

Alma Mater Studiorum Università di Bologna
Archivio istituzionale della ricerca

Assessing perceived job quality among seasonal tourism workers: The case of Rimini, Italy

This is the final peer-reviewed author's accepted manuscript (postprint) of the following publication:

Published Version:

Giovanni Guidetti, G.P. (2021). Assessing perceived job quality among seasonal tourism workers: The case of Rimini, Italy. *TOURISM ECONOMICS*, 27(8), 1629-1649 [10.1177/1354816620927524].

Availability:

This version is available at: <https://hdl.handle.net/11585/850727> since: 2022-02-01

Published:

DOI: <http://doi.org/10.1177/1354816620927524>

Terms of use:

Some rights reserved. The terms and conditions for the reuse of this version of the manuscript are specified in the publishing policy. For all terms of use and more information see the publisher's website.

This item was downloaded from IRIS Università di Bologna (<https://cris.unibo.it/>).
When citing, please refer to the published version.

(Article begins on next page)

This is the final peer-reviewed accepted manuscript of:

Guidetti, G., Pedrini, G., & Zamparini, L. (2021). Assessing perceived job quality among seasonal tourism workers: The case of Rimini, Italy. *Tourism Economics*, 27(8), 1629-1649.
<https://doi.org/10.1177/1354816620927524>

The final published version is available online at:
<https://doi.org/10.1177/1354816620927524>

Rights / License:

The terms and conditions for the reuse of this version of the manuscript are specified in the publishing policy. For all terms of use and more information see the publisher's website.

This item was downloaded from IRIS Università di Bologna (<https://cris.unibo.it/>)

When citing, please refer to the published version.

Perceived job quality among seasonal tourism workers

1. Introduction

Seasonality of demand is one of the most relevant features in the vast majority of tourism destinations. This issue determines relevant problems to local firms and administrations both in terms of efficient use of available facilities and with respect to the development of local capabilities and stable employment (see among others, Yacoumis, 1980; Krakover, 2000; Baum, 2015). In general, seasonality of demand may generate the development of a local dual labour market. Highly skilled workers tend to be hired with full time contracts and to develop several capabilities during their careers. On the other hand, low-skilled workers are hired with seasonal contracts which normally do not allow them to develop their human capital endowment and hamper their perceived job quality. However, seasonality of demand does not necessarily cause inefficiencies in the labour market if people employed in tourism have other complementary jobs in the off-peak season.

This paper aims at discussing the perceived job quality especially among seasonal workers in the tourism industry through the analysis of a sample of 407 seasonal workers hired in the summer of 2013 in the Province of Rimini. This Province is one of the most popular sun, sand and sea tourism destinations in Europe. The setting up of a job quality index is one of the most original contribution of this paper as it integrates the subjective components (that have constituted the measures normally used in the literature) with a selection of objective items related to skills' endowment and training opportunities and with a set of job holders characteristics, qualifications and occupations. The impact of each component is then evaluated and discussed in the paper by means of several statistical and econometric techniques including ANOVA and cluster analyses as well as OLS regressions. The joint use of these heterogeneous methodologies is another peculiarity of this paper.

The paper is structured as follows. After an outline of the theoretical background on seasonal employment, job satisfaction and on perceived job quality, section 3 describes the survey and the sample and it is followed by the descriptive statistics of results in section 4. Section 5 outlines how the job quality index was constructed; section 6 proposes a discussion of the statistical and econometric results and, finally, section 7 concludes.

2. Theoretical background

Seasonal employment

As strongly conditioned by seasonality, tourism industry is characterized by an extensive recourse to fixed-term contracts that last for some months, and to night and weekend working shifts (Jolliffe and Farnsworth, 2003). This is especially relevant in tourism destinations where arrivals are concentrated

during summer holidays, in some cases within one or two months. This seasonal contractual status determines important consequences on different aspects of employment conditions, on job satisfaction, and on related subjective variables, such as turnover intention, engagement, commitment, and motivation.

On the one hand, seasonal employment is a form of temporary work, which is generally correlated with low job satisfaction, unless this unfavourable condition is compensated with other benefits, in terms of either higher earnings or other dimensions such as work-life balance (Milman, 2003), and to low employee commitment to the task or to the firm (Gallagher and McLean Parks, 2001). The hypothesis of a hedonic market where flexibility is exchanged with other benefits is, however, unlikely to hold if contingent work is the result of a lack of alternative rather than a choice (Green et al., 2010). Moreover, people working in tourism are notoriously required to work for long shifts, at unsocial times and days making hard for tourism employees to attain a suitable work-life balance (Costa et al., 2017). Related issues deal with recruitment, retention (e.g. Gustafson, 2002), and poor training arising from the managers' reluctance to develop workers' skills in case of frequent turnover (Poulston, 2008; Pang et al., 2015). All these aspects can jeopardise service quality and lower productivity through depressing job satisfaction and commitment, eventually endangering organisational performance and threatening quality standards and profitability (Lashley and Best, 2002). Workers' contractual conditions in the tourism sector thus pose risks for the poor quality of these jobs and the impact that this disadvantaged status can have on firms' performances.

On the other hand, seasonal employment has interesting peculiarities. For instance, although seasonal work is characterised by a finite and short duration, employees can find an answer to their need of work-life balance by having long free-time periods during some parts of the year or develop an expectation to be re-hired in the same firm or sector in the next year. If this happens they can be considered as veteran seasonal workers who can leverage on their experience to better reduce work-related stress (Kim, 2014). This would increase their satisfaction and feeling of identification with the organisation and make them more likely to receive training in view of their possible re-hiring (Lautsch, 2002). For all these reasons, despite the relatively scarce attention it has received in the existing literature (Ainsworth and Purss, 2009), seasonal work represents an interesting and peculiar combination between an extreme form of short-term, finite employment and longer-term contractual relations.

Perceived job quality

The assessment of employment outcome can be achieved in a more comprehensive way than just referring to wages or job satisfaction by applying the broader concept of job quality. Job quality can

be defined as the set of “work - and employment related factors that have a positive and direct effect on the worker’s well-being” (Boccuzzo and Giannecchini, 2015, 455) and aims to analyse the quality of working life from a multidimensional perspective stemming from the evidence that people work not only to earn a salary, but also to improve their social and personal life, eventually achieving self-realization and social integration. Although its definition is subject to debate (e.g. Kalleberg, 2011) and an ex-ante direction of the underlying relations between its latent dimensions cannot be assessed because of their correlation (Findlay et al., 2013), job quality is often chosen as a tool to compare different types of jobs and derive the managerial practices to be implemented for improving jobs’ attractiveness.

To analyze job quality in practice, scholars usually restrict the concept to a limited number of dimensions to address specific issues. Typical attributes of the operational notions of job quality include pay and other economic incentives (Caroli et al., 2010), career development opportunities (McGovern et al., 2004), discretion, training and participation skills and effort (Sengupta et al., 2009), job security (Clark, 2005), work intensity (Green, 2007), social conditions of work and work-life balance (Wright and Dwyer, 2006). As a result, there are different measures and indexes of job quality, each linked with the underlying subjective or objective approach adopted to define the concept. Subjective approaches are based on the concept of job satisfaction and are the basis of the analysis carried out in this paper. They rely on the assumption that the subjective experience of workers is central for measuring their well-being and that workers are ultimately entitled to judge job quality (Kalleberg, 2011). They thus consider the perceived job quality by incorporating the experiences of employees and the views they express about their working lives and employment conditions. In this way job satisfaction can be divided into different aspects that compose workers’ perceived job quality such as autonomy, job security, promotion opportunities, pay and non-wage benefits (Ritter and Anker 2002). All these dimensions are of particular importance in the tourism industry as they contribute to minimizing customer complaints and enhancing service quality (Kusluvan et al., 2010).

Young workers

When addressing the issue of perceived job quality among seasonal employees one has to take into account the specificity of young workers as they usually have different work-related values, attitudes, and behaviours than their elder colleagues (Twenge, 2010). The perception of a good job may change from a young student to an old and low educated individual both because of generational issues and because of the changed working, social, and economic conditions (Findlay et al., 2013). To the best of our knowledge, the literature has not sufficiently investigated the topic of job quality within this

segment of workers (Boccuzzo and Giannecchini, 2015) For young workers, the ranking of work-related values can be compelled by their “ambitious and impatient nature” that pushes them to figure out an early career path and rapid pay increases. In this respect, seasonal work in the contemporary hospitality industry raises potential conflicts with work-related preferences, attitudes, and expectations of new generations (Barron et al, 2007). It has also been noticed, however, that new generations enjoy lower occupational opportunities than older workers with a consequent shift towards a higher relevance of work-life balance issues in shaping subjective job quality. As a result, young workers are expected to have a specific set of determinants of job quality as well as a peculiar relationship between job quality and the willingness to keep working in the employing firm (Costanza et al. 2012; Deal et al., 2010). On the one hand, the higher value attributed to work-life balance may decrease the availability of new generations to accept long working shifts, such as the ones that are typically requested in seasonal jobs. On the other hand, new generations may be relatively attracted by the low responsibility usually attached to seasonal positions because it would reduce their stress and allow them to enjoy more life outside work.

Frontline employees

A second issue is related to the high diffusion of frontline jobs in which employees interact directly with customers in the tourism industry. Thanks to the frequent interaction with customers the assignment to such positions can make workers more satisfied if they are also involved with tourism and engaged in delivering quality service and in stimulating customers loyalty. In particular, work engagement that characterise frontline hotel employees positively affects job satisfaction by mediating the effect of tourism involvement on workers’ well-being (Yeh, 2013). Furthermore, frontline jobs in the tourism industry are more likely to attract young graduates of secondary and vocational schools expecting to gain work skills and experience (Pang et al., 2015). As a result, perceptions of good and bad jobs in the tourism industry can vary along the task dimension, such as the assignment to a frontline position, with regard to which the influence of the various job dimensions on workers’ satisfaction is deemed to be rather peculiar (Karatepe and Sokmen, 2006). The dominance of objectively bad jobs within the seasonal employment in the tourism industry thus goes in parallel with the existence of specific categories of job-holders that are fulfilled by their work (Adler and Adler, 2004). Such conditions fit well with the category of “fulfilling bad jobs” (Knox et al., 2015), which can be potentially attached to a significant share of the workforce in the tourism industry. Notably, two distinct categories of workers have been found to be potentially fulfilled by the assignment to frontline positions: locals, and immigrants. Locals may be willingly “trapped in paradise” (Adler and Adler, 2004 p. 68), as frontline positions give them the opportunity to enter into

new social relationships while enjoying the advantages of a small commuting time. Immigrants may view these jobs as the only way to prioritise their family duties whilst also gain enjoyment from their work (Warhurst et al., 2009). Indeed, these workers are characterized by low qualifications and poor employment options and are often constrained by their domestic responsibilities (Knox et al., 2015).

3. The survey

Data come from a self-assessed dedicated survey conducted in the summer of 2013 on a sample of 619 seasonal workers¹, 510 of whom were under 29 years of age, working in the tourism industry of the Province of Rimini; one of the most important Italian tourist destinations, characterized by a high degree of seasonality. In Rimini's province tourism is the first employing sector, accounting for 25.8% of all employees of private enterprises (Chamber of Commerce of Rimini, 2013).

The questionnaire is divided into five sections. The first section deals with the characteristics of the employer. The second section described the selection process, the job occupied and the main characteristics of the employment relationship with the exception of the wage profile. These elements were supplemented by some information on the previous career of the employee. The third section framed the worker in terms of its human capital endowment, training needs and willingness to participate in further training programs. The fourth section was dedicated to the relationship with the employer aimed at capturing the reasons for choice of the worker to be employed as seasonal and the degree of the worker's satisfaction and identification with the firm. This section assessed the worker's ex-ante motivation (31 items), job satisfaction (18 items), and the degree of identification and commitment with the company he works for (19 items). The subjective assessment of working conditions was measured through a 7-pont Likert scale. The three scaled items have reliability coefficients (Cronbach's alpha) equal to 0.90, 0.94, and 0.88 respectively. The coefficient for job satisfaction slightly lowers to 0.935 when the binary response is added in the computation. Finally, the fifth section included personal characteristics of the worker, such as gender, age, residential, nationality, including the level of education and vocational qualification.

4. Descriptive statistics

Table 1 shows descriptive statistics for the restricted sample of 407 individuals for which we have observations for all the variables of interest. Women and young workers aged under 29 represent 57% and 86.9% of the sample respectively². The modal age group is between 18 and 24, which is the

¹ The response rate to the overall questionnaire was equal to 75.7%. To collect the questionnaires, two research assistants were employed.

² These shares are in line with the ones of the whole sample, in which the incidence of females and workers under 29 amounts to 55% and 85%, respectively.

ha formattato: Inglese (Stati Uniti)

ha formattato: Inglese (Stati Uniti)

common age of those university students that look for a seasonal work during summer. Although the majority of the workers are Italian, the share of foreign workers (17%) is higher than the share of foreign population living in the area. Most common employers are hotels (41.7%) and bar & restaurants (30.7%) while the typical jobs are waiters and kitchen assistants. Those classified as frontline jobs comprise 30% of sample, the most common positions being waiters, barman, kitchen assistant, receptionist, and lifeguard. The level of skills required for the observed jobs is either intermediate (60.9%) or low (39.0%) while only a small share of workers has been assigned a task that match with their high school qualification or with their university courses. On the other hand, these jobs usually require the knowledge of foreign languages and computer skills. Consistently, 85% of the sample know at least one foreign language while more than half speak at least two languages while basic computer skills are held by 89,3% of the sample.

Most of the respondents have previously worked with seasonal contracts (75%) with an average experience of 2.7 years, and most of them have already been employed in the tourism industry during the previous year. As a result, we can identify a considerable share of workers enduringly employed as seasonal, a part of which also enjoys a relative stability of the workplace, provided that 37.8% of the sample is also working for the same employer of the previous year. Overall, one third of the sample looks at seasonal work as a possible career perspective, which is a quite high figure and can be explained by the central role of the tourism industry in Rimini. Meanwhile, wages seem to be competitive compared to those offered for non-seasonal jobs. This is in line with the relatively high incidence of workers whose choice is driven by the willingness to get a salary (43% of respondents), and with the high diffusion of overtime work, notably at night. On the contrary, only 7% of respondents considered seasonal employment as a more accessible job opportunity. This suggests that the economic crisis has made it difficult to access this type of employment that once was usually considered as inferior and easily available. Finally, the peculiarity of seasonal work constitutes a pull factor for 22% of respondents, mainly students.

<Table 1>

At a first glance the overall level of job satisfaction is high for a largest share of the sample. 84.7% of the respondents declare themselves somewhat or very satisfied with the work. Job satisfaction clearly correlates with working time intensity and wage. Heavy workload and remuneration are the main factors of dissatisfaction, for the 48% and 24.1% of the sample, respectively. When looking at the single items of job satisfactions, other interesting results come to evidence (Table 2). Respondents are more satisfied with the relationship with colleagues and with the manager and then the work and

the quality of service they deliver. The mean score of the overall job satisfaction is 5.2 out of 7 while the standard deviation 1.56. The area of greatest dissatisfaction instead is attributed to the leisure and to the career opportunities that management and the company offer them, offering interesting insights for companies to improve the working lives of the employees and thus enhance organizational performance.

<Table 2>

5. Job quality index

In building our job quality index we mainly refer to the measures proposed by Green et al. (2010) and Olsen and Kalleberg (2010), based on job satisfaction. Yet, acknowledging that a more comprehensive articulation of the existing dimensions remains analytically under-developed and warrants further investigations (Holman, 2013), we have also decided to integrate the subjective components with a selection of objective items related to skills endowment and training opportunities. Our purpose is to consider also the job-holders characteristics, qualifications and occupations in order to address the interesting case of objectively poor quality jobs, that can be simultaneously assessed subjectively as good. This approach is consistent with “a more nuanced and comprehensive account of job quality that maintains and incorporates the objective and subjective dimensions” (Knox et al., 2015, 1562).

On such basis, we identify five dimensions that have an impact on the worker’s perceived job quality (see table 3). First, we look at remuneration using an indicator of wage satisfaction. Secondly, we consider the employees’ perceptions of employment qualities using an indicator of satisfaction about career opportunities and an additional indicator of satisfaction about job stability. Thirdly, we calculate an indicator of the so-called extrinsic qualities of the job related substantially to three aspects of its skills’ contents: i) skill matching, ii) access to on-the-job training and iii) individual job evaluation resulting from the comparison between the skills required and possessed. Fourthly, an indicator of the intrinsic qualities of the job is calculated taking into account motivation, self-fulfilment, meaningfulness and social support. Finally, an indicator of the evaluation of the work-life balance achieved by these workers is worked out. The value of each dimension is given by an unweighted normalized measure of the sum of different items ranging between 0 and 1.- Accordingly, if the indicator includes both ordinal and binary variables, the ordinal variable is preliminary transformed in a binary one. Once standardized, these scores are aggregated into a single unweighted composite index normally distributed that represents our job quality indicator. In this way, we try to build up a

synthetic measure that incorporates the different dimensions of job quality from a primarily subjective perspective.

<Table 3>

The aggregation of items and dimensions could require weights to be attached to each sub-index and original indicator. In this field, however, there are no universal rules for determining weights while the practices used in previous studies vary. In order not to rely on specific assumptions about the weight to be attached to each element for which there may be less than full agreement, we decided to assign an equal weighting to the sub-indices that make up the overall index of job quality and to the items that compose each sub-index (Munoz de Bustillo et al., 2011). We will then use a weighted index for robustness purposes in Section 6.1.4.

Despite conventional wisdom attaches a negative stigma to seasonal work contracts, descriptive statistics (Table 4) show that jobs are perceived to be relatively good in terms of remuneration (*norm_pay*), stability and career opportunities (*empl_qual*). Some workers may appreciate these jobs because they are “willing and trapped” workers that consider themselves as long-tenured in that apparently precarious position and see potential career opportunities. In such hypothesis, some employers can find it rational to provide seasonal workers with on-the-job training. Possibly for this reason the indicator of extrinsic quality is relatively high, especially if compared with the indicators of both work-life balance and intrinsic job quality.

<Table 4>

When focusing on young workers, results are different. Overall job quality is slightly lower in this group. Notably, *norm_pay*, *extr_qual* and *intr_qual* and *wk_life_bal* are the dimensions in which young workers perceive worse conditions than their older counterparts. For the economic dimension this can indicate that wage dynamics for the new generations of seasonal employees are worse than those for elder workers, like in other fields of the economy. Concerning intrinsic quality, the lower score can be related to a worse match between education and occupation given the higher educational attainment on average of young workers and the objectively poor average quality of seasonal jobs. Moreover, the lower satisfaction with work-life balance is probably related to the high job strain generated by an excess of working hours, which appears to be concentrated among new generations.

ha formattato: Tipo di carattere: Corsivo

<Table 5>

6. Statistical and econometric analysis

The statistical and econometric analysis has been carried out through three stages. First, a one-way ANOVA has been performed to assess the differences in perceived job quality according to respondents' education, occupation and previous work experience. Independent samples t-tests were also used to identify significant distances between the means of the selected variables.

Second, an OLS regression analysis has been used to establish the relationship between the job quality index and the main individual characteristics, notably age, educational attainment, tenure, experience, and occupation³. Since our aim is to analyse the association between job quality and age, on the one hand, and between job quality and the type of occupation, on the other hand, our main explanatory variables are given by the age of the worker, by the frontline occupation, and by job skill requirement. Accordingly, the two dummies attached to frontline jobs (*front_job*) and middle-skilled jobs (*mid_sk*) are separately regressed across three specifications. As robustness test we employ two dependent variables, the job quality aggregate index, and the average of the job quality indexes.

Finally, we divide workers into two clusters identified according to job satisfaction levels. Within each cluster we perform an ANOVA in order to investigate the role played by a set of variables of interest affecting job quality such as occupation, age, skills and part-time.

6.1 Discussion of results

This section will discuss the results obtained in the three phases of the statistical-econometric analysis that were described in the previous section.

6.1.1 Analysis of variance and independent samples t-test

In order to analyse the relationships between personal characteristics and the outcome of the job quality index we first conduct the ANOVA test to discover whether the means of educational and occupational characteristics significantly predict job quality scores, or in other words, whether the means are significantly different. Results show that when considering the overall sample, the only variable that, taken alone, significantly explains part of the job quality's variance is part-time employment (2.9% - See Table A1 in the Appendix).

³ Due to the reduced size of the sample, other possible control variables are excluded in order to increase the efficiency of the estimates.

Then, we perform the *t-test* of the five dimensions of job quality across six potentially discriminant categorical variables: part-time, tenure, high school vocational qualification, medium-skilled jobs, medium-skilled jobs assigned to English speaking workers and front-of-house jobs (Table 6). Years of experience as seasonal workers are omitted as they are never a discriminant factor. Results of the t-test are controlled through Wilcoxon test difference to validate the significance of the difference across groups non-parametrically.

-In line with the analysis of variance, part-time condition is highly discriminant. The quality index of part-timers is significantly higher than those employed full-time due to the significant differences in terms of *norm_pay*, *wk_life_bal* and *intr_qual*. Likewise, tenured workers show significantly higher means than non-tenured workers with regard to two dimensions, remuneration and work-life balance. On the contrary, employment quality is significantly higher for non-tenured workers. Holding a vocational qualification positively discriminates along the scores of *enpl_qual* and is negatively related to *wk_life_bal*. High school graduates holding a vocational diploma are less interested in work-life balance while they are more sensitive to career opportunities and job stability. Finally, having a middle-skill jobs and being a English speaking workers is a significant factor as well as being assigned to a frontline position. In particular, in the case of front-line jobs both cases the discriminating factors are represented by employment quality and intrinsic quality while frontline jobs are also associated with an improvement in work-life balance.

<Table 6>

Despite suffering a lower level of overall job quality, young workers report a higher level of job quality than the overall sample if they are part-timers, English speakers employed in a middle-skilled job, or occupied in a frontline position (Table 7). Other variables only discriminate between single dimensions of the index. Tenure is not significant for the aggregate index, but it is still important for *norm_pay*, *enpl_qual* and *wk_life_bal*. On the other hand, the attainment of vocational qualification differentiates the scores of *extr_qual* and *wk_life_bal* in the same direction of the overall sample. Consistently with our expectations, this result indicates that young workers are slightly more sensitive to work-life balance, such as working time, while they give less importance to job stability and career development attached to their jobs because they are more likely to see seasonal employment just as a temporary solution while finishing their studies or looking for other opportunities. This insight suggests that young workers are attracted by job opportunities where they are not forced to sacrifice their personal lives and interests.

<Table 7>

6.1.2 Linear regression

The second stage of the empirical analysis is a set of regressions aimed at estimating the relationship between perceived job quality and workers' individual characteristics, his/her educational path and previous experience, as well as the main features of the job post.

Table 8 shows the results of the estimate on the overall sample. Part-time is found to be the most important variable influencing perceived job quality: the magnitude of the aggregate index increases on average by around 36% if the worker is a part-timer. Part-time increases the perceived quality of seasonal work; it seems to offset the low stability and the limited training and career opportunities that characterize these jobs. Interestingly, the coefficient for age is at odds with our expectation: the younger the worker the lower the attractiveness of seasonal employment. Besides, the hypothesis that being employed in a frontline job is positively related to job quality is supported in all the specifications, the effect is stronger when the aggregate index is taken into account. On the contrary, skill requirements do not bring any advantage in terms of perceived job quality. Nor English knowledge provides any benefit for workers employed in middle-skilled job. In this specific labour market segment, the job relational content seems thus to count more than task complexity and skill matching. The relationship is even negative for workers having acquired a specific qualification related to the tourism industry in high school. For them, we can assume that the seasonality of their employment has negative consequences on their self-fulfillment and career expectations.

<Table 8>

6.1.3 Cluster analysis

In this section, we depart from a division of workers into two groups defined on the basis of job satisfaction and then we investigate the between-cluster variability of a set of variables of interest i.e. skills, age, part-time, occupation. In this way, we change the perspective and look at the incidence and the intensity of the determinants of perceived job quality in seasonal work after having divided the sample between satisfied and unsatisfied workers. To build up two subsamples of workers, we first performed a Principal Component Analysis on job satisfaction items, which revealed the existence of five components that overall explain 74.8% of the overall variance. Then, after having excluded an outlier, we run a cluster analysis on these components by applying stopping rules based on Caliński-Harabasz pseudo-F and Duda- Hart pseudo-T-squared values. the cluster analysis on these components and Following this procedure, we derived the identified two major clusters to be

used as subsamples⁴: SAT (satisfied workers) and UNSAT (unsatisfied workers). Consistently with the regression results, UNSAT workers are slightly younger, have a better knowledge of foreign languages and more widespread computer skills than SAT ones. The clusterization also confirms the positive role of part-time in discriminating between satisfied and unsatisfied workers. Furthermore, UNSAT workers are characterized by a shorter seasonal experience and tenure than SAT workers. More important for our purposes, frontline employees are concentrated in SAT group whereas those employed in jobs characterized by medium levels of skill requirement are more common in the UNSAT group.

<Table 9>

Then we validate the capability of the cluster analysis to discriminate between different outcomes of the job quality by finding significant difference between the job quality index and the selected clusters. Both the aggregate scores and the means of the single dimensions show higher values for the SAT cluster while the differences are always significant (Table A2 in the Appendix).

Finally, we perform an ANOVA for our explanatory categorical variables within each cluster (Table 10). Results show the partly different factors that affect job quality between the two groups of unsatisfied and satisfied workers. The main finding concerns the divergent impact of education and skills, on the one hand, and of front-of-house positions on job quality index within the two separate clusters. Within SAT occupation play a significant role in influencing job quality, notably the assignment to a frontline position. On the contrary, the skill requirement of the job post does not influence perceived job quality neither alone nor when interacted with the attainment of a vocational qualification. Among UNSAT there is instead no significant positive relationship between frontline jobs and the job quality index, whilst a slightly significant relationship is attached to middle-skilled occupations performed by workers holding a vocational qualification. At last, as a validation of the role of part-time for quality assessment of seasonal work, one observes that part-time is the only item affecting positively the job quality for both SAT and UNSAT.

<Table 10>

This result is consistent with that stream of research that emphasizes the role of the direct interaction with customers in stimulating job quality within the group of satisfied workers (Karatepe and Sokmen, 2006). The within-cluster regressions also reveal the uniform role played by the part-time

⁴ We have carried out a two-steps cluster analysis by applying the stopping rule based on Calinski-Harabasz pseudo-F and Duda-Hart pseudo-T-squared values.

status, which is a driving factor of job quality across the whole sample, thus confirming the role of time flexibility as a driver of seasonal workers' well-being across all the groups. However, the quest for work-life balance is not homogenous across the entire sample, playing a stronger role among UNSAT as the magnitude of the correlation in this group is three times higher than within SAT.

6.1.4 Robustness check

To check the robustness of our results the same exercise is repeated by assigning to the job quality indicator a set of weights obtained by regressing the overall level of job satisfaction on the five dimensions of the index through an ordinal probit model (Boccuzzo and Giannecchini, 2015). The weight of the intrinsic quality dimension is the highest (1.546) followed by the monetary dimension (1.301) while the lowest weight is attached to extrinsic quality (0.474). The aggregated weighted index has a mean of 2.398 and a standard deviation of 0.652 (Table 11).

<Table 11>

Analysis of variance (ANOVA) confirms that job quality is significantly different between part-time and full-time job, and between tenured and non-tenured workers. Table 12 presents the scores of the weighted job quality differentiated by part-time, tenure, vocational qualification, and occupational variables. Tenured and part-time workers are more positive towards their job even when the job quality index is weighted. On the other hand, occupational characteristics are discriminant factors only with regards to the frontline criteria whereas education is not significant as well as the skill requirement of the assigned position.

<Table 12>

Similarly, the regression estimates on the weighted index confirms the sign of most of the coefficients obtained when using the aggregate unweighted index as the dependent variable⁵, and in line with the ANOVA results. In particular, the relationship between frontline jobs and perceived job quality is confirmed to be positive whilst the parameter of the part-time dummy is found to be not significant any more. Among negative coefficients, age is confirmed to negatively co-variate with job quality as well as the interaction between the skill requirement of the job and the attainment of a vocational diploma. All in all, these results confirm that our findings are mainly independent from the decision to assign or not a weight to the components of the job quality index.

⁵ Results are available upon request.

7. Discussion and conclusions

This paper investigates the issue of job quality in seasonal employment in one of the main tourist destination of summer holidays in Europe through a compound index, based on objective and subjective dimensions. This allows us to investigate the relationship between job quality and worker's characteristics and their occupational status. The perception of seasonal work seems thus to be more multifaceted than usually assumed. Although it is intrinsically precarious and characterized by objectively bad jobs under many aspects, such as stability, career opportunities, and skill requirements, workers' perception of job quality is mixed and vary according to both workers' and job's characteristics.

We focused on three relationships that deserve attention in the current research debate. First, we looked at perceived job quality among young workers in order to assess the impact of age on job quality and to identify those dimensions that are mostly valued by this major group of seasonal workers. Our main finding is that perceived job quality is lower as age decreases. This result may be explained by considering that young workers that terminated their educational careers could have more nuanced expectations that are hardly satisfied by seasonal employment. These workers tend to view these seasonal jobs as 'bad' jobs, even more frequently than their older counterparts, whose largest share has a low qualification level and limited employment opportunities. Actually, the fact that young workers are endowed with a good level of transversal skills such as knowledge of foreign languages and basic computer competences may be a source of dissatisfaction with the career path of a seasonal worker.

Secondly, the paper focuses on the assignment to frontline jobs, such as barman and receptionist, as a determinant of perceived job quality. Our findings show that seasonal frontline jobs in the tourism industry fits well with the category of "fulfilling bad jobs" (Knox et al., 2015). Although most seasonal jobs are objectively bad, the subjective experiences of seasonal workers can significantly vary across different positions due to the specific characteristics and preferences of this type of workers. As a result, perceived job quality is positively influenced by the presence of frontline positions, thanks to the direct interaction with the customers, regardless of the required skills. On the contrary, middle skilled positions and skill matching are less relevant in terms of perceived job quality. Combined with the evidence that the attainment of a vocational qualification is positively related to job quality only if middle-skilled positions are singled out, this finding is in line with the existing literature suggesting that frontline jobs in the tourism industry are more likely to attract young graduates of secondary and vocational schools.

Finally, our results confirm previous findings of the literature on this topic by showing that work-life balance has a relatively higher importance than other factors in determining job quality among seasonal workers. The latter usually have time flexibility expectations and other personal duties to accomplish. Particularly, we have found that young workers are more sensitive to flexibility in time management and to the opportunity to enjoy leisure outside work while, differently from older individuals, they do not perceive a significant improvement of their condition from being relatedly employed in the same firm for more seasons. This result suggests that seasonal young workers show peculiar expectations and preferences compared to the rest of the workforce, which usually looks for full-time permanent positions. Consequently, they constitute an increasingly important segment of the workforce that is eager to accept those opportunities, provided by the gig economy, that are usually refused or despised by other segments of the labor supply.

Concerning further research directions, our findings are related to summer seasonal workers in a determined destination. Results should then be tested in one or more winter destinations to check whether workers employed in these contexts, have different educational backgrounds and work-life expectations. Moreover, the analysis could be applied to a larger set of seasonal destinations in different countries. Finally, deeper analysis with larger samples may also prove beneficial in understanding and enhancing human resource management strategies of firms operating in this specific sector and the policies deployed by local and national authorities.

References

- Adler, P., Adler P. (2004). *Paradise laborers*. Ithaca, NY: Cornell University Press.
- Ainsworth S., Purss A. (2009). Same time, next year? Human resource management and seasonal workers. *Personnel Review*, 38 (3), 217-235.
- Baum T. (2015), Human Resources in Tourism. Still waiting for change? A 2015 Reprise, *Tourism management*, 50, pp. 204-212.
- Barron, P., Maxwell, G., Broadbridge, A., Ogden, S., 2007. Careers in hospitality management: Generation Y's experiences and perceptions. *Journal of Hospitality and Tourism Management*, 14 (2), 119–128.
- Boccuzzo G., Giannecchini M. (2015). Measuring Young Graduates' Job Quality Through a Composite Indicator, *Social Indicator Research*, 22, 453–478
- Caroli, E., Gautié, J., Lloyd, C., Lamanthe, A., James, S. (2010). Delivering flexibility: Contrasting patterns in the French and the UK food processing industry. *British Journal of Industrial Relations*, 48(2), 284-309.
- Chamber of Commerce of Rimini (2013). *Distretto del turismo*. Rimini.

Clark, A. E. (2005). Your money or your life: Changing job quality in OECD countries. *British Journal of Industrial Relations*, 43(3), 377-400.

Costanza, D. P., Badger, J. M., Fraser, R. L., Severt, J. B., Gade, P. A. (2012). Generational differences in work-related attitudes: A meta-analysis. *Journal of Business and Psychology*, 27(4), 375-394.

Costa C., Bakas F. E., Breda Z., Durão M., Carvalho I., Caçador S. (2017), Gender, flexibility and the 'ideal tourism worker', *Annals of Tourism Research* 64, 64-75.

Deal J.J., Altman D. G., Rogelberg S.G. (2010). Millennials at work: what we know and what we need to do (if anything), *Journal of Business Psychology*, 25, 191-199

Findlay, P., Kalleberg, A. L., Warhurst, C. (2013). The challenge of job quality. *Human Relations*, 66(4), 441-451..

Gallagher D. G., Mc Lean Parks L. (2001). I pledge thee my throth..contingently. Commitment and the contingent work relationship. *Human Resource Management Review*, 11 (3), 181-208.

Green C., Kler P., Leeves G. (2010). Flexible contract workers in inferior jobs: reappraising the evidence. *British Journal of Industrial Relations*, 48 (3), 605-629.

Green, C. (2007). Are Flexible Contracts Bad for Workers? Evidence from Job Satisfaction Data. Working Paper No. 5102, Lancaster University Management School.

Gustafson, C. (2002). Employee turnover: a study of private clubs in the USA. *International Journal of Contemporary Hospitality Management*, 106-113.

Holman D. (2013). Job types and job quality in Europe. *Human Relations*, 66 (4): 475-502.

Jolliffe L., Farnsworth R. (2003). Seasonality in Tourism Employment. *International Journal of Contemporary Hospitality Management*, 15 (6), 312-316.

Kalleberg, A. (2011). Good Jobs, Bad Jobs. New York, NY: Russell SAGE Foundation.

Karatepe O. M., Sokmen A. (2006). The effects of work role and family role variables on psychological and behavioral outcomes of frontline employees. *Tourism Management*, 27(2): 255-268.

Kim N. (2014), Employee turnover intention among newcomers in the travel industry, *International Journal of Tourism Research*, 16, 65-64.

Knox A., W. C. (2015). More than a feeling: using hotel room attendants to improve understanding of job quality. *The International Journal of Human Resource Management*, 1547-1567.

Krakover S. (2000), Partitioning seasonal Employment in the Hospitality Industry, *Tourism Management*, 21(5), pp. 461-471.

Kusluvan, S., Kusluvan, Z., Ilhan, I., Buyruk, L. (2010). The human dimension: A review of human resources management issues in the tourism and hospitality industry. *Cornell Hospitality Quarterly*, 51(2), 171-214.

Lashley, C. A., Best W. (2002). Employee induction in licensed retail organisations. *International Journal of Contemporary Hospitality Management*, 14 (1), 6-13.

Lautsch, B. (2002). Uncovering and explaining variance in the features and outcomes of contingent work. *Industrial and Labor Relations Review*, 23-43.

McGovern, P., Smeaton, D., Hill, S. (2004). Bad Jobs in Britain: Non-standard Employment and Job Quality. *Work and Occupations*, 31 (2) 225-249.

Milman A. (2003). Hourly employee retention in small and medium attractions: the Central Florida example. *Hospitality Management*, 17-35.

Munoz de Bustillo, R. F.-M. (2011). E pluribus unum? A critical survey of job quality indicators. *Socio-economic review*, 447-476.

Olsen K. M., Kalleberg A. L., Perceived job quality in the United States, Great Britain, Norway and West Germany, 1989–2005. *European Journal of Industrial Relations* 16(3) 221–240

Pang L., Kucusta D., Chan X. (2015). Employee turnover intentions in travel agencies: analysis of controllable and uncontrollable factors. *International Journal of Tourism Research*, 17, 577-590.

Poulston J. (2008). Hospitality workplace problems and poor training: a close relationship. *International Journal of Contemporary Hospitality Management*, 412-427.

Ritter, J. A., & Anker, R. (2002). Good jobs, bad jobs: Workers' evaluations in five countries. *International Labour Review*, 141(4), 331-358.

Sengupta, S., Edwards, P. K., Tsai, C. J. (2009). The good, the bad, and the ordinary: Work identities in “good” and “bad” jobs in the United Kingdom. *Work and Occupations*, 36(1), 26-55..

Twenge, J. M. (2010). A review of the empirical evidence on generational differences in work attitudes." *Journal of Business and Psychology*, 25 (2), 201-210.

Warhurst, C., Hurrell S.A., Nickson, D., Gilbert K., Commander J., Calder I. (2009), Just “mothers really”? Role stretch and low pay amongst female classroom assistants. In S.C. Bolton and M. Houlihan (Eds.) *Work matters* (pp. 180-196), London: Palgrave.

Wright, E. O., Dwyer, R. E. (2003). Patterns of job expansions in the USA: A comparison of the 1960s and 1990s. *Socio-Economic Review*, 1, 289-325.

Yacumis (1980), Tackling Seasonality. The case of Sri Lanka, *International Journal of Tourism Management*, 1(2), pp. 84-98.

Yeh C.M. (2013). Tourism involvement, work engagement and job satisfaction among frontline hotel employees, *Annals of Tourism Research*, 42, 214-239.

Table 1 Descriptive statistics

| | Overall sample | | |
|------------------------------|----------------|-----------|------------|
| Variable | Obs | Mean | Std. Dev. |
| Age | 407 | 23.78 | 7.36 |
| seas_exp | 407 | 2.72 | 1.20 |
| Educ (qualification level) | 407 | 4.74 | 1.45 |
| Identification with the firm | 407 | 3.00 | 1.10 |
| For_languages (number) | 407 | 1.57 | 0.96 |
| Variable | Obs | Frequency | Percentage |
| Male | 407 | 171 | 42% |
| Italian citizen | 407 | 338 | 83% |
| Wage_satisf | 407 | 289 | 71% |
| Job_satisf | 407 | 345 | 85% |
| Hotel | 407 | 170 | 42% |
| Restaurant and bar | 407 | 125 | 31% |
| Retail | 407 | 22 | 5% |
| Same firm previous year | 407 | 154 | 38% |
| Same industry previous year | 407 | 226 | 56% |
| part_time | 407 | 169 | 42% |
| Weekend work | 407 | 400 | 98% |
| Night work | 407 | 133 | 33% |
| Winter_work | 407 | 96 | 24% |
| Computer skills | 407 | 383 | 94% |
| on_train | 407 | 297 | 73% |
| Ed_voc | 407 | 64 | 16% |
| Matched | 407 | 41 | 10% |
| Mid_sk_eng | 407 | 215 | 53% |
| Mid_sk | 407 | 248 | 61% |
| Front_job | 407 | 286 | 30% |

Table 2– Job satisfaction’s items (Min. 1-Max 7)

| Item | Overall sample | | |
|---|----------------|-------|----------|
| | N | Mean | Std.Dev. |
| Colleagues’ contribution | 407 | 4.74 | 1.71 |
| Relationship with my colleagues | 407 | 5.32 | 1.55 |
| Supervisor’s contribution | 407 | 4.95 | 1.69 |
| Relationship with my supervisor | 407 | 5.22 | 1.62 |
| Earnings | 407 | 4.64 | 1.80 |
| Non-economic incentives | 407 | 4.60 | 1.85 |
| Job stability | 407 | 5.11 | 1.51 |
| Working conditions | 407 | 5.08 | 1.48 |
| Career opportunities | 407 | 4.19 | 1.78 |
| Spare time | 407 | 3.77 | 2.06 |
| Challenges I find in the company | 407 | 4.21 | 1.81 |
| Management of the company | 407 | 4.21 | 1.74 |
| Quality of the output | 407 | 5.14 | 1.65 |
| Overall satisfied with my job | 407 | 5.277 | 1.57 |
| Willingness to continue to work for the company for a long time | 407 | 3.97 | 1.87 |
| Willingness to continue to work for the company after the end of the contract | 407 | 4.08 | 2.01 |
| Willingness to work again for the company if I am forced to leave it | 407 | 4.62 | 1.85 |
| Willingness to leave the company | 407 | 2.93 | 1.97 |

Table 3 - Job quality index – Items and indicators

| Dimension | Indicator | Item | Type |
|-------------|-----------------------------------|---|-------------------|
| Pay | Wage Satisfaction | I am satisfied with net wage | Binary |
| | | I am satisfied with economic remuneration | Likert scale |
| Empl_Qual | Development opportunities | I am satisfied with career opportunities | Likert scale |
| | | I do not like this job because of the poor career opportunities | Binary (inverted) |
| Ext_qual | Job Stability | I am satisfied with job stability | Likert scale |
| | Skills’ endowment and development | Skill Matching | Binary |
| | | I do not like this job because of lack of adequate skills | Binary (inverted) |
| | | Access to on-the-job training | Binary |
| Intr_qual | Poor Motivation | I do not like this job because of poor interest | Binary (inverted) |
| | Self-fulfilment | I would love to spend the rest of my career in this company | Likert scale |
| | | Willingness to continue to work for the company for a long time | Likert scale |
| | | Willingness to continue to work for the company after the end of the contract | Likert scale |
| | Meaningfulness | Satisfied with the challenges of this job | Likert scale |
| Wrk_Lif_Bal | Social support | Satisfied with the management of this company | Likert scale |
| | | I do not like this job because of working time/hours | Binary (inverted) |

Table 4 – Job quality index descriptive statistics

| Dimension | Obs | Mean | Std. Dev. | Min | Max |
|-------------|-----|-------|-----------|-------|------|
| norm_pay | 407 | 0.68 | 0.33 | 0 | 1 |
| empl_qual | 407 | 0.66 | 0.21 | 0.095 | 1 |
| extr_qual | 407 | 0.59 | 0.19 | 0 | 1 |
| intr_qual | 407 | 0.46 | 0.16 | 0.071 | 0.95 |
| wk_life_bal | 407 | 0.502 | 0.50 | 0 | 1 |
| aggqual_ind | 407 | 2.89 | 0.71 | 0.98 | 4.62 |

Table 5 – Job quality index descriptive statistics. Young workers (<29)

| Dimension | Obs | Mean | Std. Dev. | Min | Max |
|-------------|-----|------|-----------|------|------|
| norm_pay | 354 | 0.67 | 0.34 | 0 | 1 |
| empl_qual | 354 | 0.67 | 0.20 | 0.10 | 1 |
| extr_qual | 354 | 0.58 | 0.19 | 0 | 1 |
| intr_qual | 354 | 0.45 | 0.16 | 0.07 | 0.83 |
| wk_life_bal | 354 | 0.48 | 0.50 | 0 | 1 |
| aggqual_ind | 354 | 2.85 | 0.71 | 0.98 | 4.45 |

Tab 6 Independent sample t-test between job quality indicators and selected individual and job's characteristics

| | Part-time | | Same firm - previous season (Tenure) | | Vocational qualification | | Mid_sk | | Mid_sk_en | | Front_job | |
|-------------|-----------|---------|--------------------------------------|---------|--------------------------|--------|--------|--------|-----------|---------|-----------|---------|
| | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No |
| norm_pay | 0.670** | 0.587** | .653 | .571 | .637 | .629 | .6201 | .617 | .627 | .6150 | .657 | .605 |
| empl_qual | 0.593 | 0.589 | .548** | .610** | .646* | .590* | .620** | .548** | .628** | .558** | .635** | .573** |
| extr_qual | 0.583 | 0.582 | .590 | .583 | .713** | .559** | .5762 | .586 | .580 | .584 | .558* | .589* |
| intr_qual | 0.425** | 0.367** | .408 | .379 | .427 | .393 | .404 | .363 | .414 | .367 | .435** | .369** |
| wk_life_bal | 0.606** | 0.462** | .584** | .479** | .408** | .541** | .516 | .520 | .540 | .487 | .624** | .481** |
| agg_ind | 2.859** | 2.571** | 2.767** | 2.624** | 2.805 | 2.695 | 2.607 | 2.496 | 2.767** | 2.602** | 2.897** | 2.595** |

* Significant difference level of t-test <0.10 and median are statistically different across groups (Wilcoxon rank-sum test).

** Significant difference level of t-test <0.05 and median are statistically different across groups (Wilcoxon rank-sum test).

Results about the years of experience are omitted as they are always not significant.

Tab 7 Independent sample t-test between job quality indicators and selected individual and job's characteristics among young workers (<29)

| | Part-time | | Same firm in the previous season (Firm_2012) | | Vocational qualification (Ed_voc) | | Middle-skilled job (Mid_sk) | | English knowledge in a middle-skilled jobs (Mid_sk_en) | | Frontline jobs (Front_job) | |
|--------------|-----------|--------|--|--------|-----------------------------------|--------|-----------------------------|-------|--|--------|----------------------------|--------|
| | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No |
| norm_pay | .699** | .602** | .664** | .596** | .629 | .644 | .645 | .636 | .629 | .650 | .687* | .624* |
| empl_qual | .630 | .645 | .604* | .652* | .671 | .631 | .653 | .617 | .655 | .616 | .670 | .626 |
| extr_qual | .587 | .582 | .578 | .592 | .703** | .556** | .577 | .591 | .576 | .589 | .577* | .596* |
| intr_qual | .448** | .399** | .427 | .414 | .434 | .414 | .423 | .407 | .424 | .405 | .557 | .593 |
| wk_life_b al | .602** | .414** | .558** | .451** | .390** | .510** | .507 | .450 | .535 | .424 | .618** | .432** |
| agg_ind | 2.949* | 2.625* | 2.814 | 2.716 | 2.805 | 2.738 | 2.790 | 2.681 | 2.805* | 2.664* | 2.971* | 2.659* |
| | * | * | | | | | | | | | * | * |

*Significant difference level <0.10 and median are statistically different across groups (Wilcoxon rank-sum test).

** Significant difference level <0.05 and median are statistically different across groups (Wilcoxon rank-sum test).

Results about the years of experience are omitted as they are always not significant.

Tab 8 Determinants of job quality. Overall sample. Aggregate index

| | agg_qualind (1) | agg_qualind (2) | aggqual_ind (3) |
|---------------------|-----------------------|-----------------------|-----------------------|
| Seas_exp | -0.0159 (0.0339) | -0.0077 (0.0345) | -0.0199 (0.0340) |
| Italian citizenship | 0.1024 (0.1011) | 0.1796* (0.1013) | 0.0931 (0.1042) |
| Part_time | 0.3550*** (0.0730) | 0.3496*** (0.0743) | 0.3563*** (0.0731) |
| Age | 0.0116** (0.0052) | 0.0105** (0.0053) | 0.0103** (0.0052) |
| Educ | 0.0212 (0.0248) | 0.0245 (0.0254) | 0.0226 (0.0250) |
| Ed_voc | 0.1241 (0.0979) | 0.1133 (0.0997) | 0.2988** (0.1375) |
| For_lang | -0.0509 (0.0391) | -0.0349 (0.0397) | -0.0487 (0.0419) |
| Male | 0.0271 (0.0753) | -0.0114 (0.0801) | -0.0162 (0.0788) |
| Firm_2012 | -0.0150 (0.0828) | -0.0229 (0.0843) | 0.0386 (0.1158) |
| Front_job | 0.2545*** (0.0805) | | 0.3232*** (0.0926) |
| Mid_sk | | 0.0253 (0.0795) | -0.1056 (0.1470) |
| Mid_sk_eng | | | 0.0588 (0.1573) |
| Mid_sk_edvoc | | | -0.4421** (0.1952) |
| _cons | 2.3239*** (0.2118) | 2.3068*** (0.2205) | 2.3894*** (0.2259) |
| N | 407 | 407 | 407 |
| R ² | 0.104 | 0.081 | 0.119 |
| adj. R ² | 0.0811 | 0.0579 | 0.0873 |

Dependent variables are the aggregate index of the scores of the job quality dimensions (agg_qualind) and the average index of the scores of the job quality dimensions (av_qualind). Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Tab 9 -Comparison between SAT and UNSAT subsamples

| Individual Characteristics | UNSAT | SAT | ALL |
|-----------------------------|-----------------|-----------------|-----------------|
| Age | 22.3084 | 24.4346 | 23.8513 |
| Male | 0.4404 | 0.4190 | 0.8232 |
| Italian citizen | 0.8349 | 0.8188 | 0.4249 |
| seas_exp | 2.6306 | 2.7631 | 2.7261 |
| Same firm previous year | 0.3423 | 0.4007 | 0.3844 |
| Same industry previous year | 0.5405 | 0.5610 | 0.5553 |
| For_languages | 1.7207 | 1.5296 | 1.5829 |
| Computer skills | 0.9640 | 0.9333 | 0.9419 |
| Ed_voc | 0.1560 | 0.1608 | 0.1595 |
| Job-related factors | | | |
| Part_time | 0.2703 | 0.4739 | 0.4171 |
| Weekend work | 0.9910 | 0.9789 | 0.9823 |
| Night work | 0.2883 | 0.3519 | 0.3342 |
| Winter_work | 0.2432 | 0.2369 | 0.2387 |
| spec_train | 0.6577 | 0.7631 | 0.7337 |
| Mid_sk_eng | 0.6000 | 0.4894 | 0.5203 |
| Mid-sk | 0.6636 | 0.5739 | 0.5990 |
| Front_job | 0.2727 | 0.3028 | 0.2944 |
| agg_qual_ind | 2.270991 | 3.160871 | 2.912688 |
| N | 111 | 287 | 398 |

Tab 10 Within-cluster analysis of variance (ANOVA) for the main categorical variables

| Independent variables | Dependent variables | | | |
|-----------------------|----------------------|---------------------|--------------------|-------------------|
| | aggqual_ind UNSAT | av_qualind UNSAT | aggqual_ind SAT | av_qualind SAT |
| Part_time | 0.0484** | 0.0483** | 0.0162** | 0.0158** |
| Young | 0.4278 | 0.0167 | 0.6218 | 0.0245 |
| Front_job | 0.0024 | 0.0024 | 0.0151** | 0.0153** |
| Mid_sk | 0.0029 | 0.0026 | 0.0030 | 0.0031 |
| Mid_sk_edvoc | 0.0030* | 0.0295* | 0.0001 | 0.0001 |

* Prob(F) < 0.10, ** Prob(F) < 0.05, *** Prob(F) < 0.01

Table 11 – Weighted job quality index: descriptive statistics

| Dimension | Obs | Weights | Mean | Std. Dev. | Min | Max |
|--------------|-----|---------|------|-----------|------|------|
| norm_pay | 407 | 1.301 | 0.68 | 0.33 | 0 | 1 |
| empl_qual | 407 | 0.5426 | 0.66 | 0.21 | 0.10 | 1 |
| extr_qual | 407 | 0.4740 | 0.59 | 0.19 | 0 | 1 |
| intr_qual | 407 | 1.546 | 0.46 | 0.16 | 0.07 | 0.95 |
| wk_life_bal | 407 | 0.3168 | 0.50 | 0.50 | 0 | 1 |
| Agg_weig_ind | 407 | | 2.40 | 0.65 | 0.70 | 3.95 |

Table 12 – Independent sample t-test between the weighted job quality index: and selected individual and job's characteristics

| | Part-time | | Same firm - previous season (Tenure) | | Vocational qualification (Ed_voc) | | Middle-skilled job (mid_sk) | | Int_sk_en | | Front_job | |
|------------------|-----------|---------|--------------------------------------|--------|-----------------------------------|-------|-----------------------------|-------|-----------|-------|-----------|---------|
| | >3 | 1 | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No |
| agg_w_ind | 2.327** | 2.178** | 2.252* | 2.128* | 2.314 | 2.193 | 2.208 | 2.119 | 2.232 | 2.125 | 2.332** | 2.112** |

*Significant difference level <0.10

** Significant difference level <0.05