha det. Kryss av slik det stemmer for deg. *(Sett ett kryss på hver linje)*

		Stemmer veldig godt	Stemmer ganske godt	Både/og	Stemmer ganske dårlig	Stemmer veldig dårlig
192	Jeg liker å være sammen med andre mennesker	☐	☐	☐	☐	☐
193	Jeg gir ikke opp selv om jeg jobber med en vanskelig oppgave	☐	☐	☐	☐	☐
194	Jeg er vanligvis på farten	☐	☐	☐	☐	☐
195	Jeg blir lett skremt	☐	☐	☐	☐	☐
196	Jeg blir ofte lei meg	☐	☐	☐	☐	☐
197	Når jeg ikke er fornøyd sier jeg fra med én gang	☐	☐	☐	☐	☐
198	Jeg trives best alene	☐	☐	☐	☐	☐
199	Selv om jeg blir avbrutt, fortsetter jeg med oppgavene mine (som lekser og husarbeid) etterpå	☐	☐	☐	☐	☐
200	Jeg liker å gjøre noe hele tiden	☐	☐	☐	☐	☐
201	Jeg regnes for å være temperamentsfull og hissig	☐	☐	☐	☐	☐
202	Jeg blir ofte irritert	☐	☐	☐	☐	☐
203	Jeg jobber med en oppgave helt til den er fullført	☐	☐	☐	☐	☐
204	Jeg gjør menge ting hele tiden	☐	☐	☐	☐	☐
205	Vanlige hendelser plager og bekymrer meg	☐	☐	☐	☐	☐
206	Jeg har problemer med å gjøre ting ferdig	☐	☐	☐	☐	☐
207	Jeg føler meg ofte usikker	☐	☐	☐	☐	☐
208	Det er mange ting som irriterer meg	☐	☐	☐	☐	☐
209	Når jeg blir skremt får jeg nesten panikk	☐	☐	☐	☐	☐
210	Jeg vil heller jobbe sammen med andre enn å jobbe alene	☐	☐	☐	☐	☐
211	Jeg blir fort opprørt	☐	☐	☐	☐	☐
212	Jeg føler meg ofte fylt av energi	☐	☐	☐	☐	☐
213	Det skal mye til for å gjøre meg sint	☐	☐	☐	☐	☐
214	Jeg er mindre engstelig for ting enn mine jevnaldrende	☐	☐	☐	☐	☐
215	Jeg synes andre mennesker er mer spennende enn noe annet	☐	☐	☐	☐	☐
216	Jeg skifter lett fra en aktivitet til en annen, uten å bli ferdig med det jeg holdt på med først	☐	☐	☐	☐	☐

Nedenfor følger noen setninger som i større eller mindre grad beskriver hvordan du selv synes du er. Hvor godt stemmer beskrivelsene for deg <u>nå for tiden</u>?

(Sett ett kryss på hver linje)

		Stemmer svært dårlig	Stemmer ganske dårlig	Stemmer litt	Stemmer ganske godt	Stemmer veldig godt
217	Jeg synes at jeg ser bra ut	☐	☐	☐	☐	☐
218	Jeg er ikke fornøyd med utseendet mitt	☐	☐	☐	☐	☐
219	Jeg liker utseendet mitt veldig godt	☐	☐	☐	☐	☐
220	Jeg ønsker at jeg så annerledes ut	☐	☐	☐	☐	☐
221	Jeg ønsker at kroppen min var annerledes	☐	☐	☐	☐	☐

T T

Uønskede seksuelle hendelser

Har du <u>noen gang</u> vært utsatt for noe av det følgende mot din vilje?
(Sett to kryss på hver linje)

		<u>Før</u> du fylte 13 år			**<u>Etter</u> at du fylte 13 år**		
		Nei	**Ja**	**Antall ganger**	**Nei**	**Ja**	**Antall ganger**
222-225	Noen har befølt deg mot din vilje	☐	☐		☐	☐	
226-229	Du har befølt en annen mot din vilje	☐	☐		☐	☐	
230-233	Du har hatt samleie mot din vilje	☐	☐		☐	☐	
234-237	Du har hatt annen form for sex mot din vilje	☐	☐		☐	☐	
238-241	Du har vært utsatt for voldtektsforsøk	☐	☐		☐	☐	
242-245	Du har vært utsatt for voldtekt	☐	☐		☐	☐	

Dersom du svarte nei på alle spørsmålene kan du hoppe over til neste side.

246 **Tenk på <u>den første</u> gangen du ble utsatt for en uønsket seksuell hendelse. Hvor gammel var du da det skjedde?**

Jeg var omtrent ☐☐ år

247 **Omtrent hvor gammel var personen som gjorde dette mot deg?**

Han/hun var omtrent ☐☐ år

248-249 **Hadde du drukket alkohol da dette skjedde?**

☐ Ja
☐ Nei

Hadde hun/han som gjorde dette mot deg drukket alkohol da dette skjedde?

☐ Ja
☐ Nei
☐ Vet ikke

250 **Hvem var personen som gjorde dette mot deg?**
(Sett kun ett kryss)

☐ Familiemedlem
☐ Kjæreste
☐ Annen jevnaldrende jeg kjente fra før
☐ Fremmed jevnaldrende
☐ Annen voksen jeg kjente fra før
☐ Fremmed voksen

Når du tenker tilbake på denne hendelsen, passer noen av de følgende betegnelsene på det som skjedde?
(Sett ett kryss på hver linje)

		Passer svært dårlig	**Passer nokså dårlig**	**Passer nokså godt**	**Passer svært godt**
251	Jeg var for liten/ung til å forstå	☐	☐	☐	☐
252	Jeg deltok frivillig, men angret etterpå	☐	☐	☐	☐
253	Jeg ble utsatt for press	☐	☐	☐	☐
254	Jeg ble holdt fast	☐	☐	☐	☐
255	Jeg ble truet med vold	☐	☐	☐	☐

Røyking og alkohol

		Ikke i løpet av det siste året	Sjeldnere enn en gang i mnd.	Omtrent en gang i mnd.	2 - 3 ganger i mnd.	Omtrent en gang i uken	2 - 4 ganger i uken	Hver dag eller nesten hver dag
256	Omtrent hvor ofte drikker du noen form for alkohol?	☐	☐	☐	☐	☐	☐	☐
257	Omtrent hvor mange ganger i året drikker du så mye alkohol at det tilsvarer 5 flasker øl, en flaske vin, en halv flaske hetvin, eller en kvart flaske brennevin?	☐	☐	☐	☐	☐	☐	☐

		Drikker ikke	1-2	3-4	5-6	7-9	10 eller flere
258	**Hvor mange alkoholenheter tar du på en typisk drikkedag?** *(En alkoholenhet er en halvliter pils, ett glass rødvin, eller en drink)*	☐	☐	☐	☐	☐	☐

	Hvor ofte har du i løpet av det siste år.....	Aldri	Sjeldnere enn månedlig	Noen ganger i måneden	Noen ganger i uken	Daglig el. nesten daglig
259	- ikke vært i stand til å stoppe å drikke etter at du hadde begynt?	☐	☐	☐	☐	☐
260	- unnlatt å gjøre ting fordi du hadde drukket?	☐	☐	☐	☐	☐
261	- trengt en drink om morgenen for å komme i gang etter sterk drikking dagen før?	☐	☐	☐	☐	☐
262	- hatt skyldfølelse eller samvittighetsnag på grunn av drikking?	☐	☐	☐	☐	☐
263	- ikke husket hva som hendte kvelden før på grunn av drikking?	☐	☐	☐	☐	☐

		Nei	Ja - men ikke i løpet av siste år	Ja - i løpet av siste år
264	Har du eller noen annen blitt skadet som følge av din drikking?	☐	☐	☐
265	Har en slektning eller venn eller lege (eller annen helsearbeider) engstet seg over drikkingen din, eller antydet at du burde redusere?	☐	☐	☐

	Har du noen gang vært påvirket av alkohol og gjort følgende:	Nei, aldri	Ja, en gang	Ja, to eller flere ganger
266	Hatt samleie/sex med noen og senere angret?	☐	☐	☐
267	Hatt samleie/sex med noen uten å ha brukt kondom?	☐	☐	☐
268	Hatt samleie/sex med noen uten å ha brukt annen form for prevensjon?	☐	☐	☐

T T

Røyking og alkohol *fortsetter*

269-270 **Har det hendt at du har fått en halvliter pils, ett glass rødvin eller en drink foreldrene dine før du var 18 år?**

- ☐ Nei, det har aldri hendt
- ☐ Ja, en sjelden gang
- ☐ Ja, noen ganger
- ☐ Ja, ofte

Har det hendt at du har fått en halvliter pils, ett glass rødvin eller en drink av foreldrene dine før du var 15 år?

- ☐ Nei, det har aldri hendt
- ☐ Ja, en sjelden gang
- ☐ Ja, noen ganger
- ☐ Ja, ofte

271-272 **Hvor ofte har du sett moren din tydelig beruset?**

- ☐ Aldri
- ☐ Noen ganger
- ☐ Noen ganger i måneden
- ☐ Noen ganger i uka

Hvor ofte har du sett faren din tydelig beruset?

- ☐ Aldri
- ☐ Noen ganger
- ☐ Noen ganger i måneden
- ☐ Noen ganger i uka

Røyker du?

273-274 ☐ Har aldri røkt ☐ Har prøvd ☐ Har røkt tidligere, men har sluttet nå ☐ Røyker av og til

☐ Røyker daglig ca. ____ sigaretter

Bruk av digitale medier

		Vanligvis ikke	Mindre enn 1 time	1 - 2 timer	3 - 4 timer	5-6 timer	7 timer eller mer
275	Hvor mange timer sitter du vanligvis foran PCen på en hverdag, utenom skolen/jobben?	☐	☐	☐	☐	☐	☐

Hvor lang tid bruker du vanligvis når du gjør følgende i løpet av en hverdag (ikke lørdag/søndag), utenom skolen/jobben?

		Vanligvis ikke	Mindre enn 1 time	1 - 2 timer	3 - 4 timer	5-6 timer	7 timer eller mer
276	Ser på TV/DVD/video	☐	☐	☐	☐	☐	☐
277	Spiller dataspill (PC- eller TV-spill)	☐	☐	☐	☐	☐	☐
278	Chatter med andre på nettet (Facebook, MSN eller lignende)	☐	☐	☐	☐	☐	☐

Tusen takk for at du har tatt deg tid til å fylle ut spørreskjemaet!

Vi vil sende deg et sammendrag av hovedfunnene fra denne åttende og siste innsamlingsrunden så snart dataene er analysert.
Dette planlegger vi å være ferdig med i løpet av 2011.