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INFORMANTS' DISCREPANCIES ON HAPPINESS

Parent-children discrepancies in the assessment of children's and adolescents'

happiness

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"This is the peer reviewed version of the following article: (Lopez-Perez, B., & Wilson, E.L. Parent-child discrepancies in the assessment of children's and adolescents' happiness.Journal of Experimental Child Psychology. This article may be used for non-commercial purposes in accordance with the Elsevier Terms and Conditions for Self-Archiving."

Abstract

In this study we assessed parent-child agreement in the perception of a child's general happiness or well-being in typically developing children (10-11 years-olds; N = 172) and adolescents (15-16 years-olds; N = 185). Despite parent and child reporters providing internally consistent responses in the General Happiness single-item scale and the Oxford Happiness Questionnaire-short form, their perceptions about children's and adolescents' general happiness did not correlate. Parents of 10-11 year-olds significantly overestimated children's happiness, supporting previous literature on the parents' positivity bias effect. However, parents of 15-16 year-olds showed the reverse pattern, as they underestimated adolescents' happiness. Furthermore, parents' self-reported happiness or well-being (reported six months later) significantly correlated with their estimations of children's and adolescents' happiness. These findings are discussed in terms of their theoretical and applied implications for research into child-parent relationships.

Keywords: happiness; parent-report; child-report; positivity bias; egocentric bias.

Parent-child discrepancies in the assessment of children's and adolescents' happiness

Children's and adolescents' happiness is a topic that concerns families, educators, and researchers alike. Despite the emergence of positive psychology, there are few studies on children's and adolescents' happiness, only having begun in the 1990s (Chaplin, 2009). This is extremely surprising, given that happiness is one of the first emotions recognized by children (e.g., Harter, 1983; Pollack & Sinha, 2002) and that it entails positive benefits for children's and adolescents' well-being (e.g., Holder, Coleman, & Singh, 2012).

Overall, happiness has been described as global life satisfaction, the presence of positive affect, and the relative absence of negative affect (Sheldon & Lyubomirsky, 2004). However, there is little agreement on the assessment of happiness, leading researchers to use multiple measures (e.g., Holder et al., 2012) to better capture the distinct facets that cover this construct. For both adults and children, multiple single item measures, such as the Faces Scale (Holder et al., 2012) are regularly used, as they have been shown to be valid and reliable (Abdel-Khalek, 2006). Apart from single item measures, the *Oxford Happiness Questionnaire-short form* (Hills & Argyle, 2002) is frequently used to assess children's and adolescents' happiness or well-being. Despite being widely used (e.g., Egan, Chan, & Shorter, 2014), it has received some criticisms as it may overlap with other constructs such as extraversion or agreeableness (Kashdan, 2004).

When assessing children and adolescents, best practices in psychological assessment entail collecting information from multiple informants (Hunsley & Mash, 2007). These assessments may include reports from parents and teachers, as well as children and adolescents themselves (De Los Reyes, Salas, Menzer & Daruwala, 2013). Parent-report has been mainly used in two concrete scenarios: first, when assessing children under the age of seven, as children may sometimes find it difficult to introspect about themselves (e.g., Bilancia & Rescorla, 2010); and second, when using self-report (i.e., testing children directly) becomes time-consuming and difficult to administer (Durbin & Wilson, 2012).

However using multiple informants may increase the likelihood of discrepancies (Treutler & Epkins, 2003). Low levels of correspondence between informants often create a great deal of uncertainty and pose an important challenge to the interpretation of findings in child development research (Houringan, Goodman, & Southam-Gerow, 2011). For this reason, many researchers have considered informants' discrepancies as a measurement error (Achenbach, 2011). However, as acknowledge by De Los Reyes (2011) these discrepancies may provide a unique opportunity for researchers to understand more about the underlying reasons behind them.

Parents-children discrepancies when assessing children's positive emotions

The relationship between parent and child reports of the child's emotions have been largely assessed in children aged seven or older who have been diagnosed with emotional disorders (e.g., De Los Reyes et al., 2013). Most of these studies are focused on the informants' correspondence (i.e., whether parents and children agree on their reports), rather than which informant may over- or underestimate compared to the other (e.g., Achenbach, 2006). More recently, Lagattuta, Sayfan & Bamford (2012) have assessed the direction of informants' correspondence in typically developing 4-11 year-old children. They found a *positivity bias*, that is, a parents' tendency to report higher levels of optimism and lower levels of worry compared to children's self-reports. These results were in line with previous research in other developmental domains (e.g., Youngstrom, Izard & Ackerman, 1999).

Evidence from the few studies focused specifically on happiness has also shown discrepancies between parents' and children's reports, supporting this positivity bias. Namely, research conducted with children aged between 8 and 12 showed that parents tend to overestimate children's happiness compared to the actual reports by children (Holder, Coleman

& Wallace, 2010). Even during several emotion-eliciting laboratory procedures (e.g., playing with a bubble-shooting toy), mothers reported significantly higher reports of children's happiness compared to trained coders or naïve adults (Durbin & Wilson, 2012).

Parents' Happiness and Child Age

Why did parents of children under the age of twelve overestimate children's happiness? According to Lagattuta et al. (2012) these discrepancies may be due to an 'egocentric bias', in which parents use their own emotional states as anchor points to make estimations about their children's emotions. In fact, research on parents' own happiness and child age suggests that parents of children above the age of five are significantly happier than parents of younger children (for a review Nelson, Kushleve & Lyubomirsky, 2014). Therefore, as found by Lagattuta et al. (2012) if parents are significantly happier, this may bias their estimations of their child's happiness.

When looking at parents of adolescents' happiness results may be less clear. Nomaguchi (2012) found no differences in the level of happiness of parents of children and parents of adolescents. Therefore, one may expect a potential positivity bias in parents of adolescents as this effect has been found in parents of children (e.g., Durbin & Wilson, 2012). However, there is evidence which may challenge this assumption. First, Nelson et al. (2014) in an extensive review on parents' happiness did not draw any conclusion regarding similarities in the levels of happiness between parents of children and adolescents (see Table 3, page 33). Second, during adolescence the parent-child relationship undergoes important changes compared to the relationship between younger children and parents. At this time, adolescents often start considering their peers as a reference (Buhrmester, 1998) and they become less emotionally demonstrative around their parents (Erwin, 1998). During adolescence there is an increase in the number of family arguments between children and parents (e.g., Bornstein, Jager & Steinberg, 2013), leading to a decline in the family relationships (Tsai, Telzer & Fuligni, 2013). Due to all of these changes, adolescence has been characterised as period of "storm and stress" (e.g., Casey, Getz & Galvan, 2008a). In fact, research has found that parents hold "storm and stress" beliefs (i.e., adolescents tend to be moody), which may bias the way they perceive and assess their own children's happiness (e.g., Hines & Paulson, 2006).

The present research

Based on these discrepancies found by previous research, our study may fill critical gaps in the literature by targeting the assessment of happiness in typically developing children and adolescents and by studying further the impact of parents' own happiness when estimating their children's happiness. In this regard, we will assess parent-child agreement and directional differences in perceptions of children's happiness, and the effect of parents' self-reported happiness alongside those differences. Given that previous research with children under the age of 12 has suggested a positivity bias (e.g., Durbin & Wilson, 2012; Lagattuta et al., 2012; Youngstrom et al., 1999), we hypothesized that parents of children aged between 10-11 years would exhibit the same pattern (i.e., overestimation of their children's happiness compared to the children's self-report). However, given that literature on parents' happiness during adolescence has shown mixed results (e.g., levels of happiness in parents of adolescents and children do not differ; Nomaguchi, 2012; levels of happiness in parents of adolescents decrease because of family conflicts and "storm and stress" beliefs; Tsai et al., 2013) we did not pose any hypothesis but instead explored whether parents of adolescents may present a positivity bias (i.e., tendency to overestimate their children's happiness) or a more general egocentric bias (i.e., a tendency to estimate their children's happiness relying on their own levels of happiness).

Method

Participants

Three hundred and fifty-nine children and adolescents from two different schools in Spain along with their parents participated in this study. Namely, 172 children aged between 10 and 11 years-old (M = 10.35, SD = .85; 51% girls) and 185 age between 15 and 16 years-old (M = 15.50, SD = .92; 58% girls) took part in the study. All participants were from middle socio-economic backgrounds. Ninety-eight per cent of the parents' informants were the mother of the child.

Measures

Happiness was assessed using both self-report measures and ratings by the children's parents with the following measures:

Oxford Happiness Questionnaire-Short Form (OHQ-sf onwards; Hills & Argule, 2002; Spanish version by Tomás-Sabado, Edo-Gual, Aradilla-Herrero, Sorribes, Fernández-Najar, & Montes-Hidalgo, 2014). This measure uses eight items to assess happiness on a 6-point scale anchored with "strongly disagree" and "strongly agree." The items express how participants may feel about themselves (e.g., "I feel that life is very rewarding"). Parents answered the questionnaire in regards to their children (e.g., "my child feels that life is very rewarding") and themselves (six months later of responding to the other question). Internal reliability was good in this study for children and adolescents ($\alpha = .75$), parents' report of children's happiness (α = .74) and parents' self-report (α = .78).

General Happiness Single-Item Scale (GHS-IS onwards; Abdel-Khalek, 2005; Spanish version by Van Dierendonck, Abarca, Díaz, Jiménez, Gallardo, Valle, & Carvajal, 2006). This measure assesses happiness through a single item (e.g., "do you feel happy in general?") that ranges from 0 (not at all) to 10 (extremely). Parents answered this item in regards to their children (e.g., "does your child feel happy in general?") and themselves (six months later).

Procedure

Permission was obtained from the school principals and teachers. Only children who consented and who obtained their parents' consent were included. Thus, out of the 528 children, 359 obtained consent and participated in the study. Children were given packets containing the OHO-sf and the GHS-I S to take home to their parents so they could report about their child. To match the data anonymously, both children and parents created a code. The same questionnaires for the children were administered in classrooms, with all children completing their questionnaires within 10-15 minutes. Children were briefed and were instructed to read each question carefully, and to choose the response option that was most appropriate for them. After completing the study, children were debriefed. Once parents returned their completed questionnaire, children were given a written debrief form to take home for their parents. To ensure children would not discuss with their parents two steps were taken. Firstly, while being debriefed children were explicitly told not to talk about their responses. Finally, the questionnaires for parents were given in a closed envelope which contained explicit instructions about not discussing their responses. Six months later after reporting about their children's happiness parents were contacted again through the schools to ask them to report about their own happiness (self-report).

Results

Parent-report versus child-report of children's and adolescents' happiness

Correlation analyses showed no relationship between parents' and child's reports for the OHS-sf (r = .04, p = .51) and the GHS-IS (r = .02, p = .69). The lack of significance for all comparisons held for each group, that is, 10-11 years old (r = .06, p = .41; r = .10, p = .20, respectively) and the 15-16 years old (r = .13, p = .10; r = .01, p = .88, respectively).

Inspection of the means (see Table 1) revealed differences between parents' and child's reports. We examined this further by conducting a 2 (age) x 2 (gender) x 2 (reporter: child vs. parent) MANOVA on the mean scores for each measure of happiness. For the OHS-sf, results

showed a main effect for Age (F(1, 710) = 87.35, p = .001, $\eta^2_p = .11$) and Reporter (F(1, 710) = 30.18, p = .001, $\eta^2_p = .21$), qualified by an Age x Reporter interaction (F(1, 710) = 23.24, p = .001, $\eta^2_p = .17$). The same pattern was true for the GHS-IS, such that results showed a main effect for Age (F(1, 710) = 239.11, p = .001, $\eta^2_p = .25$) and Reporter (F(1, 710) = 5.58, p = .02, $\eta^2_p = .01$), qualified by an Age x Reporter interaction (F(1, 710) = 245.71, p = .001, $\eta^2_p = .26$). Thus, as shown in Table 1, univariate tests revealed that parents of children aged 10-11 years reported higher levels of happiness compared to their child. However, the reverse pattern was observed for adolescents aged 15-16, such that parents reported significantly lower happiness compared to their child. Furthermore, parents' self-reports of happiness was significantly different in parents of children and parents of adolescents in the OHQ-sf (t(348) = 17.25, p = .001, d = 1.35) and the GHS-IS (t(348) = 23.15, p = .001, d = 1.64).

Table 1

Descriptive Statistics from the Parent and Child Report for each Age Group

	10-11 ye	ear-olds	15-16 year-olds			
	Child's report	Parent's child report	Parent's self- report	Child's report	Parent's child report	Parents' self-report
OHQ-sf	3.52 (.53) ^a	4.31 (.38) ^b	4.33 (1.02) ^b	3.96 (.44) ^a	2.95 (.37) ^b	3.04 (.62) ^b
GHS-IS	7.69 (1.04) ^a	9.30 (.46) ^b	8.85 (1.25) ^b	7.92 (1.64) ^a	5.57 (1.01) ^b	6.28 (1.83) ^b

Note: Rows with different superscripts indicate statistically significant differences at p < .05. Standard deviations in parentheses.

Parent self-report and reports on children and adolescents

For the 10-11 year-olds parents' self-report of happiness correlated positively with their report on children's happiness for the OHQ-sf (r = .38, p = .001) and the GHS-IS (r = .25, p = .001). However, parents' own happiness did not correlate with children's self-reported

happiness in the OHQ-sf (r = .09, p = .27) and the GHS-IS (r = .09, p = .25). The same pattern was true for the 15-16 year-olds. Parents' self-report of happiness correlated positively with their report on children's happiness for the OHQ-sf (r = .36, p = .001) and the GHS-IS (r = .32, p = .001). However, parents' own happiness did not correlate with children's self-reported happiness in the OHQ-sf (r = .05, p = .48) and GHS-IS (r = .08, p = .25).

Control analyses

As previously done by Lagattuta et al. (2012), we conducted further analyses to control whether the obtained patterns were driven by only a small number of participants. To test this, we calculated *differences scores* (i.e., parent report of child means scale score minus child report mean scale score) and examined the distributions for each happiness measure (Laird & Weems, 2011). Difference scores were considered outliers if they were two or more standard deviations from the mean. Three outliers for the OHQ-sf and seven outliers for the GHS-IS were identified, all of whom were parents of children aged 10-11 and were *parent overerstimators* (i.e., parent reported higher happiness than child self-reported). When excluding the outliers, the mean difference for the Oxford happiness questionnaire and the General happiness single-item measure were still positive for children (Ms = .73 and 1.37, SDs = .49 and .73, respectively) and negative for adolescents (Ms = -.06 and -2.35, SDs = .58 and 1.44, respectively). Finally, when looking at the percentage for each age group results showed that 70% of parents of 10-11 year-olds were overestimators, whereas 78% of parents of 15-16 year-olds were underestimators.

General Discussion

Children's and adolescents' happiness has gained considerable attention in recent research. However, the potential problems of relying on parental report to assess children's happiness have been overlooked. Studying informants' discrepancies and the relationship between parents' and children's self-reports on happiness is vital to determine whether parental report is valid.

Our study has shown the existence of discrepancies between parents', children's and adolescents' reports of happiness. On the one hand, the obtained results with children replicated previous findings showing the existence of a positivity bias. Thus, parents showed a tendency to perceive their children to be happier than the child self-reported (Durbin & Wilson, 2012). On the other hand, the obtained results with adolescents showed a surprising effect, such that parents underestimated their child's happiness. When analysing parents' self-reports of happiness, results showed that their responses where highly correlated with their estimations of child's happiness but not with children's and adolescents' self-report of happiness. Thus, results suggest a potential parents' egocentric bias when estimating children's and adolescents' well-being.

Parents' egocentric bias has mainly been studied in the psychopathology literature, showing that mothers' depression or anxiety highly bias their estimations about their children's symptoms (e.g., Affrunti & Woodruff-Borden, 2015). However, our results along with the previous obtained by Lagattuta et al. (2012) suggest that this effect does not only impact high-risk families and therefore it is necessary to study further the direction of informants' discrepancies and the factors that may affect them.

Furthermore, our results showed a significant difference in happiness between parents of children and parents of adolescents, contrary to Nomaguchi's (2012) findings. Our results support previous literature which suggests that during adolescence parents may experience higher negative affect and possibly "storm and stress" beliefs (Bornstein et al., 2013; Tsai et al., 2013). In fact, Nelson et al. (2014) described that parents go back to their highest happiness levels when children leave home and become independent. Therefore, our research highlights the necessity to study further parents' well-being and possible moderating factors. Future research on informants' discrepancies should consider using more than one measure, as in the present research the scales used had different points and hence showed different effect sizes. Finally, future research should be conducted with a more heterogeneous parent-reporter sample, as our study was conducted with mainly mothers (98%).

Although the obtained results are coherent with previous research, one may possibly argue a potential child's bias. However, we find this explanation difficult as in our study children's and adolescents' scores were not significantly different in the OHQ-sf (t(348) = .12, p = .90, d = .35) and in the GHS-IS (t(348) = -.84, p = .40, d = .77).

Another possible argument is that the differences found in the present study may be due to a lack of validity in the measures used, as previous research found low but significant correlations between different estimators (i.e., parents and teachers) in different variables such as behaviour problems (Gagnon, Vitaro, & Tremblay, 1992). However, our results are in line with previous research which has found repeatedly a bias in parents' estimations (Durbin & Watson, 2012; Lagattuta et al., 2012) and a significant difference in mothers' estimations compared to other informants (Durbin & Wilson, 2012).

Conclusions

Our research shows the existence of different discrepancies between parent-child reports of happiness depending on the child's age group (i.e., children vs. adolescents). These discrepancies were due to an egocentric bias, as parents used their own happiness as an anchor point to estimate their children's happiness. Being unable to read child's happiness appropriately may increase misunderstanding between parents and children/adolescents, which has been shown to have negative consequences for parent-child relationships (Sillars, Koerner & Fitzpatrick, 2005). Furthermore, parents may not be able to provide the appropriate emotional support or attend to the child's needs accurately (Goodnow, Knight, & Cashmore, 1985). Thus, our research emphasized the importance of studying in greater detail parent-child

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