Children's Career Expectations and Parents' Jobs: Intergenerational (Dis)continuities

Abstract

Children develop career expectations as they increase self-knowledge and perceive societal affordances and barriers to life roles. Parents are powerful agents in the socialization of children to work, transmitting occupational concepts influencing children's career development. We used Gottfredson's and Holland's theories to test associations between children's career expectations and parents' jobs in terms of gender, prestige, and interest typology among same-sex and cross-sex child-parent dyads. Data were collected from 185 Portuguese children (48.6% girls) from two-parent families (M_{age} = 10.41). Children reported their parents' jobs and shared personal career expectations. Correlation and linear regression results suggested that fathers' male-dominated jobs put boys at risk of gender-based circumscription of career expectations. An intergenerational cycle of prestige inequalities was evidenced, although parents seem to support children's exploration of various interest areas. Future research could explore these relations across family structures. Practice should foster children's in-breadth career exploration and engage parents as key-partners.

Keywords: childhood career development; career expectations; family; parents.

Children's Career Expectations and Parents' Jobs: Intergenerational (Dis)continuities

Career aspirations rank among the most investigated dimensions in the child career development literature (Hartung, Porfeli, & Vondracek, 2005; Oliveira, Porfeli, & Taveira, 2017). Aspirations focus on children's ideals related to educational and career attainment and are associated with career outcomes in adulthood (Cochran, Wang, Stevenson, Johnson, & Crews, 2011). However, less attention has been devoted to children's expectations. Expectations refer to the school level or job(s) children anticipate attaining based on perceived social influences and their understanding of personal characteristics within contextual affordances (Howard, Flanagan, Castine, & Walsh, 2015; Marques, Silva, Oliveira, Silva, & Taveira, 2017; Rojewski, 2007). Given the need to expand research on children's career expectations and to systematically promote their career development, we examined associations between children's career expectations and parents' jobs in terms of gender, prestige, and interest typology.

Parental Influence on Children's Career Aspirations and Expectations

Gottfredson (1981) offered a theory of circumscription and compromise to explain the development of children's career aspirations and expectations from fantasy-based conceptions and into reality-based expectations. The circumscription process involves children adjusting career aspirations into expectations as a consequence of an emerging psychosocial self. This psychosocial self emerges from ongoing experiences that signal activities compatible with personal characteristics and affirmed or rejected within the social context. The theory conceives of gender and prestige as two essential dimensions of compatibility. Activities congruent with personal characteristics and affirmed within the social structure defined by gender and socioeconomic status tend to be maintained and cultivated, whereas those that do not are diminished or eliminated entirely (Gottfredson, 1981). During the compromise process, children

revise the remaining acceptable alternatives and constrain them within a cognitive map of acceptable and possible occupations (Gottfredson, 1996). Hence, career expectations include a narrowed set of career alternatives deemed acceptable and possible to the child.

Gottfredson (1996) suggested that "children tend to recreate the social order of their elders" (p. 182). Such a suggestion illustrates the sociological roots of this theory and its elaboration via Holland's theory. Holland (1973) acknowledged the possibility that children interact with specific environments and personalities – Realistic, Investigative, Artistic, Social, Enterprising, Conventional (RIASEC) – in the family setting and might, therefore, develop choices similar to those of their parents. This aspect of both theories suggests that conceptions of work are transmitted across generations (i.e., intergenerational occupational transmission) (Oren, Caduri, & Tziner, 2013). Intergenerational occupational transmission seems aligned with evidence supporting the central role of the family in the socialization of children to work (Bryant, Zvonkovic, & Reynolds, 2006). Parents have been shown to impact children's career aspirations and expectations by serving as role-models, encouraging career exploration and career-related conversations (e.g., Liu, McMahon, & Watson, 2015; Young et al., 1997). Still, discontinuities in children's expectations and parents' jobs are commonplace (Helwig, 2008). A number of factors may contribute to those discontinuities, such as children's in-breadth career exploration and parents' non-traditional work attitudes (Fulcher & Coyle, 2011). Hence, the family is a meaningful but indeterminate context for children's career development.

The literature has highlighted the capacity of the family to cultivate children's broad and deep interests as a protective factor from the anxiety triggered by contemporary society (Kenny, Blustein, & Meerkins, 2018). The family holds, therefore, the potential to expand children's interests and to foster their career adaptability (Ginevra, Annovazzi, Santilli, Di Maggio, &

Camussi, 2018). Previous research on children's career aspirations and expectations has suggested that parents can nurture children's enrolment in and exploration of multiple RIASEC environments (Liu et al., 2015; Oliveira et al., 2017). Nurturing practices may include enabling children's participation in community activities; supporting children's exposure to family and community members' careers; employing gender-balanced language in conversations with children; and being responsive to children's curiosity (Peila-Shuster, 2018). Still, parents can alternatively limit children's experiences to particular settings within more specific and familiar RIASEC environments (Liu et al., 2015). As within the family "children absorb messages that serve to encourage or discourage, motivate or de-motivate, liberate or oppress" (Peila-Shuster, 2018, p. 460) their career exploration, intergenerational occupational transmission in terms of gender, prestige and RIASEC types can be challenged.

Gender, Prestige, and Vocational Interests

Considering such dimensions, gender continues to play a powerful role in the distribution of people within the workforce (Luke & Redekop, 2014). Many jobs continue to show male (e.g., auto-mechanics) and female (e.g., preschool teachers) dominance in the workforce. These gender disparities have been traced back to gendered career aspirations during childhood (Corrigal & Konrad, 2007; Lee, Lawson, & McHale, 2015). Sons' aspirations for male-dominated occupations have been related with fathers' occupying male-dominated jobs (Schuette, Ponton, & Charlton, 2012). On the contrary, girls seem to demonstrate flexibility by aspiring to and perceiving themselves as competent in male-dominated jobs (David, Paixão, & Silva, 2015; Lawson, Lee, Crouter, & McHale, 2018). Girls' flexibility in gendered career stereotypes might be associated with their parental support for career exploration across gendered boundaries and

their increased time spent in men-dominated leisure activities from middle childhood through adolescence (e.g., Croft, Schmader, Block, & Baron, 2014; Lee, Skinner, & McHale, 2018).

Akin to the gendered nature of the workforce, career attainment is also influenced by the socioeconomic status of the family (OECD, 2018). Research demonstrates that children's aspirations are positively related to parents' occupational status (Gutman & Schoon, 2012), perhaps due to social class largely defining one's access to education and social networks (Diemer & Ali, 2009). Across generations, the rich remain rich and the poor remain poor. This prevailing pattern seems rooted in the differential opportunity structure offered to children by their family and community. For example, parental unemployment has been related to children's negative work-related attitudes (Bryant et al., 2006; Faria, 2013). Children from less affluent backgrounds and ethnic minorities have also been shown to perceive more career barriers and to more likely circumscribe career aspirations and expectations than peers from affluent backgrounds and ethnic majorities (Hartung et al., 2005; Joshi & Bkashi, 2016).

Additionally, following Holland's (1973) assertion that the family is an important context for the formation of interests, evidence has suggested positive associations among sons' Realistic and Enterprising aspirations and their fathers' Realistic and Enterprising jobs (Schuette et al., 2012). Similarly, research has demonstrated a continuity in Realistic interests across generations of grandfathers, fathers and sons (Helwig, 2008). However, the role of mothers' jobs in offspring's career aspirations and expectations is less documented due to the more recent dominance of paid work in the lives of women. Hence, dual-income families are now commonplace, and children are likely affected by both parents.

Purpose of the Study

Acknowledging the existing gaps in the literature on children's career expectations and intergenerational occupational transmission, we examined if and how mother's and father's jobs are associated with the nature of children's career expectations along gender, prestige, and interest dimensions among same-sex and cross-sex child-parent dyads. Two notes are worth mentioning. First, this study is supported by a union of Gottfredson's and Holland's theories (Figure 1). Both theories have been subject to critiques. On the one hand, challenges to Gottfredson's theory have surfaced as a consequence of controversial studies on intelligence (Luke & Redekop, 2014). On the other hand, some scholars have questioned the applicability of Holland's theory to multicultural settings and its utility in contemporary society on the basis that some aspects of the theory may be overly deterministic (Ginevra et al., 2018). Still, both theories continue to have value and relevance in contemporary research, especially in certain contexts (Trice & Greer, 2017). Second, this study was conducted in Portugal. Portugal suffered through and continues to recover from an economic crisis with lasting effects. Long-term unemployment and precarious jobs continue to be a common occurrence and many jobs offer salaries that are insufficient to meet basic needs, which put families and children at risk of economic distress (Ferreira et al., 2019; OECD, 2019). Portugal's economic crisis has negatively impacted family dynamics and children's behavioral regulation. This context has also limited educational and economic mobility with an intergenerational transmission of educational levels and socioeconomic status reaching 70% (Cadima, Gamelas, McClelland, & Peixoto, 2015). Our study is, therefore, situated within a context of limited mobility that is reflective of many countries and communities across the globe. We examine if and how family factors contribute to the intergenerational transmission of career development, limiting or encouraging

continuity/discontinuity in gender, prestige, and career interests, which are major determinants of educational and economic mobility.

Eight research hypotheses were tested. For the gendered dimension of work, it was expected that: the gendered nature of children's expectations would be positively associated with the gendered nature of parents' jobs (H1); associations of the gendered nature of children's expectations and parents' jobs would be stronger in the son-father dyad than in the daughter-mother dyad (H2); and relations of the gendered nature of children's expectations and parents' jobs would be stronger in the daughter-father dyad than in the son-mother dyad (H3). Regarding prestige, we expected that: the prestige level of children's expectations would be positively associated with the prestige level of parents' jobs (H4); and associations in the prestige level of children's expectations and parents' jobs would be of similar strength in same-sex and cross-sex dyads (H5). As for interest types, expectations were that: children's RIASEC interests would demonstrate greater associations with the parents' RIASEC interests when children and parents' interests were more proximate to each other along the RIASEC hexagon (i.e., interest types spatially closer to each other along the hexagon) as compared to more distal types (H6); relations among children's RIASEC type scores and those of their parents' jobs would be stronger in the son-father dyad than in the daughter-mother dyad (H7); and relations among children's RIASEC type scores and those of their parents' jobs would be stronger in the daughter-father dyad than in the son-mother dyad (H8).

Method

Participants

Children were recruited using a non-probabilistic convenience sampling method. The initial sample included 239 Portuguese children (47.3% girls; M_{age} = 10.44 years). However, 25

children did not indicate career expectations, alternatively reporting they could perform any job as long as they were successful in school. From the remaining 214 children, 197 (49.7% girls) indicated their mothers' jobs, 195 (46.7% girls) reported their fathers' jobs and 185 (48.6% girls) named both parents' jobs. As this study considered two-parent families, only cases with complete data regarding children's expectations and parents' jobs were included.

The final sample included 185 children attending fifth-grade in two public schools, one in an urban area (41.6%) and another one in a peripherical area (58.4%) of northern Portugal. Participants included 90 (48.6%) girls and 95 (51.4%) boys aged 10 to 12 years old (M = 10.41 years). Ninety-seven percent was Portuguese-native, whereas the remaining children were Brazilian, French, German and Venezuelan-native. Most of the children's mothers (87.6%) and fathers (96.2%) were employed. In the event that a parent was unemployed, their last paid job was used to generate the required data. This is a common strategy in Portuguese research, as parents' last paid jobs still impact offspring's conceptions of work (e.g., Faria, 2013). Most mothers (73%) and fathers (76.9%) completed a high school degree and 22.2% of mothers and 17.8% of fathers completed a college degree. Most mothers (70%) performed unskilled or semiskilled jobs (e.g., factory worker, seamstress), whereas most fathers (75.1%) executed semiskilled or clerical/skilled jobs (e.g., computer technician, lawyer).

Measures

Children's career expectations were assessed with an open-ended question "Based on the understanding of yourself and your family, school and community, what occupation do you think you will accomplish?" This strategy has been recommended due to its simplicity and predictive validity (Rojewski, 2007). Children were also asked their biological sex, which was dummy-coded as 0 (girls) and 1 (boys). Children also completed items soliciting demographic

information, such as parents' jobs. This strategy has been used in other studies with middle-school children (e.g., Schuette et al., 2012) and is aligned with calls to acknowledge children's perspectives in research (Graham & Powell, 2015).

Procedure

This study is a part of a broader research project authorized by the Portuguese General-Directorate of Education. The broader research project focuses on Portuguese middle-school children's career development in a manner that accounts for personal and contextual factors of career development. Career expectations were among those dimensions and are addressed in the present study. Principals consented to engaging their schools in this study. Written consent forms from children's caregivers were obtained. Children's participation was entirely voluntary, and their assent was obtained. Data were collected within the classrooms by school psychologists during timeframes previously scheduled with principals to avoid disruption of academic activities. International and Portuguese ethical standards for research were considered (American Psychological Association, 2010; Regulamento 258/2011) – there were no material or financial benefits offered to participants, and informed consent, voluntary participation, confidentiality and post-research information rights were guaranteed.

Data Analyses

The collected data were coded before data analyses. To code the gendered nature of an occupation, children's career expectations and parents' jobs were translated into the categories defined by the Portuguese Classification of Occupations (CPO) (e.g., machinery operators). Each category was assigned a percentage of women occupying it, whereby higher scores reflect more females occupying the job. These data sourced from the Portuguese Institute of Statistics at the same year children participated. The prestige level of children's expectations and parents' jobs

were coded according to the occupational statuses established by the CPO. Higher scores are indicative of higher job statuses. Children's expectations and parents' jobs were translated into RIASEC type scores following the O*NET job classification. Whenever a child listed several expected occupations (i.e., maximum of three), we computed the average of the data for gender, prestige, and RIASEC type scores. We followed the same procedure to compute the combination of mothers' and fathers' jobs to yield composite scores for parents, thus enabling combined examinations of parents and independent associations of mother's and father's jobs on children's career expectations.

Data analyses were performed with the Statistical Package for the Social Sciences (IBM SPSS), version 25.0 for Windows. Bivariate correlation coefficients were computed. Multiple linear regression models were used to examine the relation between children's expectations and parents' jobs in terms of the gendered nature and the prestige level of occupations. Moderator effects of the same-sex and cross-sex dyads were considered. To examine the association between children's expectations and parents' jobs in terms of RIASEC type scores, hierarchical linear regression models were employed and were guided by the RIASEC hexagonal structure. The first block included child's gender; the second block included parents' same RIASEC type and interaction with child's gender; the third block added parents' scores on the two proximate RIASEC types; the fourth block added the remaining more distal RIASEC types. This procedure was used to predict each child's expected RIASEC type, considering parents' combined RIASEC scores as well as mothers' and fathers' separate RIASEC scores. The Durbin-Watson test suggested that residuals were uncorrelated, no outliers were identified through the Cook's distance measure and variables were centered before computing interaction terms (Aiken & West, 1991).

Results

Multiple linear regression results (Table 1) suggested that girls were more likely than boys to express female-dominated job expectations. Moreover, children whose parents performed female-dominated jobs were likely to express female-dominated occupational expectations (H1 supported). Results from the regression model considering same-sex and cross-sex dyads indicated that fathers' female-dominated jobs were positively related to children's female-dominated occupational expectations. Additionally, there was a statistically significant moderator effect of the daughter-father and son-father dyads. While sons were more likely than daughters to present female-dominated job expectations when fathers performed female-dominated jobs, they were less likely than daughters to consider female-dominated jobs when fathers held male-dominated jobs (H2 and H3 supported).

Multiple linear regression results also suggested that children expected prestige was positively related with parents' combined job prestige (H4 supported). Moreover, fathers' job prestige level was positively associated with children's expectations. No significant difference was found between same-sex and cross-sex dyads (H5 supported).

Due to the large volume of statistical results springing from the hypotheses and analytic plan, only parent-child correlations are offered in Table 2 and only the best hierarchical regression models estimating children's expected fields are presented in the text. Still, complete data are available from the first author. Parents' combined scores demonstrated the strongest predictive capacity in estimating children's Social and Enterprising expectations. Children's Realistic and Artistic expectations were better estimated by the fathers' scores. Models estimating Investigative and Conventional expectations were non-significant. With regard to children's Social expectations, girls presented significantly higher Social expectations than boys,

$\beta_{\text{block 1}}$ = -.39, t = -5.73, p < .001, 95% CI [-1.79, -.88]. In the fourth block, parents' Realistic score tended to be negatively associated with children's Social expectations, β = -.26, t = -1.89, p = .06, 95% CI [-.52, .01]. Additionally, models estimating Enterprising expectations showed that parents' Enterprising score was positively and significantly related to children's Enterprising expectations, $\beta_{\text{block 2}}$ = .20, t = 2.68, p = .002, 95% CI [.04, .26].

Boys presented higher Realistic expectations than did girls, $\beta_{\text{block 1}}$ = .31, t = 4.33, p < .001, 95% CI [.53, 1.42]. In the second and third blocks, fathers' Realistic scores were positively related to children's Realistic expectations, $\beta_{\text{block 2}}$ = .20, t = 2.82, p = .005, 95% CI [.04, .24]; $\beta_{\text{block 3}}$= .17, t = 2.23, p = .027, 95% CI [.01, .23]. In the third block, fathers' Investigative scores negatively explained the variance in children's Realistic expectations, β = -.15, t = -2.11, p = .04, 95% CI [-.30, -.01]. In the fourth block, fathers' Artistic scores were negatively and marginally significantly associated with children's Realistic expectations, β = -.16, t = -1.96, p = .05, 95% CI [-.39, .001]. Girls presented higher Artistic expectations than did boys, $\beta_{\text{block 1}}$ = -.46, t = -7.05, p < .001, 95% CI [-2.20, -1.24]. Fathers' and children's Artistic scores were positively related, $\beta_{\text{block 2}}$ = .17, t = 2.53, p = .01, 95% CI [.05, .41]. As the varying associations among the proximate/distal types along the RIASEC hexagon did not conform with predictions, H6, H7 and H8 were not supported. Still, fathers' interest scores seemed to play a more important role in explaining children's Realistic and Artistic expectations than did mother's interest scores.

Discussion

We examined associations between children's career expectations and their parents' jobs among same-sex and cross-sex child-parent dyads. Results generally suggested that children's career expectations are associated with the gender, prestige, and RIASEC interest dimensions of parents' jobs, which supports the literature on career aspirations and intergenerational

occupational transmission (e.g., Oren et al., 2013; Schuette et al., 2012). Still, variability in the nature and content of children's expectations as well as in their linkages to parents' jobs was found. This might suggest that children's career development, and specifically intergenerational occupational transmission, needs to be flexibly aligned with the social forces that exist within the family (Bryant et al., 2006; Joshi & Bakshi, 2016).

Regarding the gendered nature of children's expectations and parents' jobs, results supported H1, H2 and H3. There seems to exist a greater gender circumscription for boys compared to girls, which is consistent with literature (Croft et al., 2014; David et al., 2015; Lawson et al., 2018; Lee et al., 2018). The preponderance of findings offered in this study support calls to acknowledge and act upon boys' vulnerability to their early gender-biased circumscription of career aspirations and expectations (Croft et al., 2014). Boys' vulnerability has been consistently found in international and Portuguese studies (David et al., 2015; Hartung et al., 2005; Oliveira et al., 2017), which might be illustrative of systemic and transcultural barriers for boys to approach gender nontraditional occupations. Still, fathers might constitute key figures to help boys overcome such barriers. By performing female-dominated occupations, fathers may encourage sons to take a more flexible attitude toward female-dominated occupations and weaken the gender circumscription process. Future studies discerning the sociological, contextual and relational factors minimizing boys' relative reluctance to consider female-dominated occupations could also inform parenting and career interventions.

As for prestige, results supported H4 and H5, although parents' job prestige explained a relatively small percentage of the variance of children's job expectations. This might be aligned with Gottfredson's (1996) preposition that gender impacts children's representations until approximately age eight, with prestige exerting a greater impact until approximately age 13. As

our study included 10-year-olds, children can be still constructing prestige-related ideas, whereas gender-related representations might already be consolidated by this age. Results also indicated that the child-parent linkages in prestige seem stronger for sons than for daughters. This seems consistent with previous evidence in Portugal suggesting that boys tend to diminish their career exploration and perceive it as helpful for career attainment when they are aware of parents', particularly fathers' economic challenges (Faria, 2013). It might also suggest that middle-school girls already perceive disparities in work conditions favoring men (Fulcher & Coyle, 2011). Mixed-method studies investigating children's career narratives, educational, occupational and family expectations could explore these findings. Of related concern is the finding that children's expected job prestige is linked to the prestige level of parents' jobs, which is consistent with the literature (Gutman & Schoon, 2012). This illustrates an intergenerational cycle of prestige inequalities across generations and a vulnerable social position of children from poorer families (OECD, 2018). This finding is concerning, as it might precede social class inequalities in Portuguese younger generations (OECD, 2019). Equity in the access to quality childhood education and measures to attain decent work should, therefore, be a priority for the country (Ferreira et al., 2019; Peila-Shuster, 2018).

Regarding RIASEC types, results did not support H6, H7 and H8. Although inconsistent with Holland's (1973) theory, these results may suggest that parents offer children opportunities to explore diverse careers. This might occur as a consequence of parents' believing that their working world is unpredictable. Interdisciplinary studies tying childhood career development to family socialization and parent's occupying jobs offering a living wage and benefits could advance our understanding of the contextual embeddedness of children's career development. Future research exploring associations of parents' RIASEC types with relational variables, such

as parent-child conversations (Young et al., 1997), could also be useful to identify parental behaviors that may positively influence children's career alternatives.

Limitations

We used an array of career dimensions to explore psychosocial forces fueling intergenerational patterns in parents' jobs and children's career expectations. Such an ambitious undertaking has inherent limitations. First, we relied on children's reports on parents' jobs. While previous research has employed this strategy (e.g., Schuette et al., 2012) and it is aligned with calls to acknowledge children's perspectives in research (Graham & Powell, 2015), this method might threaten measurement validity. Future studies could directly obtain parents' jobs from parents as well as their children to test the consistency between the two parties. Second, our sample included children who provided complete job data for mothers and fathers. Since there are various family structures, such as single-parent families, caution must exist in attempts of making inferences from these results to other children. Future research acknowledging such family structures and including a broader sample size is required. Third, the North-American O*NET job classification was used to translate children's expectations and parents' jobs into RIASEC interest scores due to the absence of a similar Portuguese-based classification. While we believe that this translation was reasonable given currently available data assets, differences in interests and activities of workers may exist within jobs across countries that threaten the measurement validity of our data translations methods. The creation of a Portuguese database including occupational information from Portuguese workers and employers could benefit the country and ultimately sustain a contextually-sensitive replication of this work and support cross-national research. Finally, our study relied on cross-sectional data, which limits any causal inferences. Future research could obtain longitudinal data to enhance our capacity to test how

changes in parents and children influence each other over time. Longitudinal studies would be useful to address inter- and intra-individual stability and change in children's progress from career aspirations into expectations (David et al., 2015) and to test the impact of family dynamics on children's career development (Cadima et al., 2015; Oliveira et al., 2017).

Implications for Career Counseling

Our study highlights the need to engage parents in career counseling (Bryant et al., 2006; Faria, 2013). Counselors can employ direct and indirect practices aimed at broadening children's career exploration and preventing circumscription of career options rooted in intergenerational gender and socioeconomic affordances (Peila-Shuster, 2018). Career practices could encourage children to more flexibly employ in-breadth career exploration freer from barriers defined by gender and socioeconomic status or the particular career interests defined by their parents' jobs (Gottfredson, 1996; Lee et al., 2015). Children's interaction with workers engaged in gender atypical jobs and/or those in different social classed would be important to foster children's career adaptability (Ginevra et al., 2018). This could be particularly important for boys and for children from less affluent backgrounds given findings suggesting their vulnerability to an early gender-biased and prestige-biased circumscription of occupational alternatives (Cadima et al., 2015; David et al., 2015; Joshi & Bakshi, 2016). Counselors could also stimulate middle-school children's reflexivity about the role of proximal key-figures (e.g., parents) and the society at large on a person's career options, thus promoting a more inclusive and agentic approach to future career decision-making. This could be done by interviewing children about perceived influences on their development; fostering children's self-reflection about the role of key-figures and role-models in their lives; visualizing movies or reading books that stimulate discussions about a person's role in the global social functioning; fostering parent-child conversations and

group discussions about dilemmatic situations regarding academic/occupational choices, life role management and the impact of one's behaviors and choices in others and the community (Howard et al., 2015; Kenny et al., 2018; Marques et al., 2017).

As for indirect practices, parents should be conceived as key partners in career counseling (Faria, 2013). Counselors could offer information to parents, engage them in community-based activities and focus groups devoted to discussing career issues and help them demystify career misconceptions rooted in discriminatory, exclusionary, and constraining attitudes related to gender and prestige. Counselors could also collaborate with community and school personnel to engage parents in activities with their children, such as field trips, visits to parents' workplaces, or open-days for parents to talk about their jobs in the school context (Liu et al., 2015; Marques et al., 2017). These initiatives would not only benefit children, but also their parents, by acknowledging their efforts to manage work with family in a period of financial recovery, like the one Portugal is still experiencing. Positive parental influence on children's career development could also be prompted by exercises such as role-play or discussion of career dilemmas (Young et al., 1997). These exercises could afford counselors opportunities to (a) stimulate parents' intentionality in the creation of opportunities for children to explore various occupations, (b) support role modelling of mothers and fathers equally distributing household work, school participation and work-family management, and (c) enhance awareness of the negative impact of stereotyped comments on children's behavior and future prospects (Cadima et al., 2015; Fulcher & Coyle, 2011; Liu et al., 2015).

Broader systems-level efforts could also have a positive effect on broadening children's career aspirations and expectations. Collaboration among career counselors, researchers, and scientific and professional associations could help to establish networks and stimulate

organizations' acknowledgement of employees' family roles. Children's career development would benefit from efforts to consider career processes in public policies, to improve equity in the access to quality childcare that includes concerted efforts to engage children in career exploring, to minimize social stereotypes in mass media and school handbooks, and to support parents in attaining decent work (Ferreira et al., 2019; Fulcher & Coyle, 2011; Luke & Redekop, 2014; Peila-Shuster, 2018).

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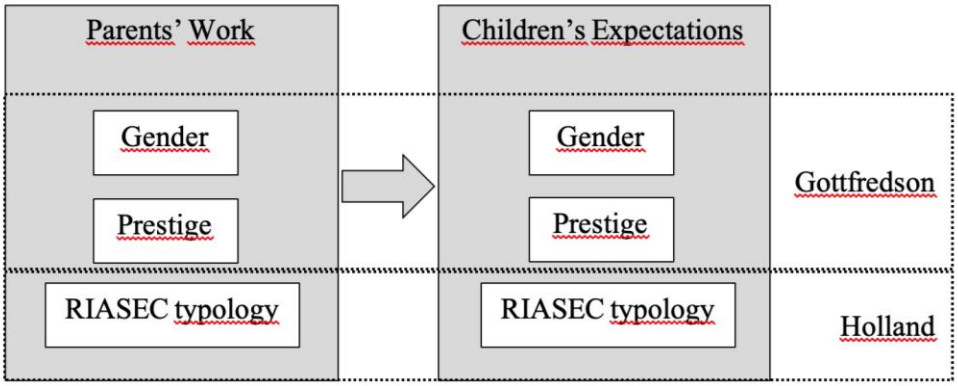

Figure 1.

Articulations between parents' jobs and children's career expectations based on Gottfredson's and Holland's theories.

Table 1

Results from the Multiple Linear Regression Models Explaining the Gendered Nature and the Prestige Level of Children's Career Expectations

Explaining variables	R^2 (R^2 Adj.)	F	β	t	95% CI
Gendered nature of children's expectations based on parents' combined role					
Gendered nature of parents' jobs	.16 (.15)	11.81***	.15	2.30*	[.01, .24]
Child's gender			-.37	-5.34***	[-12.39, -5.71]
Gendered nature of parents' jobs X Child's gender			.08	1.20	[-.09, .35]
Gendered nature of children's expectations based on same-sex and cross-sex dyads					
Gendered nature of mother's jobs	.20 (.17)	6.44***	.06	.85	[-.05, .13]
Gendered nature of father's jobs			.17	2.38*	[.02, .18]
Child's gender			-.32	-4.59***	[-11.48, -4.58]
Gendered nature of mother's jobs X Gendered nature of father's jobs			.10	1.44	[-.001, .008]
Gendered nature of mother's jobs X Child's gender			-.08	-1.04	[-.29, .09]
Gendered nature of father's jobs X Child's gender			.16	2.30*	[.03, .36]
Gendered nature of mother's jobs X Gendered nature of father's jobs X Child's gender			-.06	-.78	[-.01, .005]
Prestige level of children's expectations based on parents' combined role					
Parents' job status	.06 (.04)	3.51*	.22	3.08**	[.08, .35]
Child's gender			.06	.84	[-.14, .33]
Parents' job status X Child's gender			.04	.51	[-.20, .35]
Prestige level of children's expectations based on same-sex and cross-sex dyads					
Mother's job status	.06 (.02)	1.62	.08	.79	[-.10, .22]
Father's job status			.18	2.04*	[.005, .32]
Child's gender			.08	.92	[-.15, .40]
Mother's job status X Father's job status			-.03	-.35	[-.15, -.11]
Mother's job status X Child's gender			-.01	-.08	[-.33, .31]
Father's job status X Child's gender			.07	.76	[-.19, .43]
Mother's job status X Father's job status X Child's gender			-.05	-.53	[-.33, .19]

Note. CI = confidence interval.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2

Correlations between children's expectations and parents' jobs

	Girls R	Girls I	Girls A	Girls S	Girls E	Girls C	Boys R	Boys I	Boys A	Boys S	Boys E	Boys C
Mothers R	.01	-.19†	.05	-.12	.10	-.06	.14	-.13	-.04	-.14	-.13	-.04
Mothers I	-.11	.01	.02	-.05	.03	.20†	-.07	.14	.10	.03	-.03	-.01
Mothers A	-.11	-.11	.11	-.01	.07	.09	.06	-.08	-.10	-.07	-.04	.09
Mothers S	-.09	.10	-.01	.05	-.08	-.02	-.16	.17	.24*	.04	-.02	-.02
Mothers E	.12	.05	-.01	.02	.08	-.01	-.17	.07	-.01	.09	.23*	.16
Mothers C	.07	.13	-.11	.06	-.09	.06	.09	.03	.02	-.08	-.10	-.11
Fathers R	.13	.12	-.12	-.08	-.08	-.07	.28**	-.15	-.16	-.09	-.21*	-.10
Fathers I	-.12	-.06	.17	-.25*	.03	.11	-.18†	.19†	.07	.22*	-.19†	.10
Fathers A	-.06	-.07	.15	-.06	.06	-.07	-.23*	.07	.24*	.11	.06	.06
Fathers S	.12	-.06	-.05	-.07	-.09	.15	-.24*	.10	.19†	.10	.20*	-.03
Fathers E	-.06	-.07	.02	.11	.07	.14	-.27**	.16	.18†	-.05	.27*	.14
Fathers C	.20†	-.07	.07	.16	.08	-.04	-.19†	.24*	.01	.12	.02	.19†
Parents R	.09	-.02	-.05	-.12	.01	-.08	.25*	-.17	-.12	-.13	-.20*	-.08
Parents I	-.15	-.04	.13	-.20†	.03	.04	-.18†	.23*	.11	.18†	-.16	.07
Parents A	-.11	-.10	.15	-.04	.07	.02	-.08	-.03	.06	.01	.01	.11
Parents S	.01	.03	-.03	-.01	-.10	.07	-.23*	.16	.26*	.08	.10	-.03
Parents E	.03	-.02	.01	.09	.09	.09	-.26*	.14	.11	.02	.30**	.17†
Parents C	-.08	.04	-.03	.14	-.01	.01	-.17	.18†	.02	.03	-.05	.06

Note. R = Realistic, I = Investigative, A = Artistic, S = Social, E = Enterprising, C = Conventional. The complete correlation matrix is available upon request to the first author.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.