The Relationship Between Overeducation and Job Satisfaction Among Young Spanish Workers: The Role of Salary, Contract of Employment, and Work Experience

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The increase of education in younger generations and the relative scarcity of qualified jobs available for them makes overeducation of young employees a social issue. We explored the relationships between overeducation and job satisfaction (extrinsic, intrinsic, social facet), as well as the direct and moderating role of salary, contract of employment, and work experience in these relationships using hierarchical regression analyses. Data were collected from a sample of 643 young Spanish employees. As expected, there were negative relationships between overeducation and all 3 satisfaction facets. Moreover, high work experience emerged as a moderating factor that buffered the negative effect of overeducation on extrinsic satisfaction. Contract of employment and salary did not moderate these relationships.

A substantial rise in the educational level of individuals has taken place in parallel with a rapid rise in the demand of skills (Green, McIntosh, & Vignoles, 1999). However, industrialized economies do not always have the capacity to absorb fully the increased supply of qualified workers, so many individuals are forced to accept jobs that require less skill than they actually obtained. Consequently, overeducation emerges and has become a problem among the workforce (Büchel & Battu, 2003; Büchel & Mertens, 2004) in the United States and in Europe (Groot & Maassen van den Brink, 2000). This phenomenon seems to be accentuated in some European countries (e.g., Büchel, 2002; Sloane, Battu, & Seaman, 1999), particularly Spain, where it mostly affects young people.

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The younger generation’s level of education, improved through the extension of postcompulsory education and mainly oriented toward higher education, does not correspond to job opportunities. High unemployment rates make it particularly difficult for young people to find jobs to match their qualifications. So, the transitions from formal education to work typically involve young workers accepting jobs for which the required level of education is lower than they have attained (Alba-Ramírez & Blázquez, 2004).

As a result of the emergence and magnitude of the overeducation phenomenon, a sharp increase in the number of publications addressing this topic and its effects has been observed (for details, see Büchel, de Grip, & Mertens, 2004; Büchel & Pollmann-Schult, 2004). These publications focus on the phenomenon’s harmful economic consequences, mainly on workers’ wages (e.g., Alba-Ramírez, 1993; Alba-Ramírez & Blázquez, 2004; Bauer, 2002; Frenette, 2004; Hartog, 2000). Its effect on job attitudes (e.g., job satisfaction) has received less attention, despite its potential as a predictor of individuals’ behavior in multiple settings (see Ajzen & Fishbein, 1980; Fazio & Roskos-Ewoldsen, 1994), including the workplace (Spector, 1997), and such studies are even more limited in the case of Spain. Therefore, the present study aims to examine the relationship between overeducation and satisfaction with the different job facets in a sample of young Spanish employees. The work also aims to extend research in this field, exploring both the direct and moderating effects of relevant work-related factors on these relationships according to the literature on job satisfaction, such as salary, contract of employment, and employees’ work experience, which could protect individuals from the negative effect of overeducation as the research on possible buffering variables is very limited.

Overeducation and Its Relationship With Job Satisfaction

Generally, authors define overeducation in terms of discrepancy; that is, having more education than is required to perform one’s job. So workers are considered overeducated if their formal qualifications exceed those required to perform their jobs. Overeducation has been measured by using workers’ self-assessment (Alba-Ramírez, 1993; Alba-Ramírez & Blázquez, 2004; Büchel & Pollmann-Schult, 2004; Groeneveld & Hartog, 2004; Groot & Maassen van den Brink, 2000; Hartog, 2000; Hersch, 1991; Tsang, Rumberger, & Levin, 1991). We also measure overeducation in this way. Overeducated workers are those who report that the level of education required for their jobs is below the level of education they have attained.

Overeducation can have a negative effect on job attitudes, such as individual job satisfaction. Studies on underemployment, in which skill
underutilization and overeducation are two of its dimensions, have revealed that underemployed workers are more likely to experience job dissatisfaction (Feldman, 1996; Feldman & Turnley, 1995). In particular, job satisfaction can be understood from the one-dimensional versus multidimensional construct (Harpaz, 1983; Hundley, 2001; Locke, 1976; Miceli & Mulvey, 2000; O’Brien, 1982; Sparks, Corcoran, Nabors, & Hovanitz, 2005).

From a one-dimensional approach to job satisfaction (i.e., satisfaction with job as a whole), Tsang et al. (1991) pointed out that workers who had more schooling than their jobs require, determined either by the workers’ self-assessment of their jobs or by outside assessments of the schooling required for their occupations, were less satisfied with their jobs. Similarly, Hersch (1991) found that overqualified workers were less satisfied with their jobs.

More recently, Johnson and colleagues (Johnson & Johnson, 2000a, 2000b; Johnson, Morrow, & Johnson, 2002) adopted a multidimensional point of view of job satisfaction, and they also used a composite indicator of perceived overqualification: mismatch (i.e., surplus job qualifications) and no-grow (i.e., limited opportunities to acquire and use new job-related skills). However, the second indicator actually seems to allude to Hackman and Oldham’s (1975) task characteristics, themselves from the Job Diagnostic Survey (e.g., job interest, challenges), rather than to an education-related construct. When these authors only measured job satisfaction itself, they found that no-grow was negatively related to job satisfaction, while mismatch had no relationship with it (Johnson & Johnson, 2000b). When four facets of job satisfaction (i.e., work, supervision, promotion, pay) were analyzed, no-grow had a negative effect on satisfaction as far as work and supervision were concerned, while mismatch was negatively related to satisfaction with promotion and pay. Satisfaction with work and promotion were job facets that caused relative deprivation over time (Johnson & Johnson, 2000a). These negative relationships between perceived mismatch and facets of job satisfaction also appeared in other studies (Johnson et al., 2002).

In the present study, we also understand job satisfaction from a multidimensional viewpoint, so we analyzed different constituent parts of the job setting with which an individual may feel more or less satisfied. These facets are usually classified into two components: intrinsic and extrinsic job satisfaction (see the Minnesota Satisfaction Questionnaire [MSQ]; Weiss, Dawis, England, & Lofquist, 1967). Satisfaction with extrinsic job characteristics refers to the affective response to aspects outside the job activity itself (e.g., salary, physical conditions). An individual could feel more or less satisfied with the intrinsic job properties (e.g., autonomy, skill utilization).

Moreover, job activity also possesses social significance (see England, 1991; Meaning of Work—International Research Team, 1987; Warr, 1987). In
particular, it gives an individual the chance to interact with colleagues, supervisors, clients, and so forth, thus constituting an important source of interpersonal relationships beyond the family. Work activity also provides status and social prestige. Individual social status is conditioned by the job one performs and its utility for society, thus becoming a source of self-respect, respect, and recognition by others. These issues have sometimes been included in the extrinsic satisfaction scale.

However, instruments such as the Job Diagnostic Survey (JDS; Hackman & Oldham, 1975) and the Michigan Organizational Assessment Questionnaire (MOAQ; Camman, Fichman, Jenkins, & Klesh, 1979) measure social satisfaction as a separate dimension. So, in addition to extrinsic and intrinsic satisfaction, we analyzed a third facet accordingly: satisfaction with the social aspects of the job. This allows us to test whether this facet is also negatively affected by overeducation—an unexplored relationship in previous studies—so we can distinguish the predictive power of overeducation in each facet of job satisfaction.

Despite the empirical evidence in favor of the negative relationship between overeducation and job satisfaction from one multidimensional viewpoint, as far as we know only Johnson and Johnson (2000a) offered a detailed explanation of this finding on the basis of relative deprivation theory. Stouffer, Suchman, DeVinney, Star, and Williams (1949, as cited in Feldman, Leana, & Bolino 2002) first introduced the term deprivation. They suggested that individuals’ job attitudes are partially influenced by how objective job conditions match up to what they desire, and they feel entitled to what they receive from their jobs.

Crosby (1976) argued that an individual feels relatively deprived when he or she (a) desires a certain object; (b) sees that others similarly possess that object; (c) feels entitled to possess the object; (d) thinks that possessing the object is feasible; and (e) does not blame himself or herself for failure to possess the object. Furthermore, the relative deprivation theory considers social comparison processes (Festinger, 1954), which involve self-assessment in comparison with referent others in certain relevant dimensions (e.g., performance, capabilities). Accordingly, employees’ reactions to work situations could be explained by their perceptions of how the outcomes they receive are comparable to those received by their referent others (Crosby, 1984). Empirical evidence has shown that relative deprivation is negatively related to job satisfaction (Feldman & Turnley, 2004). The situation of underemployment also generates feelings of relative deprivation, which, in turn, adversely affect job satisfaction (Feldman et al., 2002).

Therefore, overeducation may be a source of relative deprivation that could negatively influence job satisfaction, since it could make employees feel disillusioned with their jobs. After several years of study, an individual
expects to obtain a qualified job, which usually implies desired intrinsic aspects (e.g., skill utilization, task variety), extrinsic rewards (e.g., good salary), and social reinforcements in terms of social prestige or enriched interpersonal relationships. When employees occupy a job below their level of qualification, they perceive that they obtain few reinforcements: underutilization of their skills (Borgen, Amundson, & Harder, 1988; Burris, 1983; Feldman et al., 2002), reduced salaries (e.g., Alba-Ramírez & Blázquez, 2004), low social prestige associated with their underqualified job (i.e., less qualified jobs are associated with lower social prestige), and less enriched social relationships (i.e., overeducated individuals are likely to occupy jobs that are also below their level of social skills). They could also feel deprived in comparison with the jobs their peers occupy (i.e., overqualified workers are likely to work with non-overqualified workers performing similar tasks), and also in comparison with the jobs of other colleagues with their same level of qualification (i.e., overqualified workers are likely to know individuals with their same level of qualification who perform more qualified jobs in which they obtain higher extrinsic, intrinsic, and social rewards). So, overeducation could be linked to satisfaction with extrinsic, intrinsic, and social aspects of the job. Accordingly, we formulate the following hypothesis:

**Hypothesis 1.** Overeducation will be negatively related to the three facets of job satisfaction: extrinsic, intrinsic, and social.

**Direct and Moderating Effects of Salary, Contract of Employment, and Work Experience**

The relationship between overeducation and job satisfaction could be affected, and even changed, by other variables that are not usually included in studies on this issue. As far as we know, only one previous study (Johnson & Johnson, 2000b) explored the role of a third variable (i.e., positive and negative affectivity) in the link between overeducation and satisfaction with the work itself. At this point, we are interested in extending the research by examining work-related factors that could protect employees from the negative effects of overeducation, thus making them feel relatively less deprived. We focus on salary, contract of employment, and experience, as the literature on job satisfaction highlights their significant predictive role.

Specifically, salary is a key reward that predicts a person’s level of job satisfaction. Empirical evidence has suggested that a higher salary is associated with greater job satisfaction (e.g., Agho, Mueller, & Price, 1993; Gunter & Furnham, 1996; Witt & Wilson, 1990). Concerning contract of employment, which is recommended to be studied as a single categorical
dummy variable (e.g., permanent vs. nonpermanent employment; Bernhard-Oettel, Sverke, & de Witte, 2005; de Cuyper & de Witte, 2006), studies have displayed that temporary workers report lower levels of overall job satisfaction than do their counterparts in permanent employment (Bardasi & Francesconi, 2004). When different aspects of job satisfaction were considered, temporary workers were less satisfied with their promotion prospects and job security than were permanent workers (Booth, Francesconi, & Frank, 2002).

Finally, an individual’s job satisfaction could depend on the years of work experience in the labor market. Research has indicated that job satisfaction also increases with work experience. Those employees with longer work tenure rated their job satisfaction higher than did those with less work experience (i.e., newcomers; Mwamwenda, 1998; Traut, Larsen, & Feimer, 2000). Thus, high salary, permanent contract of employment (in contrast to nonpermanent), and high work experience could all be associated with a high level of job satisfaction. Hence, we propose the following:

**Hypothesis 2.** Salary, contract of employment (i.e., permanent condition), and work experience will have additive (direct) positive effects on job satisfaction (extrinsic, intrinsic, and social).

Moreover, these three variables might not only have a direct effect, but also a moderating effect on the relationship between overeducation and job satisfaction, acting as buffering factors that could protect individuals from the negative effects of overeducation. However, research is lacking at this point. According to relative deprivation theory (Stouffer et al., 1949, as cited in Feldman et al., 2002), overeducation could be a source of relative deprivation that may negatively affect job satisfaction, breaking an individual’s perceptions regarding his or her chance of achieving desired rewards (e.g., good salary), which are usually associated with higher qualified jobs (e.g., Eck, 1993; Groot & Oosterbeek, 1994). If the worker benefits from a high salary that constitutes a powerful extrinsic incentive, then he or she might feel less relatively deprived, so his or her job satisfaction will be less damaged. In this sense, salary could also act as a buffering factor. Therefore, we propose the following:

**Hypothesis 3.** The effect of overeducation and salary will interact to affect job satisfaction.

Similarly, a permanent contract of employment (and the consequent perception of job security; Parker, Griffin, Sprigg, & Wall, 2002) is another very valuable extrinsic reward in the labor market, characterized by its increased flexibility and its associated higher job temporality (Brewster, Nayne,
Nonpermanent employees report more perceived job insecurity than do their permanent counterparts (Hesselink & van Vuuren, 1999; Parker et al., 2002). If employees take advantage of this stability in their jobs, then they could also feel less relatively deprived, and their satisfaction will suffer less damage. Therefore, a permanent contract of employment could also act as a buffering variable. Accordingly, we propose the following:

Hypothesis 4. The effect of overeducation and contract of employment will interact to affect job satisfaction.

Finally, work experience—namely, the number of years as an employee in the labor market—could also play a significant role in overeducation. Empirical evidence has indicated that workers with less work experience, who are mainly younger employees (Alba-Ramírez & Blázquez, 2004), present higher overeducation (Büchel & Battu, 2003; Büchel & Mertens, 2004; Sloane et al., 1999). However, overeducated individuals with less work experience may not necessarily feel relative deprivation, since according to career mobility theory (e.g., Alba-Ramírez & Blázquez, 2004; Linsley, 2005; Rubb, 2005), they could gain experience in the meantime, as well as occupational human capital through training, which could help them to progress to a higher level of occupation in which they can make full use of their qualifications. Hence, lower work experience could also act as a buffering variable. Thus, we propose the following:

Hypothesis 5. The effect of overeducation and work of experience will interact to affect job satisfaction.

Method

Design and Sample

The present paper is part of a wider study developed by the Occupation Observatory of Youth (1996–2002), whose general aim is the analysis of the transition process of young people living in the Valencian community and in the metropolitan cities of Barcelona and Madrid (Spain). The sample consisted of young people between the ages of 16 (i.e., minimum legal age to start working in Spain) and 30. In order to obtain a representative sample of all the young people of this region and these cities, the selection was based on a standard and two-stage procedure, with stratification in the first stage.

Allocation was proportional within each of the three subsamples (Valencian community, Madrid, and Barcelona). Stratification within the Valencian
community was based on county and town size. After the proportional allocation within each area, the towns were selected following two criteria: to obtain at least two towns in each stratum, and the minimum number of interviews had to be six for each town. When there were more than two towns in one stratum, we performed a random selection with probabilities proportional to the size of the population sample. In each selected town, the sample units were obtained by the procedure of random routes with sex quotas. After two attempted contacts, non respondents were replaced by a randomly chosen substitute of the same age and gender.

A total of 823 people were interviewed, although 180 of them did not report their levels of education, required education, or salary and were removed from the analyses. The final sample was formed by 643 Spanish employees (303 males, 340 females) from the Valencian community (63.6%), Madrid (14.6%), and Barcelona (21.8%). The participants worked in service companies (70.2%), industry (20.9%), and agricultural activities (2.6%; the remaining 6.3% did not report on this question).

Participants’ ages ranged from 16 to 36, and the mean age of the sample was 23.5 years ($SD = 3.9$), although 95% were below the age of 30. The rest were above this age because they were first interviewed in the broader research in 1996. Concerning their education, 29.1% had finished primary school, 46.1% had completed secondary school, and 24.8% had obtained a university degree.

Trained interviewers administered the survey through structured face-to-face interviews at the participants’ homes. Respondents were asked to report on their latest jobs.

**Variables and Measures**

*Gender* was used as a dummy variable, in which female was the omitted category. *Age* was measured in years.

*Education.* Participants reported their levels of schooling completed, according to the Spanish educational system, on a 12-point scale ranging from 1 to 12. The choices were as follows: *no schooling; primary education; lower secondary education–first stage; lower secondary education–second stage; upper secondary education; intermediate specific vocational training; advanced specific vocational training; some years at university; university diploma/technical engineering or technical architecture; bachelor’s degree; degree in architecture, engineering; master’s degree; and doctor’s degree.*

*Region.* Region was used in the correlation and regression analyses as a dummy variable. Madrid and Barcelona composed the omitted category.
Education mismatch. This variable was obtained from two indicators: (a) the individual’s level of education; and (b) the level of education required by his or her job, both using the same response range (1–12). We assessed the level of education required by the following question: “If an individual would have to perform your job, which level of education would you recommend him or her to possess?” The current worker’s level of education was compared with his or her self-report on the level required to determine whether or not the worker was overeducated.

Overeducation was obtained from an education mismatch. Negative and zero scores were indicative of undereducation ($N = 77$ employees; 12.0%) and education match ($N = 258$; 40.1%), respectively. Positive scores were indicative of overeducation ($N = 308$; 47.9%). As education mismatch proceeds from ordinal variables, to carry out the correlation and regression analyses, we recoded it to two dummy variables: overeducation (where negative and zero scores were the omitted category) and undereducation (where positive and zero scores were the omitted category).

Contract of employment, salary, and work experience. The contract of employment variable was measured as a dummy variable (see Bernhard-Oettel et al., 2005). The omitted category was no permanent contracts of employment, such as temporary training, seasonal, probationary, replacement, specific service, self-employment, and working without contract of employment.

Job earnings in thousands of euros per month were used to assess salary. The work experience variable was measured in years and was calculated by the total number of days of all contracts of employment that the employee has had. We divided this total by 365 to obtain the number of years of work experience.

Job satisfaction. A scale was developed following the dimensions identified by numerous researchers (e.g., Hackman & Oldham, 1975; Locke, 1976; Warr, Cook, & Wall, 1979; Weiss et al., 1967) to measure job satisfaction. This scale was composed of three subscales: extrinsic (6 items; e.g., “salary,” “generous holidays”); intrinsic (7 items; e.g., “task variety,” “job autonomy”); and social satisfaction (5 items), which measures the chance to interact with colleagues, clients, and so forth (e.g., “contact with users, clients”) and also the social prestige associated with the job activity (e.g., “social status”). Participants responded on a 5-point scale ranging from 1 (nothing at all) to 5 (high). Internal consistencies (Cronbach’s $\alpha$s) were .78, .89, and .74, respectively.

Participants received the questionnaires in Spanish. The scales were originally in English (i.e., job satisfaction) and were translated into Spanish and from Spanish into English (using back-translation) by native English and Spanish speakers in order to check for the equivalence of meaning in both languages.
Data Analysis

We first used structural equation modeling (SEM) methods, as implemented by AMOS (Arbuckle & Wothke, 1997), to carry out confirmatory factor analyses to test whether the items of the job satisfaction scale were loaded in two dimensions (i.e., extrinsic and intrinsic) or in three dimensions (i.e., extrinsic, intrinsic, and social), as expected. Maximum likelihood estimation methods were used, and the input for each analysis was the covariance matrix of the items.

The goodness of fit of the models was evaluated using absolute and relative indexes. The absolute goodness-of-fit indexes calculated were: (a) chi-square goodness-of-fit statistic; (b) root mean square error of approximation (RMSEA); (c) goodness-of-fit index (GFI); and (d) adjusted goodness-of-fit index (AGFI). The relative GFIs computed were: (a) normed fit index (NFI); (b) comparative fit index (CFI); and (c) incremental fit index (IFI).

Second, to test the hypotheses, we performed three hierarchical multiple regression analyses; one for each facet of job satisfaction. The regression equation included the independent variables in three successive steps (cf. Jaccard, Turrisi, & Wan, 1990). We introduced (a) gender (dummy variable), age, education, and region (dummy variable) to control their influence on the outcomes; (b) overeducation, undereducation (dummy variables), salary, contract of employment (dummy variable), and work experience as the main variables, while controlling for the previous individual factors; and (c) the two-way interaction terms considering the main variables to test if they had additional significant effects.

Results

Preliminary Results

In order to assess the differences in the main variables associated with regional groups, we performed a MANOVA and chi-square tests. The multivariate analysis was significant, Wilks’s $\Lambda$, $F(5, 636) = 0.04, p < .001$. Additionally, variance analyses were significant for salary, $F(2, 642) = 16.34, p < .001$; work experience, $F(2, 642) = 3.98, p < .05$; intrinsic, $F(2, 642) = 9.53, p < .01$; and social satisfaction, $F(2, 642) = 12.45, p < .001$. Individuals from the Valencian community scored higher in intrinsic and social satisfaction, and also in work experience than did the other two groups. In the case of salary, employees from Madrid reported the highest salaries. The chi-square tests reveal no differences among the regional groups on contract of employ-
ment, $\chi^2(2, N = 643) = 1.10, p = .58$; overeducation (dummy variable), $\chi^2(2, N = 643) = 0.84, p = .66$; and undereducation (dummy variable), $\chi^2(2, N = 643) = 0.52, p = .77$.

From the original variable of educational mismatch (where the positive scores were indicative of overeducation), we found that the sample, on average, was overeducated ($M = 1.20, SD = 2.25$). Table 1 shows the empirical means, standard deviations, alpha coefficients, and zero-order correlations of the study variables.

Participants’ average salary was around 697€ (approx. $999.28 US), and the average work experience duration was almost 3 years. The level of job satisfaction in their different facets was moderately high, always above 3.4. Alpha coefficients showed sufficient internal consistency, since Cronbach’s alpha meets the criterion of .70 (Nunnally, 1978) for the three dimensions of job satisfaction. Overeducation correlated negatively with undereducation, salary, contract of employment, and work experience. In addition, its correlations with the dimensions of job satisfaction were negative. In this vein, undereducation correlated negatively with salary and positively with social satisfaction. Moreover, salary, contract of employment, and work experience correlated positively with the three dimensions of job satisfaction, except for salary, which did not correlate with the social facet of job satisfaction. Finally, dimensions of job satisfaction correlated positively among themselves.

**Confirmatory Factor Analyses**

The SEM analyses show that the indexes obtained for M2 (the three-factor structure of job satisfaction) met the respective criteria better, $\chi^2(133, N = 643) = 461.01, p < .001$ (GFI = .93, AGFI = .91, RMSEA = .06, NFI = .90, CFI = .93, IFI = .93) than those for M1 (the two-factor structure of job satisfaction), $\chi^2(134, N = 643) = 565.86, p < .001$ (GFI = .90, AGFI = .87, RMSEA = .07, NFI = .87, CFI = .90, IFI = .90). Based on modification indexes, the fit of the three-factor model could be slightly improved by allowing one pair of errors to correlate from the Social scale: Item 1 (contact with clients, users) and Item 2 (contact with coworkers), which were similar in content (social relationships). All of the indexes of this model (M2r) met the respective criteria better, $\chi^2(132, N = 643) = 417.74, p < .001$ (GFI = .93, AGFI = .91, RMSEA = .06, NFI = .91, CFI = .94, IFI = .94). The difference between the chi-square statistics associated with the revised model (M2r) and the original model (M2) was statistically significant, $\Delta \chi^2(1) = 43.26, p < .001$. Thus, the confirmatory analysis supports a model of job satisfaction and was divided into extrinsic, intrinsic, and social components (see Figure 1).
Table 1

Means, Internal Consistencies, and Correlations

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<th>Variable</th>
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<td>2. Age</td>
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<td>3. Education</td>
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<td>5. Overeducation</td>
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<td>6. Undereducation</td>
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<td>7. Contract of employment</td>
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<td>8. Salary</td>
<td>696.91</td>
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<td>-.14***</td>
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<td>.26***</td>
<td>-.10**</td>
<td>-.15***</td>
<td>-.08*</td>
<td>.18***</td>
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<td>9. Work experience</td>
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<td>0.38</td>
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<td>.39***</td>
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<tr>
<td>10. Extrinsic satisfaction</td>
<td>3.42</td>
<td>0.69</td>
<td>.78</td>
<td>-.03</td>
<td>.06</td>
<td>.04</td>
<td>.08*</td>
<td>-.19***</td>
<td>.08</td>
<td>.18***</td>
<td>.14***</td>
<td>.18***</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>11. Intrinsic satisfaction</td>
<td>3.53</td>
<td>0.76</td>
<td>.89</td>
<td>-.02</td>
<td>.17***</td>
<td>.07</td>
<td>.16***</td>
<td>-.22***</td>
<td>.05</td>
<td>.16***</td>
<td>.18***</td>
<td>.25***</td>
<td>.59***</td>
<td>—</td>
</tr>
<tr>
<td>12. Social satisfaction</td>
<td>3.63</td>
<td>0.67</td>
<td>.74</td>
<td>.06</td>
<td>.08</td>
<td>.07</td>
<td>.19***</td>
<td>-.15***</td>
<td>.08*</td>
<td>.08*</td>
<td>.06</td>
<td>.11**</td>
<td>.57***</td>
<td>.66***</td>
</tr>
</tbody>
</table>

Note. N = 643.
*p < .05, **p < .01, ***p < .001.
Hypothesis Testing

As Table 2 displays, overeducation was negatively related to the three facets of job satisfaction, while undereducation did not hold any link. Thus, after controlling for gender, age, education, and region, our results confirm Hypothesis 1: Overeducation presented negative relationships with the extrinsic, intrinsic, and social facets of job satisfaction. The weakest link was with social satisfaction, while the strongest was with the extrinsic facet. Contract of employment had positive effects on extrinsic satisfaction; salary was positively associated with extrinsic and intrinsic satisfaction; while work experience displayed a positive relationship with extrinsic and social satisfaction. Thus, Hypothesis 2 was also confirmed, as salary, contract of employment, and work experience were positively related to the facets of job satisfaction, although in a different way.

Figure 1. Confirmatory factor model. The three-factor model of job satisfaction from the best fitting model.
### Summary of Hierarchical Multiple Regression for Variables Predicting Dimensions of Job Satisfaction

<table>
<thead>
<tr>
<th></th>
<th>Extrinsic satisfaction</th>
<th>Intrinsic satisfaction</th>
<th>Social satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$\Delta R^2$</td>
<td>$\Delta F$</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Gender</td>
<td>-.01</td>
<td>.01*</td>
<td>4.21*</td>
</tr>
<tr>
<td>Age</td>
<td>-.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Region</td>
<td>.08*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overeducation</td>
<td>-.25***</td>
<td>.09***</td>
<td>24.93***</td>
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<tr>
<td>Undereducation</td>
<td>.04</td>
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<tr>
<td>Contract of employment</td>
<td>.12**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salary</td>
<td>.08*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience</td>
<td>.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
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<tr>
<td>Overeducation $\times$ Contract of Employment</td>
<td>.06</td>
<td>.01*</td>
<td>4.03*</td>
</tr>
<tr>
<td>Overeducation $\times$ Salary</td>
<td>-.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overeducation $\times$ Work Experience</td>
<td>.13*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undereducation $\times$ Contract of Employment</td>
<td>.03</td>
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<tr>
<td>Undereducation $\times$ Salary</td>
<td>.07</td>
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<td></td>
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<tr>
<td>Undereducation $\times$ Work Experience</td>
<td>.03</td>
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<td></td>
</tr>
<tr>
<td>Multiple $R$</td>
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<td>$R^2$</td>
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<td>Adjusted $R^2$</td>
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</tr>
<tr>
<td>$F$</td>
<td>11.03***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 643. Reported values are standardized regression coefficients.
* $p < .05$. ** $p < .01$. *** $p < .001$. 
To test Hypotheses 3, 4, and 5, we examined the significance of the interaction effects. No interaction effect was found for salary, nor for contract of employment, so Hypotheses 3 and 4 were not confirmed. However, the results in Table 2 display one significant two-way interaction effect (Overeducation × Work Experience) on extrinsic satisfaction. Figure 2 graphically represents this two-way interaction, where values for work experience (chosen 1SD above and below and above the mean) appear in the conditions of no-overeducation/overeducation. So, work experience moderated the relationship between overeducation and extrinsic satisfaction.

The highest level of extrinsic satisfaction appeared in the condition of low work experience and no overeducation (3.45). However, the level of extrinsic satisfaction decreased noticeably and obtained its lowest value (3.01) when individuals displayed overeducation. In the condition of high work experience, the level of extrinsic satisfaction was also higher when employees did not display overeducation (3.39) than when they were overeducated (3.15). As Figure 2 depicts, overeducated individuals felt somewhat more extrinsically satisfied when they had a higher level of work experience than when they had a lower level. Thus, Hypothesis 5 was not confirmed, since higher, rather than lower work experience was that which buffered the negative effect of overeducation on extrinsic satisfaction.

Discussion

The present study aimed to advance the understanding of overeducation, which is a far from negligible phenomenon in the United States and Europe,
particularly in Spain, where many young workers are forced to accept jobs for which the required level of education is lower than that they have attained (Alba-Ramírez & Blázquez, 2004). Moreover, this situation could negatively influence their job attitudes.

This study aimed to analyze the relationships between overeducation and the extrinsic, intrinsic, and social facets of job satisfaction among young Spanish workers. We found that overeducated workers were less satisfied in their jobs for all three facets, which supports the results obtained in previous studies (Hersch, 1991; Johnson & Johnson 2000a, 2000b; Johnson et al., 2002; Tsang et al., 1991), while the undereducation condition seems to have been unrelated to job satisfaction. Moreover, we extended the research on this topic since we clarified these relationships by analyzing the three facets with which an employee may feel more or less satisfied. In this way, we have contributed to a more detailed analysis of job satisfaction than other studies that either considered it as a whole (e.g., Hersch, 1991; Tsang et al., 1991), or as a construct composed of two facets (e.g., Johnson & Johnson, 2000a, 2000b; Johnson et al., 2002), thus underexploring the social aspects of the job. At this point, the results of our study show that overeducation is negatively related to the three job satisfaction facets, but it hampers more extrinsic satisfaction.

Our study findings support relative deprivation theory (Stouffer et al., 1949, as cited in Feldman et al., 2002). The perception of overqualification seems to damage perceptions toward opportunities to feel satisfied within the work setting, with all its different aspects. After several years of study, an individual expects to obtain a qualified job that usually possesses attractive characteristics and reinforcements, good salary, skill utilization, task variety, social prestige, or enriched interpersonal relationships. Thus, when an employee occupies a job that is below his or her expectations (i.e., overqualification), he or she will feel more deprived, and hence less satisfied with extrinsic (e.g., limited career development opportunities, reduced salaries) and intrinsic rewards (e.g., underutilization of one’s own skills; Alba-Ramírez & Blázquez, 2004; Burris, 1983; Feldman et al., 2002; Feldman & Turnley, 1995). Besides, we obtained that the individual is also less satisfied with the social aspects of the job (e.g., lower social prestige, poorer social relationships than expected), evidencing that job activity possesses social significance, as it is a source of social relationships and social prestige (England, 1991; MOW, 1987; Warr, 1987). Moreover, when individuals compare themselves with their referent others (Crosby, 1984) and perceive that others who are either inside or outside the organization obtain more extrinsic, intrinsic, or social benefits than themselves, relative deprivation could appear.

The present study also aimed to analyze the direct and moderating role of salary, contract of employment, and work experience in the relationship
between overeducation and the facets of job satisfaction, thus extending research on the topic. Our findings support previous studies on direct effects (e.g., Agho et al., 1993; Bardasi & Francesconi, 2004; Booth et al., 2002; Gunter & Furnham, 1996; Mwamwenda, 1998; Traut et al., 2000; Witt & Wilson, 1990), since individuals with a higher salary, permanent contract of employment, and greater work experience report higher job satisfaction. However, those factors do not have the same influence on each facet of job satisfaction. Contract of employment and salary are positively related to the extrinsic dimension. In this vein, work experience joined with salary is linked to the intrinsic facet, while the social dimension only seems to be affected by work experience. These findings clearly point out that social facets need to be considered, irrespective of extrinsic ones, when analyzing the antecedents of job satisfaction.

Moreover, the results of the interaction tests display one moderating effect (i.e., buffering effects) and, thanks to the use of a multidimensional measure of job satisfaction, we observed that this protecting effect is only beneficial for the extrinsic facet in this sample. In particular, a higher work experience, rather than a lower one, buffers the negative effect of overeducation on extrinsic satisfaction. These findings are contrary to our expectations and reveal that overqualified youngsters are more extrinsically satisfied in their jobs when they have greater work experience. Therefore, enjoying work benefits (e.g., high salary, permanent contract of employment) and the consequent perception of job security (Parker et al., 2002) has no buffering effects. Only higher work experience protects individuals from the negative effects of overeducation, and only in the case of satisfaction with the extrinsic aspects of the job.

Overeducated individuals with less work experience—in comparison with those with more tenure—feel less satisfied when noticing that they obtain rewards that are lower than they expected, according to their levels of qualification, which, once again supports relative deprivation theory (Stouffer et al., 1949, as cited in Feldman et al., 2002). This is reinforced when we notice that most of the individuals in the sample (85% of total employees) do not prefer a job in which their levels of qualification are higher than the level required for the job. Hence, the condition of overeducation is not normally voluntary in such circumstances. However, it is likely that their job satisfaction would be less reduced if they would consider their present jobs as an important way to gain experience in the meantime, as well as occupation-specific human capital through training, both of which help them to progress to a higher level of occupation in which they will make full use of their qualifications, as expected. Nevertheless, this was not the case, so career mobility theory (e.g., Alba-Ramírez & Blázquez, 2004; Linsley, 2005; Rubb, 2005) was not supported here.
This decreased satisfaction could be a result of the resignation among overeducated employees to their work situations (i.e., overqualified individuals could think that at least they have a job, despite it being below their levels of overeducation, because unemployment is even less satisfying). This resignation is reasonable, if we consider that the present labor market cannot fully absorb the increased supply of qualified workers (e.g., Büchel & Battu, 2003; Büchel & Mertens, 2004), and that youth employment in Spain is relatively high and permanent jobs are relatively scarce because of the work protection for older workers in permanent jobs, among other things. Nevertheless, when overeducated individuals lose their condition of newcomers and gain higher work experience, even though they are resigned to their underqualified jobs, they appreciate the achievement of extrinsic rewards (e.g., salary), since higher satisfaction with the extrinsic aspects of their jobs appears. However, intrinsic and social satisfaction does not seem to be affected by the degree of individuals’ tenure in the labor market.

In summary, the key contributions of the present study to advancing research on overeducation are as follows. First, we used a multidimensional measure of job satisfaction, understood as an affective response, which we divided into extrinsic, intrinsic, and social components and that supported the confirmatory factor analysis. Second, these three dimensional approaches to job satisfaction allowed us to distinguish better which facets of job satisfaction are more affected by overeducation. Finally, we explored the moderating role of salary, contract of employment, and work experience by discovering the buffering effects of higher work experience on the relationship between overeducation and extrinsic job satisfaction.

Study Limitations

Nevertheless, our study has its limitations. Relationships cannot be interpreted causally, as the research design was cross-sectional. Therefore, a longitudinal design or the use of statistical techniques such as propensity scoring and instrumental variables would be recommended. Besides, the magnitude effects of the direct and moderated relationships are not high, so the conclusions are of limited generalizability. We did not test the joint interaction effect of the two or three moderating variables, so it is possible that the present findings could change. Temporary contracts might have different meanings and effects, depending on the volition and employability of the participants (Peiró, García-Montalvo, & Gracia, 2002). Thus, a more refined typology of contracts may be required to understand the effects and the role of this variable better (Silla, Gracia, & Peiró, 2005).
Implications for Practice and Future Research

These results have relevant practical implications for companies, individuals, and society. Companies might not hire workers who are overeducated for job performance since this situation, irrespective of the salary they earn and their contracts of employment, is clearly associated with lower satisfaction with extrinsic, intrinsic, and social aspects of the work setting, which could have potential negative effects (e.g., reduced role and extra-role performance; lower physical and psychological well-being; increased absenteeism or aggressiveness; Spector, 1997). In this vein, an important element that influences an individual to choose a job should be the fact that it matches his or her level of education, despite it possibly offering some immediately less attractive extrinsic rewards, since overeducation is linked with more dissatisfaction at work.

For this reason, when employees with reduced work experience (who are mostly newcomers to the labor market) are forced to occupy an underqualified job unavoidably, they should gain experience in the meantime, as well as occupation-specific human capital through training, both of which help them to progress to higher levels of occupations in which they make full use of their qualifications. Moreover, although maintaining a job for which one is overeducated is related to increased extrinsic satisfaction in the medium term, no link appears with improved satisfaction with the intrinsic and social aspects of the job in the medium term.

Another interesting point is the fact that occupying a job for which one is undereducated is not risky in terms of job satisfaction, according to our results. Finally, society strongly invests in young people’s education, which often does not correspond to the expected benefits in terms of human capital. Hence, policymakers should stimulate active employment actions by promoting the creation of qualified jobs within organizations, hence favoring the possibility of people being able to occupy jobs that actually match their educational levels.

Additional specific questions could be tested in future research, such as which other factors (e.g., work-related values, personal initiative, self-efficacy) could buffer the negative effects of overeducation on the three dimensions of job satisfaction. The search for alternative buffering variables is especially recommended in the case of intrinsic and social facets, as they do not appear to have been moderated in the present study. The role of organizational factors (e.g., organization size) could be tested.

Furthermore, satisfaction with life or work motivation could be involved as potential antecedents of overeducation. It might be that workers who are less satisfied with their lives are more likely to end up in jobs for which they are overeducated, or less motivated workers are more likely to be in jobs for
which they are overeducated. Research could focus on overeducation links with other work-related attitudes, such as job involvement and organizational commitment or extra-role behaviors. We could also explore the effects of low job satisfaction among overeducated workers, where indicators such as job performance, turnover, and job search are considered.

References


