

Adolescent times of storm and stress revised

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ABSTRACT

This paper focuses on two issues regarding theories of adolescence. The first one, which has been a topic of discussion for a long time, concerns whether adolescence should be regarded as either an uncomplicated or a turbulent period. In the latter case, it is aspired in this paper to find out which factors account for such turbulence. The second issue, which arose more recently, concerns the continually longer postponement of the transition to adulthood. These topics are empirically addressed using the data of the second Flemish Youth Monitor. Analyses indicate that the loss of childhood innocence causes adolescents to have a more realistic evaluation of life, self and relationships. For adolescents whose ties with parents and their school environment are less tight, this can cause heightened stress in terms of lowered self-esteem and negative future prospects. These stresses, however, cannot account for the rise in delinquent activity during this developmental stage, for the analyses indicate that adolescent delinquency rather results from a more outgoing lifestyle. Finally, the idea of a prolongation of 'storm and stress' cannot be supported by the data, since it is found that most youth find their balance back around age 22.

1. STORM AND STRESS?

The idea of adolescence being a period of 'storm and stress' – a perspective which was introduced by Hall (1904) and supported by the psychoanalytic tradition (Freud, 1958) and Erikson's (1968) definition of adolescence as a time of identity crisis – was popular for most of the 20th century. In this view, adolescence is characterized as an inevitably turbulent process; accompanied by negative moods, a problematic relationship with parents and risky behavior, including delinquency (Deković & Buist, 2004; Gecas & Seff, 1990; Goossens, 2006a). Since the 1980s, however, improved empirical data caused this view to stagger. Even though the notion that adolescents would have a despondent temper is (cautiously) supported – adolescents experience slightly more negative emotionality than children (overview in Goossens, 2006b) – it was also determined that for most adolescents, the relationship with parents does not become troubled (Boer, 2004; Deković & Buist, 2004; Gecas & Seff, 1990).

Despite these findings, the increase of internalizing and externalizing problem behaviors in this developmental stage indicates that the idea of adolescence as a tumultuous and on occasion miserable period, cannot just be discarded (Alsaker & Dick-Niederhauser, 2006; Burssens, 2007; Hooge, Decaluwé & Goossens, 2000;

Junger-Tas, Steketee & Moll, 2008; Moffitt, 1993; Slot, 2004). Reasons for this discomfort were introduced by different scientific disciplines. It is more specifically the interaction between biological-emotional, cognitive and social indicators that is most referred to in this case.

Biological-emotional development

From a biological perspective, the despondent moods adolescents endure can be clarified by the bodily changes they go through. Even though the direct effects of changes in behavior-activating hormones (such as testosterone) are often referred to as the number one explanation in this context, debate about their actual impact still exists. After all, empirical data portray that the link between these changes and mood is too weak to provide a full explanation (Doreleijers & Jansen, 2004; Steinberg, 2002; Walsh, 2000). Another observation that could add to this incomplete explanation consists of the late maturation of the prefrontal cortex (PFC), the brain part that is responsible for the regulation of emotions, planning, reasoning and self-control. Furthermore, drastic changes in the neurotransmitters dopamine and serotonin – responsible for emotional stimuli in the limbic system of the brain – occur during adolescence. These cause the individual to simultaneously experience a heightened sensitivity for stress and a lowered susceptibility for rewards. It is thus the conflicting combination of a PFC that is not yet completely developed and hormonal changes that causes adolescents to experience more adversity and difficulties in their relationships. For some of them, these will be enacted through internalizing or externalizing problem behavior (Doreleijers & Jansen, 2004; Spear, 2000; Steinberg, 2002; Walsh, 2000).

Cognitive development

Cognitive abilities, such as memory or problem solving skills, undergo a vast evolution during adolescence. Adolescents acquire the ability of abstract and hypothetical thinking. They can picture situations that did not (yet) occur – for instance, their time perspective broadens which makes them able to contemplate their own future – and they are able to discuss conceptual constructs (Steinberg, 2002). They also obtain the capacity to combine and generalize different factors in search for an explanation of the matters they are confronted with, in this way exercising logic-deductive reasoning (Lehalle, 2006).

Furthermore, adolescents become more aware of events in their surroundings, but are not yet able to put them in the right context (Lewin, 1939). They are most occupied with themselves (Elkind, 1967; Olthof, 2004), therefore they process new impressions exclusively from their individual perspective. Elkind (1967:1029) referred to this phenomenon as “adolescent egocentrism”. According to him, this

egocentrism results from the fact that adolescents develop the ability to consider the ideas and conditions of others, but at the same time still lack the capacity to distinguish between what they think and what others think. Adolescent egocentrism intensifies emotional reactions to stimuli from the environment, which may trouble the relationship with others that mean well. For a much announced plight in adolescence exists of 'nobody understands what I am going through'.

Social conditions

Adolescents grow out of their childhood years and aspire the status of an adult person. Expectations of significant others amplify these aspirations; adolescents are encouraged to act mature, 'childish behavior' is frowned upon. A strong desire for independence is thus created (Greenberg, 1977; Lewin, 1939; Moffitt, 1993). This desire however sharply contrasts with the restrictions that adolescents experience in reality, such as a lack of money or a lack of authority. In daily life, most decisions are still taken by others (in most cases by parents). Hence, the individual does not obtain full access to an adult position, but lingers between child and adult status. Moffitt (1993:687) denominates this as a "maturity gap", a gap between biological age and social position.

The desire for independency also drives adolescents to rely more on their peers, developing a strong want for *peer popularity* (Greenberg, 1977; Hay & Ashman, 2003; Wilkinson, 2004). Yet obtaining peer popularity can be a competitive matter, dependant on subtle social advantages or skills such as athletic competence, intelligence, attractive looks, etc. (Agnew, 1997). For adolescents who do not possess (one of) these trait(s), gaining popularity can be difficult.

The fact that the adolescent is not yet granted adult status, but already surpassed childhood, may accordingly contribute to a negative temper and troubled relationships with adults, most importantly with parents. Uncertainty about the group one belongs to can cause the individual to feel pushed into a marginal position and result in oversensitivity (Lewin, 1939). In reaction, adolescents will look for emotional support amongst peers who are in a similar position. However, for some of them acceptance by peers is difficult to obtain. Therefore peer-relations can also be a source of stress in adolescence.

Current position: storm and stress?

The above mentioned theoretical perspectives providing a logical explanation for adolescence being a time of 'storm and stress', in combination with the mixed empirical evidence for this idea, caused a necessity for a new approach. This approach regards the average adolescent as a quite well-adapted individual with little psychological perils. Still, this current position also takes into account that

adolescence can be an ordeal for *some* juveniles, dependent on the relations between the individual and his/her surroundings. The more the adolescent feels in harmony with his/her environment, the more agreeable transition to adulthood will occur (Goossens, 2006a). Therefore, the idea of a turbulent adolescence cannot be considered a universal phenomenon (Conger & Galambos, 1997). In this paper, it will be examined in the Flemish youth population for *whom* the adolescence might be a time of heightened instability, based on characteristics that apply to the connection between the individual and his/her environment.

2. POSTPONEMENT OF THE TRANSITION TO ADULTHOOD

Traditionally, adolescence has been demarcated as a relatively short transitional period, approximately starting at age 10 and ending at age 22. Within this time, the individual is supposed to successfully finish all developmental tasks that characterize the passage from child to adult. As well, adult status has been clearly defined by traditional markers, such as marriage, starting one's own family, etc.

In the current industrialized Western society, these limits are more complex. First of all, transition to adulthood is not just defined by traditional markers anymore. Fairly individualistic boundaries such as reaching (financial) independency and autonomy have become more prominent. 'Being an adult' is now more generally characterized as being able to take responsibility in mapping out one's own life path (Goossens, 2006c; Roggemans, forthcoming). On top of that, the time that precedes adulthood has continually been prolonged by social-cultural trends. Within Europe, this is especially the case in the northern regions (Lützelberger, 2009). Young people study longer, leave the parental home later, put off getting children, etc. Therefore, the new upper limit for the transitional phase preceding adulthood has been moved to somewhere between age 25 to 30 (Goossens, 2006c; Terjerina, 2009; Van Nuffel, 2004). Explanations that have been offered to clarify this trend are located in the economic (e.g. a more competitive job market, higher housing prices, etc.) and in the cultural (e.g. more leniency regarding the institute of marriage) domain (Lützelberger, 2009; Murinkó, 2009).

Goossens (2006c) issues the question whether the postponement of adulthood is a positive case. On the bright side, the time between age 18 and 25-30 is characterized by a vast freedom, which allows the individual to generously experiment with different tastes and lifestyles. The drawback, however, may be a widening of the earlier mentioned 'maturity gap', going hand in hand with the prolongation of 'typical' adolescent frustrations. Therefore, in this paper, it will be examined in the Flemish youth population whether the distress that some individuals may experience during adolescence is stretched out over young adulthood (age 22 to 30).

3. RESEARCH HYPOTHESES

1. For a small group of Flemish youth, adolescence can be considered an experience of 'storm and stress', characterized by a troubled relation with parents, an increase of negative moods and a heightened delinquent activity. This tendency will be reflected in general Flemish youth statistics.
2. Postponement of adulthood will push the upper limit of this experience back from age 21 to somewhere between age 25 and age 30.
3. Characteristics regarding the relationship between the individual and his/her environment will be most crucial in determining whether adolescence will be experienced as a time of 'storm and stress'.

4. METHODOLOGY

Data

In 2003, the Flemish government decided to establish an interdisciplinary Youth Research Platform, or as it is originally called, a 'Jeugdonderzoeksplatform' (JOP). The assignment of this JOP is threefold: (1) upkeeping an inventory of recently finished research about Flemish youth, (2) periodically gathering empirical data about the conditions, convictions and conduct of Flemish youth and (3) work towards international validation of the information obtained through (1) and (2). Up until now, the second assignment has been accomplished by two large scale mail questionnaires, named JOP-monitor 1 (finished in 2006) and JOP-monitor 2 (finished in 2009). To address the research questions of this paper, the most recent database (JOP-monitor 2) will be used. This database represents the complete population of Flemish youth between age 12 and 30. Sample selection was based on the official Flemish population statistics, the fieldwork proceeded in compliance with the total design method (Billiet & Waege, 2006). In this way, 3708 completed questionnaires were eventually gathered. 460 respondents are 12 or 13 years old, 901 respondents are between 14 and 17 years old, 788 are between 18 and 21 years old, 689 are between 22 and 25 years old and 870 are between 26 and 30 years old. 1644 respondents are male, 2064 are female. Data collection was initiated in August 2008 and finished in February 2009.¹

Measures²

¹ More detailed information about sample characteristics and data collection can be consulted in the technical report, available on www.jeugdonderzoeksplatform.be.

² A concise overview of used variables will be presented here. More detailed information can be found in the technical report of this project, available on www.jeugdonderzoeksplatform.be

Dependent variables

Conflict with parents

The database does not contain information about direct stress or conflict in the relationship with parents. Instead, two scales measuring how the respondent perceives the relationship with his/her father and mother are utilized. The scales specifically gauge to what extent the respondent finds his/her mother and father to be responsive to his/her emotional needs. It is assumed that, if the relationship with parents is of a difficult nature, the respondent will be more likely to give his/her parents lower scores on these scales. The scale '*relation with father*' (Cronbach α of .953, an explained variance of 75.45%) is based on the items 'my father helps me when I am having problems', 'when I am sad or worried about something, my father will understand', 'when things are not going well for me, my father manages to comfort me', 'when I talk about my problems with my father, he really helps me', 'my father knows exactly when I experience problems with something', 'when I am sad or when I have a chip on my shoulder, my father will notice', 'I can talk well with my father about everything' and 'my father knows very well what I want or how I feel'. The scale '*relation with mother*' (Cronbach α of .946, an explained variance of 72.87%) is based on the same items, with focus on the mother.

Despondent moods

The general experience of despondent moods is measured through the four following constructs: self-esteem, future prospects, general life satisfaction and satisfaction with physical characteristics. The *self-esteem scale* (Cronbach α of .821, explained variance of 65.88%) is based on the items 'all in all, I find myself a failure', 'I think I am OK', 'I think I have a couple of good qualities' and 'I think I can be proud of who I am'. '*General life satisfaction*' (Cronbach α of .738, explained variance of 39.99%) is based on the following six items 'how satisfied are you with: your life in general, your living standard, your home, the time you have for yourself and your personal interests your family and your social contacts with friends and family'. '*Satisfaction with physical aspects*' (Cronbach α of .756, explained variance of 13.12%) is based on five items being 'how satisfied are you with: your physical condition, your weight, your looks and your health'. '*Future prospects*' (Cronbach α of .818, explained variance of 57.96%), finally, is based on the items 'the future looks hopeless to me', 'I am sure that a wonderful future is awaiting me', 'it feels like I have no goal in life' and 'my expectations towards the future are gloomy'.

Delinquency

Most of the delinquent behaviors questioned in JOP-monitor 2 are offences that are usually not considered too severe, such as fare dodging, vandalism, theft and playing

truant. Besides those, a couple more serious crimes were questioned, such as possession of a weapon (in public places), selling drugs (with profit) and violence (beating someone so badly that this person was injured). The respondents were asked how often they committed these offences and could choose between the response categories *never, one time, two times, three times* and *more than three times*. For the analyses, the different offences were joined together in a delinquency scale that was standardized. Based on the average score on this scale, the dummy variable 'delinquency' was created, which has the categories 'more delinquent behavior than average' (1) and 'less delinquent behavior than average' (0).

Independent variables

The boundaries of the developmental stage in which the respondents find themselves, are based on biological age and on the social transitions the respondents went through.

Biological age.

Even though the idea of postponement of the transition to adulthood has caused the appearance of certain new, theoretically distinctive developmental categories such as 'emerging adulthood' and 'young adulthood' (e.g. Arnett, 2000), in this paper a more rudimentary categorization of three developmental stages, being 'pre-adolescence', 'adolescence' and '(young) adulthood' will be utilized. The age scale is divided into five categories that normatively represent these stages. Respondents *age 12 and 13* are considered 'pre-adolescents', *age 14 to 17 and age 18 to 21* 'adolescents', *age 22 to 25* and *age 26 to 30* (young) adults. Although it might seem more reasonable to divide the respondents in three age groups matching the three developmental stages under study, it was decided to subdivide the adolescents and young adults to be more sensitive to age alterations.

Social age.

This variable estimates whether a respondent can be considered an 'adult' based on the social transitions this person has passed. Traditional as well as more contemporary markers of adulthood are considered, to separate youth who did not complete any transitions yet from youth who completed at least one transition and youth who completed more than two transitions. The transitions that are taken into account are *owning a house or an apartment (independent from parents), marriage, being financially independent, leaving the parental house and living together with partner*.

Background variables

Besides two general demographic variables (*gender* and *schooltrack*), different variables concerning the reciprocal relation between the individual and his/her environment are included in the analyses with regards to the third hypothesis:

Gender: dichotomous, male [Ref. female].

Schooltrack: dichotomous, general track [Ref. technical track] and vocational track [Ref. technical track].

Neighborhood: dichotomous, respondents living in an urban neighborhood [Ref. respondents not living in an urban environment].

Wellbeing at school: scale. Based on nine items, has two dimensions ('contact with teachers' and 'general well-being at school'), a Cronbach α of .793 and an explained variance of 49.91%. The higher respondents score on this scale, the better they feel at school.

Relationship: dichotomous, respondents in a stable relationship [Ref. single respondents and respondents in an erratic relationship].

Financial space: scale. Based on one item, measured through six response categories, going from 1 ('my family has many difficulties getting by with the available income') to 6 ('it is very easy for my family to get by with the available income').

Social involvement: dichotomous, respondents whose social involvement is lower than average [Ref. respondents whose social involvement is higher than average]. This variable is based on 11 items regarding littering, recycling, financial support towards a good goal, participation in alternative forms of politics (such as participation in a demonstration), etc.

Ethnocentrism: scale. Based on 11 items, has two dimensions, a Cronbach α of .905 and an explained variance of 60.81%. The higher respondents score on this scale, the more racist their attitude is.

Victimisation: dichotomous, respondents who were more often than average victim of a crime in the last year [Ref. respondents who were less often than average victimized in the last year]. This variable includes damage of property, theft of property, being threatened with a weapon and being beaten up so severely that injury occurred.

Outgoing in free time: scale. Based on five items, has one dimension, a Cronbach α of .754 and an explained variance of 18.77%. The higher respondents score on this scale, the more often they go out in their free time (to pubs, parties, festivals, hangouts with friends, etc.)

Divorced parents: dichotomous, respondents whose parents are divorced [Ref. respondents whose parents are still together].

Analysis

All the scale variables were standardized before being used in the analyses. Analyses are executed through the software Statistical Package for Social Sciences (SPSS)

version 16.0. The continuous dependent variables relation father, relation mother, self-esteem, general life satisfaction, satisfaction with physical aspects and future prospects are analyzed through linear regression. The dichotomous variable delinquency is analyzed through binary logistic regression. In the latter case, the presented R^2 is the Nagelkerke R^2 .

5. RESULTS

'Storm & stress?' & Postponement of adulthood

By biological age

Table 1 and figure 1 portray that pre-adolescents (age 12 and 13) score most positive on all measured concepts. They report a better relationship with mother ($\beta=.340$, $p<.001$) and father ($\beta=.275$, $p<.001$), a higher self-esteem ($\beta=.345$, $p<.001$), better expectations towards the future ($\beta=.157$, $p<.05$) and more satisfaction with life in general ($\beta=.396$, $p<.001$) as well as with their physical aspects ($\beta=.239$, $p<.001$). On top of that, their involvement in delinquency is low ($\beta= -.982$, $p<.001$).

Furthermore, table 1 exhibits that adolescence might not be such a miserable time after all. It looks like the most important issues that youth between age 14 and 17 face, concern their identity and their future prospects. Their self-esteem drops in comparison with the other age groups, and they show less confidence towards the future than the pre-adolescents. On top of that, their involvement in delinquent behavior rises vigorously. They do however report a closer relationship with mother and father than the older age groups, as well as a higher satisfaction with their life in general and with their physical aspects. Similar tendencies are noticeable amongst the youth between age 18 and 21.

Table 1. Age differences in the relation with parents, mood and delinquent behavior.

	B				
	12-13	14-17	18-21	22-25	26-30
Responsiveness mother	.340***	Ref. cat.	-.140**	-.180**	-.213***
Responsiveness father	.275***	Ref. cat.	-.221***	-.224***	-.212***
Self-esteem	.345***	Ref. cat.	.056 (n.s.)	.128*	.141**
General life satisfaction	.396***	Ref. cat.	-.246***	-.408***	-.483***
Satisfaction physical aspects	.239***	Ref. cat.	-.240***	-.315***	-.319***
Future prospects	.157*	Ref. cat.	.003 (n.s.)	.056 (n.s.)	.052 (n.s.)
Committed at least one delict in the last year [Ref. committed no delicts in the last year]	-.982***	Ref. cat.	.071 (n.s.)	-.501***	-1.302***

*** $p<.001$; ** $p<.01$; * $p<.05$; n.s.= not significant

The two oldest age groups (age 22 to 25 and age 26 to 30) display an equivalent, stable pattern. Their lower scores on the scales measuring the quality of the relationship with mother (respectively $\beta=-.180$, $p<.01$; $\beta=-.213$, $p<.001$) and father

(respectively $\beta = -.224, p < .001$; $\beta = -.212, p < .001$) are most likely resulting from their growing independence.³ This independence and its matching decline of youthful carelessness negatively impact their satisfaction with life in general (respectively $\beta = -.408, p < .001$; $\beta = -.483, p < .001$). On top of that, they issue feeling less fit and attractive than the younger respondents, reporting a lower satisfaction with their physical aspects (respectively $\beta = -.315, p < .001$; $\beta = -.319, p < .001$). Yet these dissatisfactions do not affect their self-esteem, which stabilized around their twenties (respectively $\beta = .128, p < .05$; $\beta = .141, p < .01$). As well, they resolutely refrain from delinquent activities (respectively $\beta = -.501, p < .001$; $\beta = -1.302, p < .001$).

Figure 1 demonstrates that - even though the two oldest age groups report the lowest scores on general life satisfaction, satisfaction with physical aspects and parental relations - the most robust changes on these scales take place between age 12 and 21. After age 21, scores more or less seem to stabilize. It might be this sudden downfall, which spurs the general idea of adolescence as a time of 'storm and stress'.

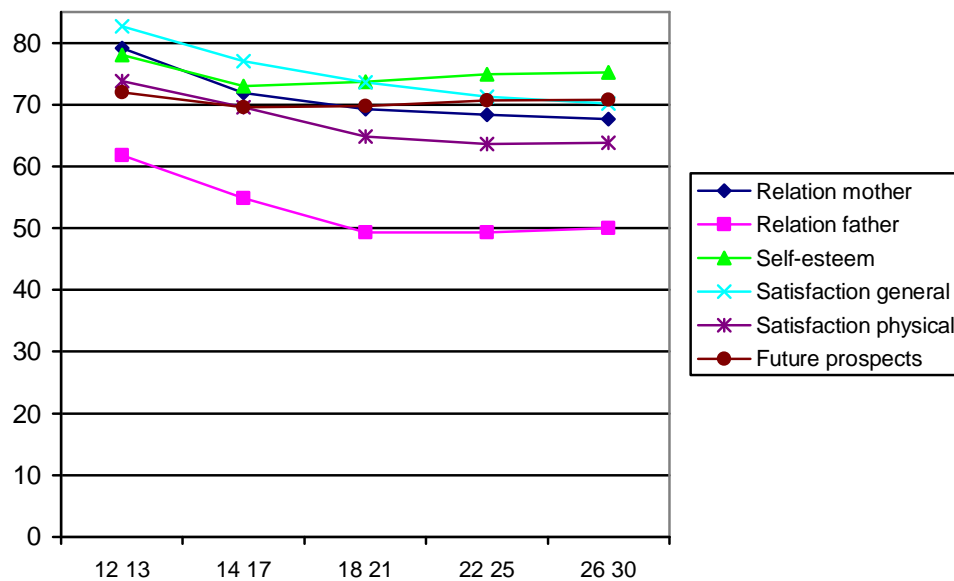


Figure 1. Average scores on relation with mother, relation with father, self-esteem, general life satisfaction, satisfaction with physical aspects and satisfaction with future prospects per age group.

By social age

The results of the analysis based on social transitions, displayed in table 2, show a pattern similar to that of the age analysis. Youth who completed at least one

³ As was mentioned before, a scale directly measuring the amount of conflict with parents was lacking in the database. A scale that measures how responsive mother and father are to the emotional needs of the youth was utilized instead. Hence, the lower scores of the older age groups on these scales might just be related to the fact that they are less tended to turn to their parents for their emotional needs.

transition report a more negative relation with mother ($\beta = -.190$, $p < .01$) and father ($\beta = -.213$, $p < .001$), as well as a stronger dissatisfaction with life in general ($\beta = -.410$, $p < .001$) and with one's physical aspects ($\beta = -.184$, $p < .01$) than youth who did not pass any transition yet. Nevertheless, they also display higher self-esteem ($\beta = .107$, $p < .05$) and less delinquent behavior ($\beta = -.247$, $p < .01$).

Table 2. Differences according to social transitions in the relation with parents, moods and delinquent behavior.⁴

	At least one transition [Ref. no transitions]	β More than two transitions completed [Ref. one or two transitions]
Relation mother	-.190**	.094 (n.s.)
Relation father	-.213***	.132*
Self-esteem	.107*	.030 (n.s.)
General life satisfaction	-.410***	.067 (n.s.)
Satisfaction physical aspects	-.184**	-.058 (n.s.)
Future prospects	.029	.137*
Committed at least one delict in the last year [Ref. committed no delicts in the last year]	-.247*	-.735***

*** $p < .001$; ** $p < .01$; * $p < .05$; n.s. = not significant

Between youth who completed one or two transitions and youth who passed more than two transitions, fewer discrepancies occur. The only significant differences concern delinquent behavior, future prospects and relation with father. Youth who passed more than two transitions report even less delinquent activity ($\beta = -.735$, $p < .001$) and more confidence in the future ($\beta = .137$, $p < .05$) than youth who only passed one or two transitions. This latter finding corresponds with the idea that negative future prospects are partly caused by feelings of insecurity. Youth who are still facing important life decisions therefore will be less optimistic than youth who already settled most of those. Interestingly, youth who passed more than two transitions also report a stronger relationship with father ($\beta = .132$, $p < .05$). This might indicate that youth who are just starting to organize their independent life possibly temporarily devalue the relationship with their parents, because of the focus on new freedom. Perhaps it is the entrance into complete adulthood that allows for a re-appreciation of the relationship with father.⁵

Generally, it can be concluded that adolescence does not seem to be such a distinctively miserable time after all. Adolescents mainly suffer from feelings of insecurity, not only regarding their personal self but also towards their future. They are, however, still able to connect with their parents positively and they cognitively estimate their life as being genuinely good. These last findings suggest that the

⁴ This analysis is based on data of respondents between age 14 and 30, because the 12- and 13- year old respondents were not questioned about life transitions.

⁵ In this case, it was also considered that having children of your own, something that is mostly planned after the individual already passed several transitions, might cause a revival of the relationship with parents. Since the transition 'having children' was also included in the JOP-monitor, the effect of it on the relationship with parents could be tested as well. However, no significant impact of this transition could be identified.

higher level of delinquent activity in this age group cannot not be understood as the rebellious reaction towards damaged relationships with parents or a lowered well-being.

As well, data do not signify a prolongation of these negative experiences. Even though the youth between 18 and 21 still experience a significantly lower self-esteem and display higher delinquent activity, figure 1 portrays that their scores on the different scales start to resemble those of the older age groups. The youth aged 22 to 25 show a pattern that is almost completely similar to that of the youth aged 26 to 30. These findings indicate that, even though transition to adulthood might be postponed, this tendency is not accompanied by a prolongation of experiences of 'storm and stress'.

Who is more prone to a tumultuous adolescence?

The former analysis revealed that 'storm and stress' in adolescence can be reduced to a lower self-esteem, a higher delinquent activity and, to a lesser extent, a reduction in confidence towards the future. It is however possible that these statistics are dominated by a small group of people being more prone to a tough adolescence. To discover who belongs to the latter, a wide variety of variables considering the reciprocal connection between the youth and his environment, as well as the general attitude of the youth, are added to the analyses. Furthermore, since it was shown that adolescents do not have a worse relationship with their parents than older respondents, the relationship-variables will be added as independent variables too.

By biological age

Table 3 displays that, when background variables are added to the analysis, age differences become insignificant. The quality of relationships between the respondent and his/her environment is much more crucial. Self-esteem and future prospects, for instance, are strongly affected by the relation with mother (respectively $\beta=.222$, $p<.001$; $\beta=.28$, $p<.001$), father (respectively $\beta=.165$, $p<.001$; $\beta=.207$, $p<.001$) and the school environment (respectively $\beta=.175$, $p<.001$; $\beta=.166$, $p<.001$). As well, being in a stable relationship significantly elevates confidence in the future ($\beta=.195$, $p<.05$), having parents that exercise too strong of a supervision lowers it ($\beta=-.120$, $p<.05$).

Having financial space too adds to a positive self-esteem ($\beta=.124$, $p<.01$) and future prospects ($\beta=.177$, $p<.001$). As well, a negative self-esteem and lower expectations for the future go hand in hand with an ethnocentric attitude (respectively $\beta=-.096$, $p<.05$; $\beta=-.094$, $p<.05$). Self-esteem is higher for males ($\beta=.279$, $p<.01$), people

who go out more often in their free time ($\beta=.120$, $p<.001$), and who are less concerned with social issues ($\beta=.171$, $p<.05$).

Finally, table 3 demonstrates that a positive relationship constraints youth from committing delinquency ($\beta=-.414$, $p<.01$). Having divorced parents ($\beta=.584$, $p<.01$), often having been victim of a crime ($\beta=1.327$, $p<.001$) and going out more often ($\beta=.622$, $p<.001$) add to a higher delinquent activity.

Table 3. Background differences (including biological age) in self-esteem, future prospects and delinquent behavior.

	Self-esteem	B	
		Future prospects	Delinquency
Male [Ref. female]	.279**	.124 (n.s.)	-.074 (n.s.)
Age 14-21 [Ref. age 22-30]	.032 (n.s.)	.351 (n.s.)	.768 (n.s.)
General track [Ref. technical track]	.088 (n.s.)	.009 (n.s.)	-.381 (n.s.)
Vocational track [Ref. technical track]	.037 (n.s.)	-.012 (n.s.)	-.200 (n.s.)
Relation father	.165***	.207***	-.114 (n.s.)
Relation mother	.222***	.248***	-.414**
Supervision parents	-.054 (n.s.)	-.120*	.162 (n.s.)
Parents divorced [Ref. parents still together]	-.009 (n.s.)	.015 (n.s.)	.584**
Well-being at school	.175***	.166***	-.167 (n.s.)
Being in a stable relationship (ref. being single or in an erratic relationship)	.053 (n.s.)	.195*	.445 (n.s.)
Urban living environment [Ref. no urban living environment]	-.093 (n.s.)	-.058 (n.s.)	.157 (n.s.)
Financial space	.124**	.177***	.079 (n.s.)
Social involvement below average [Ref. social involvement above average]	.171*	.107 (n.s.)	-.069 (n.s.)
Victimisation above average [Ref. victimisation below average]	-.110 (n.s.)	-.157*	1.327***
Ethnocentrism	-.096*	-.094*	-.171 (n.s.)
Outgoing in free time	.120***	.076 (n.s.)	.622***
R ²	.202	.261	.295

*** $p<.001$; ** $p<.01$; * $p<.01$; n.s. = not significant

To identify which factors were most crucial in rendering the age variable insignificant, the analysis was repeated by implementing the significant variables step by step (strongest effect first). This procedure revealed that gender, the relation with mother and well-being at school are the most crucial factors constituting positive self-esteem in adolescence. For future prospects, it is the combination of the relation with mother, the relation with father and being in a stable relationship that renders the age variable insignificant. As for delinquent behavior, all added effects are required to even the age differences.

In this case, several explanations for adolescent delinquency are possible. Delinquent behavior could be caused by the adolescent lifestyle leaving more possibilities to commit crime. Adolescents who go out more often will find themselves more often in less controlled places. This does not only make them more prone to delinquency but also more vulnerable regarding victimization. In this line of thought, it is also possible that youth with divorced parents experience less parental control, perhaps leaving more possibilities for outgoing activities, including delinquency. The sooth of these explanations can be checked by adding interaction effects (product terms) to

the analysis. Table 4 shows a significant interaction effect between being victimized and being more outgoing in the explanation of delinquency ($\beta = -.212$, $p < .05$). More specifically, an outgoing pattern has a stronger effect on the delinquent behavior of youth who were less often victimized in the last year.

Table 4. The effect of an outgoing lifestyle and victimization on delinquency.

	Delinquency
Relation mother	-.180***
Parents divorced [Ref. parents still together]	.414***
Victimisation above average [Ref. victimisation below average]	.846***
Outgoing in free time	.639***
Victimisation above average * outgoing in free time	-.212*
R ²	.166

*** $p < .001$; ** $p < .01$; * $p < .05$; n.s. = not significant

An interaction effect between having divorced parents and an outgoing lifestyle was not significant. As well, the hypothesis that adolescents whose parents are divorced experience less monitoring by their parents was tested, without any significant results. This signifies that adolescent delinquency can be the result of a more outgoing lifestyle, but it might also be considered a way of acting out against possible side effects of the divorce.

By social age

Remarkably, table 4 displays that the impact of the transition variable on self-esteem stays significant ($\beta = .580$, $p < .01$), even in competition with the other background variables. This finding indicates that, no matter how strong one's connections with his/her environment are, self-esteem can still drop in adolescence. In that case, lower self-esteem does not so much result from biological-emotional issues, but rather from the inability to be independent yet.

Table 5. Background differences (including social age) in self-esteem and delinquent behavior.⁶

	B	
	Self-esteem	Delinquency
Male [Ref. female]	.291***	-.058 (n.s.)
One or more transitions completed [Ref. more transitions completed]	.580**	.620 (n.s.)
General track [Ref. technical track]	.124 (n.s.)	-.152 (n.s.)
Vocational track [Ref. technical track]	.027 (n.s.)	-.370 (n.s.)
Relation father	.172***	-.107 (n.s.)
Relation mother	.229***	-.402**
Supervision parents	-.037 (n.s.)	.176 (n.s.)
Parents divorced [Ref. parents still together]	-.004 (n.s.)	.543*
Well-being at school	.165***	-.173 (n.s.)
Being in a stable relationship (ref. being single or in an erratic relationship)	.044 (n.s.)	.435 (n.s.)
Urban living environment [Ref. no urban living environment]	-.111 (n.s.)	.108 (n.s.)
Financial space	.137**	.089 (n.s.)
Social involvement below average [Ref. social involvement above average]	.160 (n.s.)	-.100 (n.s.)

⁶ Here 'future prospects' are not analyzed anymore, since table 2 shows that in this case youth who passed at least one transition do not significantly differ from youth who did not pass any transitions yet.

Victimisation above average [Ref. victimisation below average]	-.140 (n.s.)	1.315***
Ethnocentrism	-.092*	-.174 (n.s.)
Outgoing in free time	.112	.627***
R ²	.216	.296

*** p<.001; ** p<.01; * p<.01; n.s. = not significant

As for the rest of the variables, table 4 demonstrates that the social age analysis does not render much difference in comparison with the biological age results displayed in table 3.

6. DISCUSSION

The idea of adolescence being a time of 'storm and stress', although very popular in most of the 20th century, recently has become more controversial. Increasingly more research contradicted this perception, indicating that for most individuals adolescence passes rather peacefully. The analyses in this paper partly agree with this last hypothesis. Based on biological as well as social age, it was found that adolescents not only report a more positive relationship with their parents than (young) adults, they also more strongly evaluate their life and their physical aspects as being genuinely good. On the other hand, it was found that the average scores on these measures undertake the most powerful decline between age 12 and 21, which suggests a loss of childhood innocence that is reflected in a more realistic evaluation of life, self and relationships. On top of that, it was demonstrated that 'storm and stress' in adolescence is most prominently reflected in a lower self-esteem and a higher delinquent activity. As well, favorable future prospects that were held during childhood suddenly become less idealistic. This last finding not only corresponds with earlier mentioned assumptions about a loss of childhood naivety, it also agrees with theoretical insights about cognitive development in adolescence. As adolescents become more proficient in abstract thinking, they are better able to estimate what their future will bring. This broadened perspective causes them to think more realistically about future possibilities, causing a rift in comparison with their childhood.

Variables regarding the relationship with the youth and his/her environment as well as the general attitude of the youth, however, caused these age differences to disappear. It is the youth whose connections with parents and the school environment are less tight, who is more prone to lowered self-esteem and negative future prospects in adolescence. Displaying a racist attitude and growing up in a less (materialistically) privileged family also generally adds to this. Remarkably, the analysis based on social age revealed that the transition variable remained significant in the explanation of self-esteem, even after adding relationship variables. It thus appears that the critical social position of adolescents has a decisive impact on the self-esteem of most of them, no matter how strong their connections with significant others. This would mean that Moffitt (1993, 1997) was most accurate in

defining adolescent discomfort as the result of the 'maturity gap' that they are confronted with.

Explanations for the rise of delinquent activity in adolescence appear to be slightly different. Adolescents who go out more often (not only to pubs, parties etc. but also just hanging out with friends), who have divorced parents and who were more often victimized, display a higher delinquent activity. A strong relationship with mother, on the contrary, has a preventive effect. These findings on the one hand suggest the possibility that adolescent delinquency is a way of acting out against conceivable side effects of their parent's divorce. On the other hand, they show that adolescent delinquent behavior results from a more outgoing lifestyle, not only providing the individual with more possibilities to offend, but also putting him/her at risk for victimization. This latter idea corresponds with the observation that respondents between age 18 and 21 report a slightly higher delinquency rate than the respondents between age 14 and 17 (see figure 1), even though this difference was not significant (see table 1). After all, it is this age group that reports to go out most often (cfr. Boonaert & Vettenburg, *forthcoming*).

Finally, it was investigated whether the contemporary tendency to postpone the transition to adulthood would cause adolescent tense to be prolonged. The analysis showed that, at least for Flemish youth, this is not the case. When it comes down to well-being, parental relationships and delinquency, adolescence sticks to the classical age limits of 21 to 22.

7. CONCLUSION

The analyses of this paper are based on the theoretical assumption that youth who feel less connected to their significant others, will be more prone to a difficult adolescence. Although it was found that the relation with mother, father and the school environment are indeed crucial, the cross-sectional design of this research does not allow making statements about causality in this matter. Are the youth who have a worse relationship with their parents and do not feel good at school more prone to lowered self-esteem and negative future prospects in adolescence? Or do the relations of a small group of youngsters worsen in adolescence, causing the above mentioned troubles? These issues emphasize that transition into adulthood should ideally be studied through the use of longitudinal data. Accordingly, the cross-sectional data of JOP-monitor 2 only provide an artificial picture of the different developmental stages, even though the broad age range of this database – allowing comparison between different age groups – partly covers this disadvantage. As well, due to the fact that the analyses of this paper are based on secondary data, 'second best instruments' had to be utilized to measure some of the concepts. For the same reason, the quality of friendships could not be added to the analyses, even though relationships with peers are known to play a vast role in adolescent life.

These limitations aside, it was indicated that the drastic changes adolescents go through do cause a certain amount of stress, especially to those who do not have strong connections with significant others. Most of them, however, find their balance back around the age of 22. No signs that the experience of 'storm and stress' is prolonged could be identified. As well, it was found that different mechanisms are in play regarding this concept of adolescent 'storm and stress'. Whereas the quality of relationships is most crucial in the explanation of adolescent self-esteem and future prospects, delinquent behavior is most prevalent among adolescents whose lifestyle leaves more opportunities for this kind of behavior. The application of distinguished frameworks in approaching adolescent trends in parental relationships, general well-being and delinquency in adolescence is therefore a necessity.

8. REFERENCES

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