Perceived parenting practices as predictors of harmonious and obsessive passion among high schoolers and adults

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Abstract

Passion has been proposed as one of the potential constructs that could contribute to a more fulfilling life as well as to subjective well-being. The importance of the social environment has been underscored in relation to passion; however, less emphasis has been put on the role of perceived parenting practices. The present two-sample investigation posited that the perceived parenting practices of care, autonomy granting, and overprotection experienced in adolescence are predictive of harmonious (HP) and obsessive (OP) passion which are, in turn, differentially related to subjective well-being. A sample of Hungarian high schoolers (N = 474) and a comprehensive sample of Hungarian adults (N = 471) were recruited for this research to test the proposed model and the generalizability of the findings. The measurement models and the regressive paths were invariant across the two samples, showing that care positively predicted HP, while autonomy granting and overprotection positively predicted OP. Subjective well-being was positively related to HP and care, but not the other variables. The present findings highlight that perceived parenting experiences are related to different indicators of functioning among high schoolers and adults.

Keywords: adolescent; Dualistic Model of Passion (DMP); harmonious passion; obsessive passion; perceived parenting practice; Self-Determination Theory (SDT)

The positive psychological research stream has been introduced two decades ago with the goal of understanding what makes people's lives more fulfilling and what improves the quality of their lives (Seligman & Csikszentmihalyi, 2000). Passion (and being passionate) has been proposed as one of the candidates that contributes to subjective well-being. The Dualistic Model of Passion (DMP; Vallerand, 2015; Vallerand et al., 2003) defines passion as a strong inclination towards a specific, self-defining activity that people like (or love) and enjoy, consider it important, and spend a significant amount of time and energy with it. Although much research has investigated the potential determinants and consequences of being passionate for an activity, only a few studies focused on the role of perceived parenting practices, even though the DMP as well as other models of engagement (e.g., Tóth-Király et al., 2018) underscore the importance of the social environment in experiencing passion.

In the present two-sample investigation, we posit that perceived parenting practices during adolescence may play an integral role in experiencing passion. In addition, to our best knowledge, it has never been tested within passion research whether similar mechanisms can be observed among high schoolers and adults, with the former group receiving substantially less scientific attention in this field. Thus, the present research extends previous research by examining the associations between different perceived parenting practices and passion, as well as the role of passion as a predictor of subjective well-being. This investigation also contributes to the literature by further highlighting that perceived parental experiences in adolescence might also be related to indicators of functioning in adulthood. Finally, we test the generalizability of the results across a sample of high schoolers (using concurrent ratings about parents) and adult (using retrospective ratings about parents).

The Dualistic Model of Passion (DMP)

One of the key aspects of the DMP is that it proposes the existence of two qualitatively different types of passion that depend on the internalization process (i.e., the integration of enjoyable and valued elements into one's identity; Grolnick et al., 1997; Vallerand, 2015). The first type is *harmonious passion* (HP), which results from autonomous (or complete) internalization (Deci & Ryan, 2000) referring to the notion that the loved activity is authentically and volitionally engaged and incorporated into people's identity, without any activity-related contingencies (i.e., engaging in an activity without others' approval). As a result, people are in complete control of the loved activity which takes up a significant, yet not overwhelming amount of time and energy. This form of activity internalization leads to a balance between the loved activity itself and other aspects of people's life and identity, as well as it leads to potentially adaptive outcomes (Vallerand, 2015). The second type is called *obsessive passion* (OP) which stems from controlled (or partial) activity internalization where inter- or intra-personal contingencies and ego-invested characteristics are often attached to the loved activity itself, for instance, maintaining the same level of self-esteem (Lafrenière et al., 2011). As a result of these contingencies, even though people still love this activity, they feel compelled to engage in it, thus losing control over it, while everything is gravitating around the activity. This pressured engagement often leads to conflicts with other aspects of life (e.g., relationship) and it is often predictive of maladaptive outcomes (Vallerand, 2015).

Since its inception, research on passion extensively focused on examining the relationship between passion and motivational-, cognitive-, and behavioral outcomes (Curran et al., 2015). For instance, HP and OP has been differentially associated with deliberate practice and performance (e.g., Vallerand et al., 2007), various motivations (Tóth-Király, Vallerand, et al., 2019), burnout (e.g., Carbonneau et al., 2008), problematic behaviors (e.g., Orosz, Tóth-Király, et al., 2016), and achievement goals (Bonneville-Roussy et al., 2011). Of major importance are the studies that examined the relations between passion and different indicators of subjective well-being. Based on the DMP (Vallerand, 2015), harmoniously passionate people are in control of their loved activity and are able to organize their engagement in a way that does not lead to conflicts with other important activities. Moreover, people with harmonious passion only engage in their activity to the extent that is good for them. Both of these propositions imply that harmonious engagement should entail experiencing adaptive outcomes such as positive emotions. Conversely, obsessive passionate engagement is a more rigid engagement that entails a lack of people's control over their loved activity, leading to conflicts with different areas of life. As a result, obsessive passion is likely to lead to negative emotions (such as frustration, shame or rumination) when people should do something else. Generally, these studies involving both adults and high schoolers (e.g., Philippe et al., 2009; Rousseau & Vallerand, 2008; Schellenberg & Bailis, 2015; St-Louis et al., 2018; see also Vallerand, 2012, 2016)

supported the notion that harmonious passion is positively associated with different indicators of subjective well-being (e.g., vitality, life satisfaction, positive emotions), whereas obsessive passion is either not or negatively related to the same indicators.

Studies so far have underlined the importance of individual differences as predictors of passion. Again, based on the DMP (Vallerand, 2015), factors sustaining people's autonomy as it pertains to their activity engagement are expected to positively predict harmonious passion, whereas factors imposing control and pressure on people are expected to positively predict obsessive passion. Empirical studies have provided support for these propositions as harmonious passion has been positively predicted by individual characteristics, such as autonomous personality orientation (Vallerand et al., 2006), self-oriented perfectionism (e.g., Verner-Filion & Vallerand, 2016), need satisfaction (Lalande et al., 2017), or conscientiousness and openness (Dalpé et al., 2019). In contrast, obsessive passion has been positively predicted by controlled personality orientation (Vallerand et al., 2006), socially prescribed perfectionism (Verner-Filion & Vallerand, 2016), need frustration (Tóth-Király, Bőthe, Márki, et al., 2019), neuroticism (Dalpé et al., 2019), or impulsivity (Orosz, Vallerand, et al., 2016). The DMP also attributes great importance to the social environment as a cardinal predictor of passion. Still, considerably less emphasis has been put on the potential environmental determinants of passion, particularly from the perspective of perceived parenting practices that could impact the activity internalization process and, in turn, passion.

Perceived Parenting Practices

The process of internalization, which is important with respect to the type of passion that is developed, is a central element of Self-Determination Theory (SDT; Ryan & Deci, 2017), a macro-theory of human motivation, personality and emotion. As mentioned above, different forms of passion are thought to manifest depending on the internalization process being autonomous (complete) or controlled (partial) which then leads to harmonious or obsessive passion, respectively (Vallerand, 2015). SDT posits that the social environment, in which individuals evolve, greatly affects their internalization process. Within the social environment, parents are thought to have a major role in influencing children's behavior (e.g., Cheng & Mallinckrodt, 2009; Greenberg et al., 1983). The present study relied on the examination of three key parenting behaviors (Skinner et al., 2005): autonomy granting, overprotection and parental care. Parental *autonomy grating* refers to valuing children's self-initiation as well as encouraging their choices and feelings (Mageau & Vallerand, 2003). By contrast, parental *overprotection* (or psychological controlling) refers to manifesting a controlling and restrictive behavior where pressure is put on children to behave in a certain way (Joussemet et al., 2008). Finally, parental *care* refers to the perceived warmth, closeness, empathy, and affectionate behavior of the parent (Parker et al., 1979).

Perceived positive parenting practices (characterized by high care or low overprotection) have been associated with a wide range of positive outcomes among high schoolers and adults alike. For instance, studies have shown that, among high schoolers who provide contemporaneous evaluation of perceived parenting practices, parental care and autonomy granting have been associated with increased subjective well-being (Chirkov & Ryan, 2001) and self-esteem (Passmore et al., 2005). In addition, in adult samples where retrospective evaluation is provided about the perceived parenting practices experienced in their adolescence, parental care and autonomy granting were related to improved quality of life (Rihkye et al., 2008), psychological functioning (Schreiber & Lyddon, 1998).

Conversely, exposure to suboptimal parenting (characterized by low care or high overprotection) has been associated with several negative outcomes. Among high schoolers, parenting control has been related to chronic pain (Evans et al., 2017) or anxiety disorders (Van Der Bruggen et al., 2008). Excessive parental control in adolescence has been associated with having psychopathic personality (Gao et al., 2010), decreased social adjustment (Soenens et al., 2009) as well as lower well-being and harmful substance use in young adulthood (Aquilino & Supple, 2001). While most studies focused on psychopathologies, we wished to extend these with the inclusion of harmonious and obsessive passion which might be interpreted as optimal and suboptimal forms of engagement, respectively.

As mentioned above, previous studies put less emphasis on the investigation of passion from the perspective of perceived parenting practices. Still, there is some evidence supporting the relevance of autonomy granting and, to a smaller extent, of overprotection in experiencing passion. Using correlational and short-term longitudinal designs across three studies, Mageau et al. (2009, see also Liu et al., 2011) reported that both perceived and actual autonomy granting predicted harmonious (but

not obsessive) passion. Similar results were reported when teachers' behaviors were evaluated (Bonneville-Roussy et al., 2013). These findings suggest that an autonomy granting environment that fosters choice and exploration is likely to elicit autonomous processes (i.e., autonomous internalization) which in turn are related to harmonious passion. On the other hand, a controlling environment (criticism or pressure) is more likely to elicit controlled internalization (via the creation of activity-related contingencies) that, as a result, leads to obsessive passion (Vallerand, 2015).

Apart from these scarce direct results, more indirect evidence is available for parental care and overprotection. Early studies showed that obsessive traits were associated with higher parental overprotection and lower parental care in clinical (Chen et al., 2017) and non-clinical samples (Cavedo & Parker, 1994). Besides their impact on mental health, negative perceived parenting practices have also been linked to problematic behaviors which are akin to obsessive passion (e.g., Kovácsik et al., 2018; Tóth-Király, Bőthe, Tóth-Fáber, et al., 2017). More specifically, studies demonstrated that negative parenting practices were associated with Internet addiction (Lin et al., 2009), excessive alcohol use (Mak & Kinsella, 1996), and pathological gambling (Grant & Kim, 2002).

The Present Study

Perceived parenting practices are thought to have long-lasting consequences on children's cognitive, emotional and social functioning, and they are also predictive of adult behaviors (e.g., Cheng & Mallinckrodt, 2009; Rihkye et al., 2008). Still, to date, perceived parenting practices have been scarcely examined in conjunction with passion. The present two-sample investigation sought to address this gap in the literature by investigating, as a primary aim, the role of perceived parenting practices as predictors of harmonious and obsessive passion. Based on the above-mentioned studies, our first hypothesis states that perceived care (Hypothesis 1a) and autonomy granting (Hypothesis 1b) would be positive related to harmonious passion by fostering autonomous internalization, while perceived overprotection (Hypothesis 1c) would be positively related to obsessive passion by fostering controlled internalization. We also expected parental care (Hypothesis 2a) and autonomy granting (Hypothesis 2b) to be positively, and overprotection (Hypothesis 2c) to be negatively related to subjective well-being. Finally, harmonious passion was hypothesized to be positively (Hypothesis 3a), while obsessive passion (Hypothesis 3b) was hypothesized to be negatively related to subjective well-being. See a schematic illustration of the hypothesized model on Figure 1.

Our goal was not only to examine how high schoolers' perceived parenting experiences are related to passion and subjective well-being, but we also wished to test whether the same effects could be observed in an adult sample where participants provide retrospective ratings as opposed to the contemporaneous ratings provided by high schoolers. While the cross-sectional nature of this research prevents any form of causal or directional inferences, having a high schooler and an adult sample makes it possible to compare whether the same effects could be observed in the two groups and whether these effects would have the same magnitude. With this approach, it became possible to test whether perceived parenting practices have an effect during high school years and whether these effects could potentially last into adulthood. While retrospective ratings might be considered biased, studies have shown that this is not often the case (Brewin et al., 1993; Gerlsma et al., 1994; Wilhelm et al., 2005). In addition, cognitive evaluation theory, which is a micro-theory of SDT (Deci & Ryan, 1985; Ryan & Deci, 2017), posits that one's perceptions of others' behaviors—as opposed to the actual behavior per se—are thought to influence one's behavior (Clarkson et al., 2010; Deci, 1975; Giant & Vartanian, 2003). Therefore, based on the previous studies listed above, we hypothesized (Hypothesis 4) that the relationships between the examined variables would be the same across both high school and adult groups.

Methods

Procedure

The study was conducted in accordance with the Declaration of Helsinki and with the approval of the University Research Ethics Committee. Two samples were recruited for the present investigation. Participants of Sample 1 (i.e., high schoolers) were recruited from a Hungarian high school situated in countryside town and questionnaires were filled out via an online system. High schoolers were informed beforehand about the aims and content of the study, and they could participate voluntarily. None of them received compensation or punishment for the participation or non-participation, respectively. High schoolers were assured of their anonymity and that teachers would not be informed about their responses. Schools and parents were also informed through an opt-out passive consent.

Participants of Sample 2 (i.e., adults) were recruited by a research market company using a multiple-step, proportionally stratified, probabilistic sampling method. With this method, individuals were removed from the panel if they gave responses too quickly (i.e., without paying attention to their responses) and/or had fake (unused) e-mail addresses (see Tóth-Király, Bőthe, & Orosz, 2017 for a similar recruitment process). This comprehensive sample was representative for those Hungarians who used the Internet at least once a week in terms gender, age, level of education, and type of residence. Based on prior recommendations (VanVoorhis & Morgan, 2007), we aimed to recruit at least 300 participants in each sample in order to ensure that the analyses would not be underpowered. However, we did not set an upper limit for participation.

Participants

Sample 1. After the removal of 39 multivariate outliers, this sample consisted of 474 high schoolers (77.6% female) aged between 15 and 20 (M = 17.17 years, SD = 1.21 years). They reported their class as being 9th grade (29.7%), 10th grade (30.6%), 11th grade (18.1%), and 12th grade (21.5%); and their place of residence as the capital city (1.1%), county capitals (40.1%), cities (41.6%), and villages (17.3%).

Sample 2. After the removal of 33 multivariate outliers, this sample consisted of 471 adults (52.2% female) aged between 18 and 60 years (M = 39.20 years, SD = 11.91 years). These participants reported their highest level of education as primary (21%), secondary (57.5%), and higher (21.4%) education; and their place of residence as the capital city (19.7%), county capitals (19.1%), cities (32.5%), and villages (28.7%).

Measures

Passion. Participants' level of passion was measured by the Passion Scale (PS; Marsh et al., 2013; Tóth-Király, Bőthe, Rigó, et al., 2017). It is a 12-item instrument assessing harmonious (six items, e.g., "This activity is in harmony with the other activities in my life"; $\alpha_{Sample\ 1}$ = .871, $\alpha_{Sample\ 2}$ = .835) and obsessive passion (six items, e.g., "If I could, I would only do my activity"; $\alpha_{Sample\ 1}$ = .827, $\alpha_{Sample\ 2}$ = .858) passion. Instead of specifying beforehand the object of passion, participants were asked to think of an activity that corresponded to the criteria of passion (e.g., they liked or loved it, they spent significant amount of time and energy with it, and this activity was personally important and valuable for them). Participants could indicate their level of agreement on a seven-point scale (1 = not agree at all; 7 = very strongly agree).

Perceived parenting practices. The Parental Bonding Instrument (PBI; Parker et al., 1979; Tóth & Gervai, 1999) is a 25-item self-report instrument about one's recalled experiences about their parents' practices and behaviors during the first 16 years of life. Following Xu et al. (2018), the PBI measured three parenting behaviors: care (12 items, e.g., "Was affectionate to me"; $\alpha_{Sample\ 1}$ = .911, $\alpha_{Sample\ 2}$ = .940), autonomy granting (six items, e.g., "Liked me to make my own decisions"; $\alpha_{Sample\ 1}$ = .842, $\alpha_{Sample\ 2}$ = .900), and overprotection (seven items, e.g., "Tried to control everything I did"; $\alpha_{Sample\ 1}$ = .782, $\alpha_{Sample\ 2}$ = .862). The instructions were slightly modified in both studies so that participants were asked to think about their experiences with their parents instead of only one of their parents. This modification was necessary given the limited time available for data collection which did not permit us to administer the questionnaire for each of the parents separately. Previous studies highlighted the importance of both maternal and paternal behaviors (e.g., Bisby et al., 2017; Gao et al., 2010; Siomos et al., 2012); therefore, we did not wish to arbitrarily select one of the parents and instead we focused on both as a unity. Items were formulated in present tense for high schoolers and past tense for adults and were rated on a four-point scale (1 = very like this; 4 = very unlike this).

Subjective well-being. Subjective well-being was measured with the Satisfaction with Life Scale (SWLS; Diener et al., 1985; Martos et al., 2014). It is a short five-item scale assessing participants' level of satisfaction with their lives in general (e.g., "The conditions of my life are excellent"; $\alpha_{Sample\ 1}$ = .865, $\alpha_{Sample\ 2}$ = .919). Participants rated their level of agreement on a seven-point scale (1 = strongly disagree; 7 = strongly agree).

Statistical Analyses

All analyses were conducted in Mplus 8 (Muthén & Muthén, 2017) and the robust maximum-likelihood (MLR) estimator which is able to provide fit statistics and standard errors that are robust to the non-normality of the data. No missing data was present given the way the online questionnaire was set up. The statistical analyses were conducted in three steps.

First, we estimated preliminary measurement models separately for each sample. On the basis of previous recommendations (e.g., Tóth-Király, Bőthe, Rigó, et al., 2017; Xu et al., 2018), passion and parenting behaviors were modelled with two sets of Exploratory Structural Equation Modeling (ESEM; Marsh et al., 2014) models, also known as set-ESEM (Marsh et al., 2020). In these models, items were specified to only load on their a priori sets of target factors (i.e., passion items on the passion factors, parenting items on the parenting factors), and cross-loadings within each set of factors were targeted to be as close to zero as possible using the confirmatory oblique target rotation (Browne, 2001). Cross-loadings between the two sets were constrained to be zero but factor correlations within and between sets were freely estimated. In the passion set, based on Tóth-Király, Bőthe, Rigó, et al. (2017), a priori correlated uniquenesses (CUs) were added between three pairs of items. In the parenting set, a priori CUs were included to account for the negative-wording effect between a subset of items belonging to the care factor (Marsh et al., 2010). In contrast, subjective well-being was modeled via confirmatory factor analysis (CFA) whereby all items loaded on a single latent factor. Relying on fully latent variables allowed us to reduce the biasing effects of measurement errors (Finkel, 1995) which, in turn, provides a more accurate estimation of the parameters.

Second, before investigating the associations between the variables of interest, we verified via tests of measurement invariance the equivalence of the measurement models and the constructs across the two samples to avoid any measurement-related biases. Tests of measurement invariance were conducted in the following sequence (Millsap, 2011): (Model 1) configural invariance (same factor structure); (Model 2) weak invariance (equal factor loadings); (Model 3) strong invariance (equal intercepts); (Model 4) strict invariance (equal uniquenesses); as well as the invariance of (Model 5) correlated uniquenesses; the (Model 6) latent variance-covariance matrix; and the (Model 7) latent means. While only weak invariance is needed to test associations between latent variables across groups (Millsap, 2011), there are statistical advantages (i.e., more parsimonious model, leading to more stable and trustworthy estimates) of pursuing additional tests of measurement invariance.

Third, the most invariant measurement model was subsequently converted into the proposed predictive model (Model 8) in which parenting behaviors predicted passion and subjective well-being, while passion also predicted subjective well-being. Sex (coded as 0 = male 1 = female) was also included as a predictor of all variables to control for its potential effects. An additional predictive model (Model 9) was also estimated to assess the equilibrium (equality) of all predictive paths across the samples (Tóth-Király et al., 2020).

Because the chi-square (χ^2) test of exact fit tends to be oversensitive to sample size and minor model misspecifications, we relied on the following goodness-of-fit indexes for model interpretation: the comparative fit index (CFI), the Tucker–Lewis Index (TLI), and the root mean square error of approximation (RMSEA). According to typical interpretation guidelines (e.g., Marsh et al., 2005), values greater than .90 and .95 for the CFI and TLI, respectively, are considered to indicate adequate and excellent fit to the data, whereas values smaller than .08 or .06 for the RMSEA, respectively, support adequate and excellent model fit. For purposes of model comparisons, relative changes (Δ) in the fit indices were inspected with a change of at least .010 for CFI and TLI and a change of at least .015 for the RMSEA were taken to suggest meaningful differences (Chen, 2007; Cheung & Rensvold, 2002). However, because the cut-off values for model comparison have mostly been validated with CFA, their performance with ESEM-based models is still not fully known. Consequently, we relied on these values as rough guidelines and considered small deviations (up to an additional Δ of .005) in only one of the fit statistics acceptable (Scherer et al., 2016; Tóth-Király & Neff, 2021). Additionally, TLI and RMSEA (but not CFI) are corrected for parsimony (i.e., more parsimonious models can have better TLI and RMSEA values than less parsimonious models) which is relevant as more parameters are estimated in ESEM-based models than in CFA (Morin et al., 2020). Therefore, we put a larger emphasis on TLI and RMSEA in model comparisons. Finally, we calculated model-based composite reliability indices (ω; McDonald, 1970).

Results
Preliminary Measurement Models
Model fit information for the measurement models is reported in Table 1, and show that all models achieved an adequate level of fit (all CFI/TLI $\geq$ .90 and all RMSEA $\leq$ .06). Tests of measurement invariance provided support for the configural and weak invariance of the preliminary measurement model. However, strong invariance was not achieved (ΔCFI = -.022, ΔTLI = -.032,

ΔRMSEA = +.009), thus we tested a partial strong invariance model in which a total of six intercepts were freed up (two intercepts for the care, autonomy granting and subjective well-being factors). This partial strong model demonstrated adequate model fit changes (ΔCFI and ΔTLI ≤ .01; ΔRMSEA ≤ .015). Subsequent steps of measurement invariance provided support for the complete invariance of this measurement model up to the level of latent mean invariance which was retained for interpretation. Parameter estimates associated with the most invariant measurement model (Model 7) are reported in Table S1. Overall, our results revealed well-defined and reliable factors for harmonious passion (λ = .617 to .737; ω = .850), obsessive passion (λ = .542 to .876; ω = .851), care (λ = .481 to .893; ω = .931), autonomy granting (λ = .522 to .879; ω = .858), overprotection (λ = .422 to .663; ω = .806), and subjective well-being (λ = .697 to .899; ω = .904). Table 2 includes the latent correlations among all study variables from Model 7. Latent correlations were highly similar in both samples and reflected the a priori expectations: harmonious passion was positively related to care and subjective well-being, while obsessive passion was positively related to overprotection, but negatively related to care in the high school sample. Autonomy granting was not related to any passion variables.

Main Analyses

Model fit for the predictive models is reported in the bottom section of Table 1, and show that both models achieved adequate fit to the data. Adding equality constraints to the predictive paths resulted in negligible differences in model fit (Model 9), supporting our hypothesis that these predictive paths can be considered equal in the two samples. The examination of parameter estimates from this model, reported in Table 3, showed that parental care positively predicted harmonious (but not obsessive) passion. In contrast, obsessive (but not harmonious) passion was positively predicted by autonomy granting and overprotection. Subjective well-being was predicted by parental care and harmonious passion, but not the other three variables. Finally, participants' sex positive predicted harmonious and obsessive passion (but not the other variables), suggesting that being female was associated with higher levels of passion.

Discussion

Understanding the psychological processes occurring during adolescence might provide insight not just into adolescent and adult health, but psychological functioning as well. Combining perceived parenting practices grounded in the well-established Self-Determination Theory (Ryan & Deci, 2017) and the Dualistic Model of Passion (Vallerand, 2015), the present two-sample investigation set out to (1) examine the role of perceived parenting practices as predictors of passion, (2) investigate the role of harmonious and obsessive passion as predictors of subjective well-being, and (3) test the similarity of these associations across a sample of high schoolers and a comprehensive sample of adults. In general, effect sizes were small and the results partially supported the hypotheses: parental care positively predicted harmonious passion (supporting Hypothesis 1a), while both autonomy granting (not supporting Hypothesis 1b) and overprotection (supporting Hypothesis 1c) positively predicted obsessive passion. Harmonious passion (supporting Hypothesis 3a) and care (supporting Hypothesis 2a) positively predicted subjective well-being, whereas the other variables were not related to it (thus not supporting Hypothesis 2b, 2c, and 3b). Additionally, the magnitude of effects was the same in the two samples as the regressive paths were equivalent across the two samples (supporting Hypothesis 4). These findings lead to some important implications.

The Importance of Perceived Parenting Practices for Passion

Among the many potential predictors, the DMP (Vallerand, 2015) and other models of engagement (e.g., Tóth-Király et al., 2018) posit that the social environment plays an important role in experiencing passion. The present investigation provides an important contribution to the literature by demonstrating that perceived parental care was positively associated with harmonious passion, although this effect appears to be relatively small. Thus, positive parenting practices (i.e., being affectionate, praising, or making the child feel better) might be associated with harmonious passion due to the fact that these practices provide children with positive experiences and might even satisfy their basic psychological needs (Ryan & Deci, 2017). Parental care might provide children with a sense of security that might allow them to immerse in different activities and to experience enjoyment during these activities. In such a situation, people might not engage in an activity out of some form of pressure, but for its own sake. Parental care might also entail that the activities provided or supported by the parents align with the age, maturity, and personality of the children, thus these activities might reflect on their needs.

On the other hand, overprotection was positively related to obsessive passion which mirrors comparable findings from the addiction-related literature (e.g., Grant & Kim, 2002). Negative parenting practices (i.e., invading privacy, trying to control the child, or constructing a constantly interdependent environment) might not allow children to explore their surrounding environment for new experiences. Eventually, they might find an activity that they like and, in order to escape this controlling parental milieu, might start to become overengaged with that particular activity.

A somewhat surprising finding was that autonomy granting was positively associated with obsessive (but not harmonious) passion which contradicts previous studies on this topic (e.g., Mageau et al., 2009). Although these results might appear to be surprising at first glance, they become more clear-cut upon inspecting the autonomy granting factor of the PBI. Previous studies (e.g., Bonneville-Roussy et al., 2013; Mageau et al., 2009) measuring autonomy granting did so in line with the Self-Determination Theory (Ryan & Deci, 2017) which underscores that autonomy granting has three main characteristics (Grolnick, 2003; Reeve, 2006; Soenens & Vansteenkiste, 2010): (1) the provision of clear rules and goals, (2) the possibility of offering guidance and help when necessary, and (3) the provision of constructive, positive feedback. On the other hand, items of the PBI autonomy granting subscale appear to measure permissive or laissez-faire practices which is characterized by lack of structure, involvement and guidance as well as complete freedom and independence. Given that this parenting style entails relatively few parental constraints, children might experience that any kind of behavior is permitted without consequences which might lead to self-regulatory deficits (Piotrowsky et al., 2013). Overall, it seems that permissive or laissez-faire parenting practices that provide "excessive" freedom and imposes few restrictions might be conductive of obsessive passion. It has to be noted that even though effect sizes in the current investigation might be considered relatively small, these are comparable to those reported in previous studies (e.g., Bonneville-Roussy et al., 2013; Mak & Kinsella, 1996; Rikhye et al., 2008). Overall, it appears that perceived parenting practices might predict passion not only in the case of high schoolers but later in the case of adults as well.

Apart from direct associations, parenting behaviors might also be related to passion indirectly, through other intervening variables. It has been suggested that self-related processes are central to the distinction of harmonious and obsessive passions (Vallerand et al., 2003). Negative parenting practices (e.g., overprotection or neglect) are more likely to contribute to unsatisfactory self-related processes which might lead to the compensatory obsessive passion. Such an unsatisfactory self-related process might be low self-esteem. If people's self-esteem is low as a result of negative parenting practices, they might be more likely to overengage in an activity to compensate for this deficit to restore their self-esteem. This assumption aligns with studies which have already showed that individuals with low self-esteem experience higher levels of obsessive passion (Lafrenière et al., 2011; Stenseng & Dalskau, 2010). Given that parenting practices had small-to-moderate associations with their global (e.g., Wichstrøm & von Soest, 2016) and domain-specific self-esteem (e.g., Morin et al., 2017), future studies could take this factor into account when examining parenting practices and passion.

Another unsatisfactory self-related process might be low impulse control. When impulse control is low, individuals are not able to delay enjoyable short-term gratification for the sake of long-term goals (Tice et al., 2001). It might be plausible that due to negative parenting practices, people seek to find comfort in other activities, which might fulfill their needs which are thwarted by their parents' inappropriate practices. Some previous studies support this proposition as poor parenting practices (e.g., permissiveness or overprotection) has been positively associated with impulsivity and subsequent substance use (Patock-Pechkam & Morgan-Lopez, 2006) as well as with anti-social behavior (Jones et al., 2007). From the perspective of passion and related fields, impulsivity has been identified as a potential predictor of obsessive passion (Orosz, Vallerand, et al., 2016) as well as other problematic behaviors (e.g., Billieux et al., 2008; Bőthe et al., 2019).

Passion and Subjective Well-being

Finally, it was examined whether harmonious and obsessive passions are related to subjective well-being. This question is particularly important given the paucity of passion research among high schoolers. Harmonious passion positively predicted subjective well-being, while obsessive passion was not related to it. It appears that being engaged in a harmoniously passionate activity might be conductive of subjective well-being. These findings are comparable to those of Marsh et al. (2013) as well as to the meta-analysis of Curran et al. (2015) in which harmonious passion was related to the subjective well-being, whereas obsessive passion was not.

On a general note, having overprotective or excessive autonomy granting parents might orient children to seek control elsewhere, in the form of an activity that they gradually become overly involved with. However, this overengagement might not be related to their subjective well-being. On the other hand, a caring parenting behavior might contribute to a more optimal functioning in the form of harmonious passion, resulting in higher subjective well-being.

Limitations and Future Directions

There are some limitations that need to be addressed. Given that the study design was cross-sectional, causality cannot be inferred from these results. To address the directionality of the associations, longitudinal studies would be needed, possibly starting from early childhood. Longitudinal studies would also be useful to examine how the effect of parenting practices change over time. In a similar vein, it would be important to investigate how changes in parenting practices are related to changes in passion as the latter is known to be a malleable construct whose level and intensity can increase and decrease over time (Vallerand, 2015). The self-reported nature of the instruments should also be taken with caution. The retrospective recall of parenting practices could be biased in adulthood and could be influenced by concurrent parent behaviors that are experienced in adulthood. Still, previous studies reported that recall of significant past behaviors was not significantly affected by current mood state among depressive participants (Brewin et al., Parker, 1990). Given that adolescence is an important developmental period, parenting behaviors should be more thoroughly examined, potentially with daily diary methods or by following them over this period of time. It would be interesting to ask parents about their self-perceived parenting practices and examine the discrepancy between the reports of adolescents and parents. It might be important in future studies to compare the relative importance of active (in line with SDT) and passive (in line with laissez-faire parenting) autonomy support. As the presence and availability of friends might compensate for the lack of autonomy from parents during adolescence (Helsen et al., 2000), future studies might do well in incorporating variables about peers. Future studies should also test the potential mediating role of the above-mentioned self-related process (i.e., self-esteem or impulse control).

Conclusions

It appears that obsessive passion might be tamed by avoiding practicing a controlling, and intrusive relationship or by avoiding granting children excessive autonomy. Instead, putting more focus on warm and emotionally responsive parenting might facilitate experiencing harmonious passion. Family-based interventions might also be effective as intervention programs have already been developed to minimize the risk factors associated with poor parenting (Webster-Stratton & Herman, 2010). In sum, positive parenting appears to be beneficial in terms of harmonious passion and subjective well-being.

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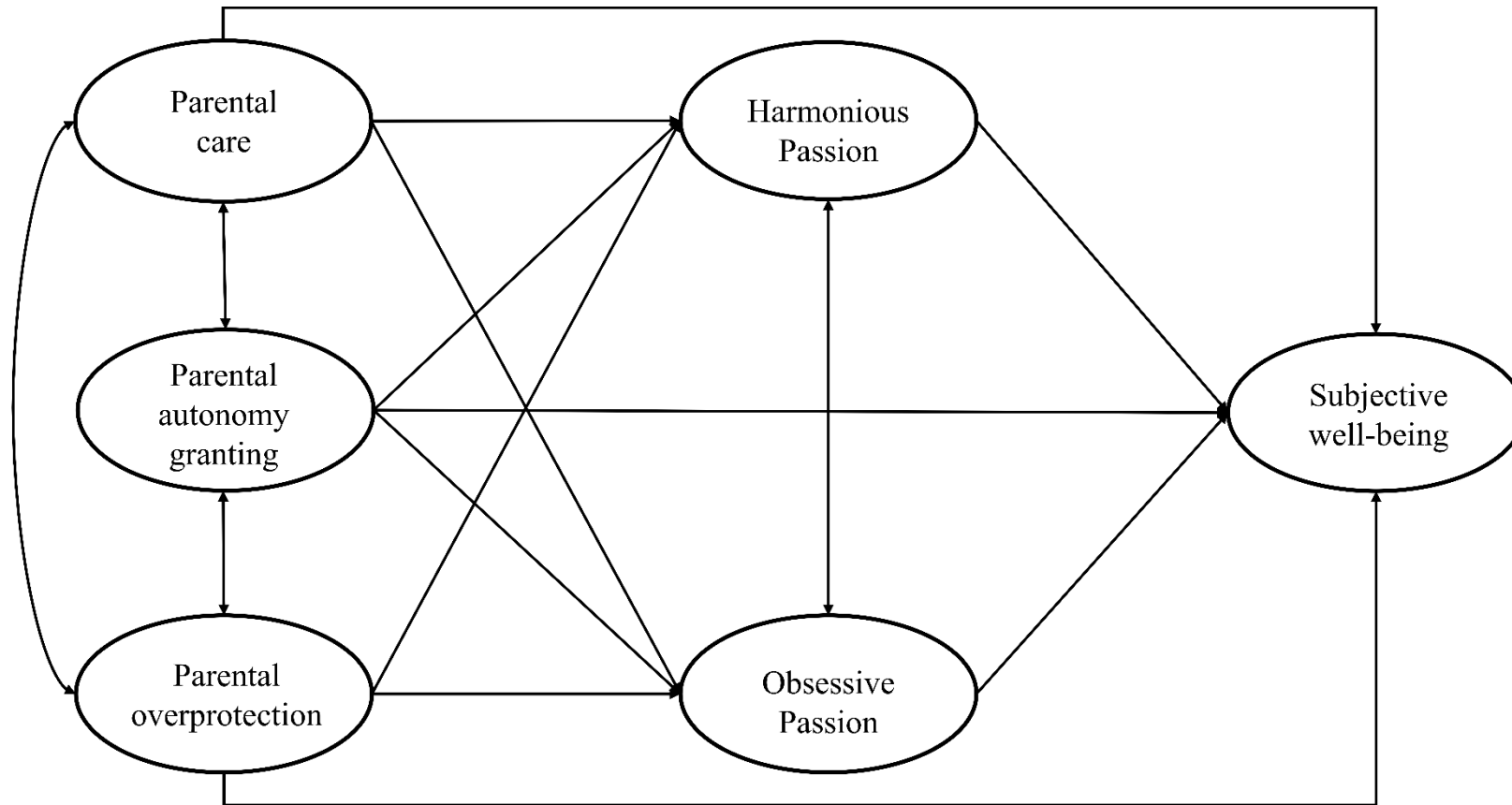
Figure 1

Schematic Illustration of the Hypothesized Model

Note. Ellipses represent latent variables and squares represent observed variables. Scale items and correlations are not shown for the sake of simplicity. One-headed arrows represent regression coefficients, two-headed arrows represent correlations.

Table 1

Goodness-of-Fit Indices Associated with the Estimated Models

Model	χ^2	df	CFI	TLI	RMSEA	90% CI	Comparison	$\Delta\chi^2$	Δdf	ΔCFI	ΔTLI	ΔRMSEA
Separate Measurement Models												
High school sample	1270.644*	732	.937	.926	.039	[.036, .043]	—	—	—	—	—	—
Adult sample	1173.300*	732	.960	.952	.036	[.032, .040]	—	—	—	—	—	—
Tests of Measurement Invariance												
M1. Configural	2442.696*	1464	.950	.941	.038	[.035, .040]	—	—	—	—	—	—
M2. Weak	2740.851*	1554	.939	.932	.040	[.038, .043]	M1	283.769*	90	-.011	-.009	+.002
M3. Strong	3392.495*	1590	.907	.900	.049	[.047, .051]	M2	690.137*	36	-.022	-.032	+.009
M3p. Partial Strong	2951.427*	1584	.930	.924	.043	[.040, .045]	M2	216.312*	30	-.009	-.008	+.003
M4. Strict	3168.562*	1626	.921	.916	.045	[.042, .047]	M3p	174.757*	42	-.009	-.008	+.002
M5. Correlated Uniquenesses	3217.389*	1644	.919	.915	.045	[.043, .047]	M4	44.598*	18	-.002	-.001	.000
M6. Latent Variance-Covariance	3270.393*	1654	.917	.914	.045	[.043, .048]	M5	48.157*	10	-.002	-.001	.000
M7. Latent Means	3398.377*	1660	.911	.907	.047	[.045, .049]	M6	130.168*	6	-.006	-.007	+.002
Predictive Models (with control for sex)												
M8. Freely estimated relations	3451.325*	1732	.912	.908	.046	[.044, .048]	—	—	—	—	—	—
M9. Equilibrium (equal relations)	3601.405*	1749	.905	.902	.047	[.045, .050]	M8	150.606*	17	-.007	-.006	+.001

Note. *p < .05; χ^2: robust chi-square test of exact fit; df: degrees of freedom; CFI: comparative fit index; TLI: Tucker–Lewis index; RMSEA: root mean square error of approximation; 90% CI: 90% confidence interval of the RMSEA; $\Delta\chi^2$ = robust (Satorra–Bentler) chi-square difference test (calculated from loglikelihood for greater precision); Δ: change in fit information relative to the previous model.

Table 2

Latent Correlations between the Examined Variables for the High School (below the diagonal) and Adult (above the diagonal) Samples from the Latent Mean Invariant Measurement Model (Model 7)

Variables	1	2	3	4	5	6
1. Harmonious passion	—	.448**	.098*	-.024	-.018	.170**
2. Obsessive passion	.448**	—	-.021	.064	.258**	.014
3. Parental care	.166**	-.170**	—	.448**	-.471**	.269**
4. Parental autonomy	.062	-.003	.448**	—	-.405**	.207**
5. Parental overprotection	-.058	.204**	-.471**	-.405**	—	-.204**
6. Subjective well-being	.242**	-.017	.696**	.389**	-.360**	—

Note. *$p < .05$; *$p < .01$. Within-construct correlations (e.g., between harmonious and obsessive passion; and between care, autonomy and overprotection) are the same as these are tested in the measurement invariance sequence. However, the between-construct correlations (e.g., between harmonious passion and care) are still allowed to vary as the equality of these associations are tested in the predictive model.

Table 3

Parameter Estimates from the Final Predictive Model (M9)

Predictor	Outcome	b (S.E.)	β (S.E.)
Parental care	Harmonious passion	.146 (.046)**	.144 (.044)**
Parental care	Obsessive passion	-.014 (.049)	-.014 (.047)
Parental care	Subjective well-being	.408 (.055)**	.358 (.044)**
Parental autonomy	Harmonious passion	-.043 (.050)	-.042 (.049)
Parental autonomy	Obsessive passion	.193 (.051)**	.184 (.048)**
Parental autonomy	Subjective well-being	.099 (.054)	.087 (.047)
Parental overprotection	Harmonious passion	.012 (.056)	.012 (.055)
Parental overprotection	Obsessive passion	.317 (.052)**	.303 (.047)**
Parental overprotection	Subjective well-being	-.069 (.062)	-.061 (.054)
Harmonious passion	Subjective well-being	.189 (.047)**	.168 (.041)**
Obsessive passion	Subjective well-being	-.031 (.048)	-.029 (.044)
Sex	Parental care	.101 (.069)	.042 (.029)
Sex	Parental autonomy	-.019 (.796)	-.008 (.031)
Sex	Parental overprotection	-.015 (.077)	-.006 (.032)
Sex	Harmonious passion	.289 (.077)**	.118 (.031)**
Sex	Obsessive passion	.213 (.076)**	.084 (.030)**
Sex	Subjective well-being	-.010 (.076)	-.004 (.027)

Note. *$p < .05$; **$p < .01$. Sex was coded as $0 =$ male, $1 =$ female.

Online Supplements for:

Perceived parenting practices as predictors of harmonious and obsessive passion among high schoolers and adults

These online supplements are to be posted on the journal website and hot-linked to the manuscript. If the journal does not offer this possibility, these materials can alternatively be posted on one of our personal websites (we will adjust the in-text reference upon acceptance).

We would also be happy to have some of these materials brought back into the main manuscript, or included as published appendices if you deem it useful. We developed these materials to provide additional technical information and to keep the main manuscript from becoming needlessly long.

Table S1

Parameter Estimates from the Latent Mean Invariant Measurement Model (Model 7)

Items	Harmonious passion (λ)	Obsessive passion (λ)	Parental Care (λ)	Autonomy granting (λ)	Parental Overprotection (λ)	Subjective wellbeing (λ)	δ
HP1	**.697****	-.061*					.548
HP3	**.731****	-.003					.468
HP5	**.617****	.182**					.486
HP6	**.737****	.026					.439
HP8	**.639****	.134**					.497
HP10	**.707****	-.156**					.575
OP2	-.070*	**.592****					.681
OP4	.177**	**.728****					.323
OP7	.120**	**.542****					.634
OP9	.145**	**.594****					.548
OP11	-.052*	**.783****					.420
OP12	-.206**	**.876****					.352
CA1			**.858****	.105**	.151**		.284
CA2			**-.532****	.066*	.174**		.635
CA4			**-.725****	.108**	.119**		.447
CA5			**.770****	.083**	.041		.374
CA6			**.838****	.145**	.215**		.317
CA11			**.722****	.063	.161**		.526
CA12			**.893****	.091**	.181**		.255
CA14			**-.481****	.005	.408**		.420
CA16			**-.565****	.087**	.250**		.540
CA17			**.737****	.081**	.093**		.458
CA18			**-.652****	.132**	.087**		.583
CA24			**-.660****	.076**	.184**		.466
AU3			.150**	**.656****	-.016		.448
AU7			.215**	**.540****	-.109**		.477
AU15			.228**	**.531****	-.198**		.391
AU21			-.078**	**.879****	-.077**		.228
AU22			-.129**	**.846****	.005		.369
AU25			.023	**.522****	-.034		.700
OV8			-.086*	.028	**.628****		.563
OV9			-.151**	-.228**	**.541****		.424
OV10			.051	-.182**	**.571****		.590
OV13			-.020	-.059	**.663****		.511
OV19			-.195**	.033	**.422****		.722
OV20			-.181**	.005	**.596****		.513
OV23			.205**	-.135**	**.625****		.626
SWLS1						.826**	.318
SWLS2						.788**	.380
SWLS3						.899**	.193
SWLS4						.825**	.320
SWLS5						.697**	.515
ω	.850	.851	.931	.858	.806	.904	

Note. * $p < .05$; ** $p < .01$; λ: Factor loading; δ: Item uniqueness; ω: model-based omega composite reliability based on McDonald (1970); Target factor loadings are in bold.