

Determinants influencing the success of internships (Praktika)

Keyword: Internships, Determinants, Survey, Germany

Introduction

For several years now German HR managers have been challenged by the demographic change which comes along with skill shortage. More than 51 % of the German enterprises connect the changes of the population with the lack of skilled labor (Statista, Demografischer Wandel, 2012).

Therefore, companies have to deal more intensely with the needs and wishes of their employees and potential applicants as well as they have to communicate their benefits as the employer and the quality of their offers.

In addition to effective HR marketing activities the student internship may be considered a very useful instrument for recruitment and retention of high potentials since interns have the possibility to gain insight into the company, its culture and the reality of professional life. Companies have the opportunity to present and communicate sustainably their employer brand in real life in order to win graduates over and become less exchangeable for them (Scholz, 2011, p. 175).

The utilization of internships in Germany

Internships (German: Praktikum) have the primary purpose to impart knowledge and skills within the framework of a fixed-term assignment (Scholz, pp. 335-336). If internships are considered professional education as defined by article 1 of the German Vocational Training Act (Berufsbildungsgesetz), depends on the type of the internship and the moment in which it is realized. Internships that are done before or after the university studies are deemed vocational training and thus they are subject to social insurance contribution (Adam, pp. 40-41).

Along with the introduction of the bachelor programs the internships become more and more an integral part of the academic curricula (Schamel, 2010, p. 5) and especially the universities

of applied sciences give great importance to practical experience (Adam, p. 11). In many programs the students have to absolve a long mandatory professional internship (German: Hauptpraktikum) which is regulated by the guidelines of the universities. A type of this mandatory internship is the practical semester that lasts 19 – 26 weeks and is a part of the final academic result (Czenkowsky et al., pp. 30-32). For that reason they are not subject to social insurance contribution.

Even if the better part of the German business enterprises and institutions employ interns, there are no nationwide statistics about the numbers of yearly working interns. The German Federal Labor Market Authority only controls the number of interns who are subject to social insurance contribution in Germany. In 1999 the authority counted 32.337 interns and in 2011 the number was already 68.932 (Statista, January 2012). The German institute of labor market and vocation research (Institut für Arbeitsmarkt- und Berufsforschung) estimates that the German organizations employ yearly about 150.000 – 200.000 interns with academic background (Rebien & Spitznagel, 2007).

Students can seize the opportunity to explore the professional world and to gain practical experience. Beyond that, potential employers can be investigated closely and the network building plays an important role (Czenkowsky et al., 2001, pp. 13-14).

The companies which are exercising interns have the possibility to use the internships as an instrument to appraise the aptitude of graduates for job vacancies. Involving executive managers and with the assignment of challenging tasks it could even become a convenient substitution for assessment centers (Schamel, 2010, p. 5-6). Although many business enterprises have a talent relationship management offering retention programs to their students who performed well during their internship (Kolb, 2010, p. 89), there is little literature about this topic.

Thus the labor market is confronted by a very interesting group of young professionals. Employing business enterprises have to respond to the fact that it is not only them to make high demands on their human resources, but that they have to measure up on the employee's challenging expectations.

Developing the Questionnaire - pretest

So far there were no data available for Germany, which identified or tried to identify the criteria/determinants that are important for students in accepting an internship with a company. On international level Crumpacker and Crumpacker (2007) as well as Narayanan and Olk (2010) tried to identify some determinants.

In a pre-test by asking 20 students, 5 professors and 8 HR managers from industry offering internships over 40 possible determinants were identified. The determinants from the above mentioned international researchers were involved.

By a pre-rating (0-10) the 24 highest rated possible determinants were selected for the study.

The determinants identified and tested

After work integration with colleagues
Allowed to do things on your own
Atmosphere in the workplace
Being taken seriously as an intern
Company interesting as future employer
Company willing to accept outside ideas
Deepen your own knowledge
Enrichment through your supervisors
Feedback given by your supervisors
Gain experience
Good insight of the company
Internationality of the company
Internship/Co-op as a challenge
Own knowledge transfer
Possibility to join a retention program
Proper office tools
Recognition through your supervisors
Regular work hours
Responsibility given to you
Salary
Supervised by personal supervisor
Team spirit within your working group
Training on the job
Your own work space

Developing the final paper-based questionnaires

Based on this pretest two paper-based questionnaires were developed and distributed.

The first one was to be answered by the students studying different subjects.

The other one was a very similar form that was to be filled in by enterprise representatives who were asked for their estimation regarding the expectations of the students. The questionnaires were structured as follows:

General questions

- Gender of the proband
- Subject of study (not to be answered by enterprise representatives)
 - Business
 - Business and engineering
 - Engineering
 - IT
 - Natural sciences
- Duration of your work experience (not to be answered by enterprise representatives):
 - Up to 2 weeks
 - 2 – 4 weeks
 - 1 – 3 months
 - 3 – 4 months
 - More than 4 months
- Number of employees of the company
 - 1-10 employees
 - 11-50 employees
 - 51-100 employees
 - 101-500 employees
 - 501-1500 employees
 - 1501-2500 employees
 - More than 2500 employees
- The vocational field of the internship (not to be answered by representatives)
 - Accounting
 - Consulting
 - HR
 - IT
 - Legal department
 - Logistics
 - Marketing
 - Mergers & Acquisitions
 - Production
 - Research & development
 - Sales
 - Other
- Sector of the company
 - Health industry
 - ICT
 - Tourism & Entertainment
 - Finance & insurances
 - Energy industry
 - Food industry

- Transport/Traffic
- Machine building industry
- Automotive industry
- Consulting
- Pharmaceutical / Chemical industry
- Others
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After that the probands were given the 24 determinants (see above) and were asked to rate the importance of the several aspects/determinants for themselves by choosing an internship.

They were also asked to evaluate the fulfillment through the company during their own internship (Praktikum) with regard to these aspects/determinants.

Giving points from 0 up to 10. Zero points meant not important or not fulfilled whereas ten points corresponded to high importance or complete fulfillment.

Characteristics of the sample

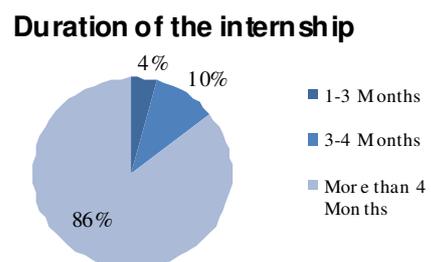
To achieve significant results we asked 248 students of different study programs. Amongst the probands were 154 male and 94 female former interns. Most of the students were enrolled in business study programs (136) and 58 probands studied business with engineering. In addition, we have received answers from 30 prospective engineers, 24 future natural scientists and IT-students.

The notable difference between male and female participation results from the student body's structure of the engineering programs which attract more male students.

Analyzing the data – First results

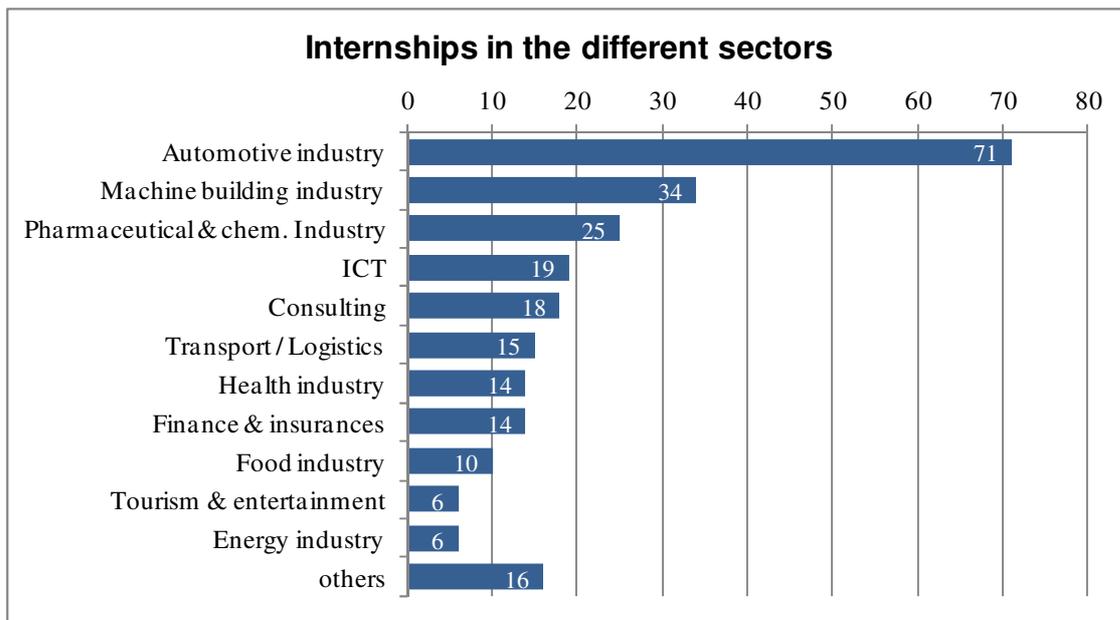
The data available were analyzed by an Excel-based software “Askalyze” developed by the author and programmed by B. Holfeld.

First results show that amongst the students was nobody who had not yet absolved an internship of at least 1 month. Only ten students described their experiences with regard to internships of 1 – 3 months and 25 participants enjoyed a work experience of 3 – 4 months. The greater part of 213 students/probands work for at least 4 months



as an intern.

More than a quarter of the respondents worked with a company of the automotive industry and another 13,7 percent realized an internship in the machine building industry. About a tenth of students chose the pharmaceutical and chemical industry for this work experience.



The vocational fields with the most participants are marketing (45 interns), research & development (40 interns) and controlling (30 interns).

In addition, 29 enterprise representatives filled in the questionnaire in order to facilitate the comparison between the companies' assumptions about the students' expectations and the real answers from the student body.

The applied statistical and empirical methods

The internship success factors that are listed below were to be evaluated with regard to their importance and the fulfillment during the internship. The probands had to give between 0 (not important/not fulfilled) and 10 points (very important/meets completely the expectations). Often such a scale can be interpreted as an ordinal scale, but in this case we can assume that the semantic intervals between the values were considered equal (Altobelli, 2007, p. 173). This allows the use of arithmetic means, variances as well as t-Tests and F-tests. As we compared different groups of probands, we used the two-tailed t-Test in Excel.

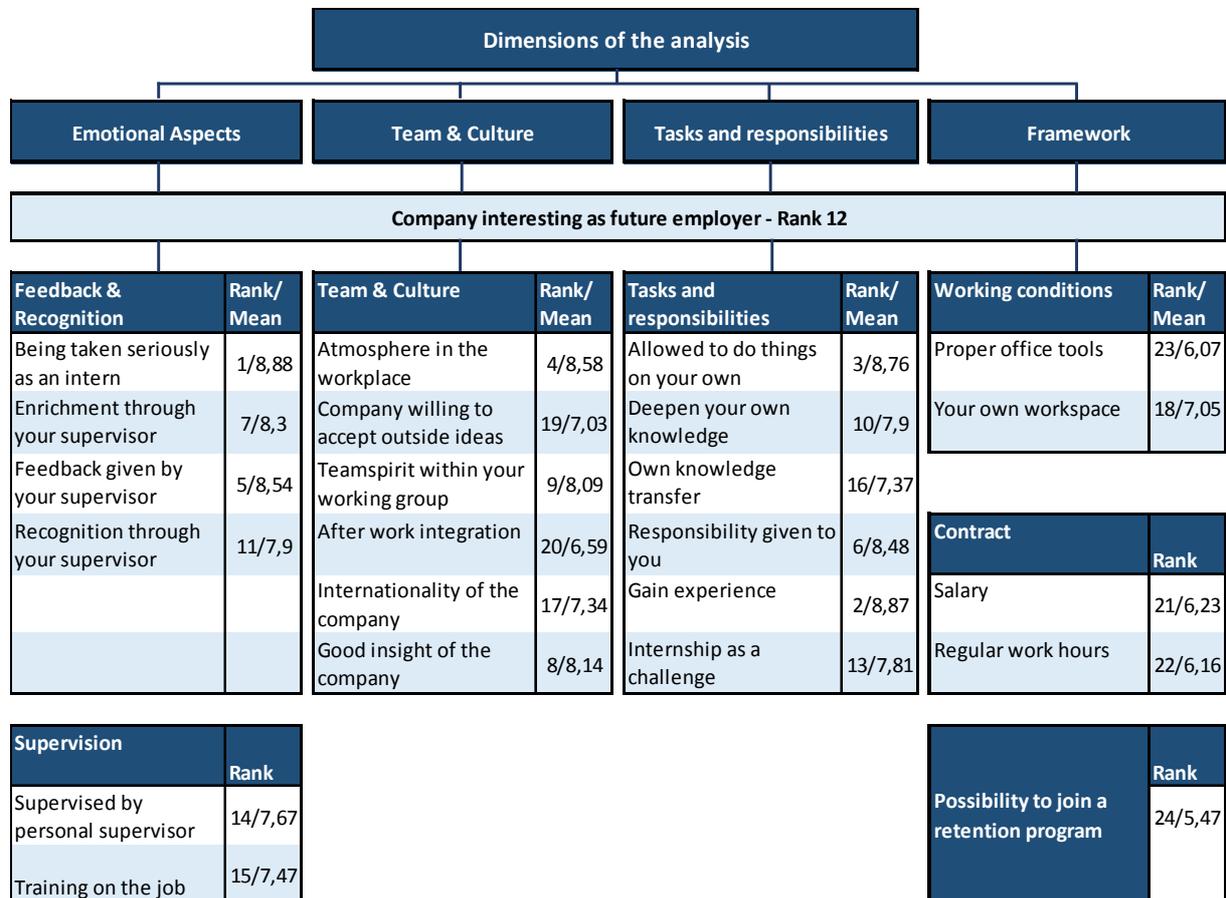
Ranking the determinants

As a first analytical step a simple ranking of the factors of internship success can show which are the most important aspects/determinants for an intern. The table below demonstrates that the emotional aspects and the quality of the tasks play a very critical role whereas the general framework of working hours and salary seem to be less decisive.

Rank	Determinants	Importance overall	Importance male students	Importance female students	Rank (male)	Rank (Females)
1	Being taken seriously as an intern	8,88	8,86	8,91	1	4
2	Gain experience	8,87	8,67	9,20	2	1
3	Allowed to do things on your own	8,76	8,60	9,00	3	2
4	Atmosphere in the workplace	8,58	8,34	8,96	6	3
5	Feedback given by your supervisors	8,54	8,41	8,73	5	5
6	Responsibility given to you	8,48	8,52	8,41	4	7
7	Enrichment through your supervisors	8,30	8,28	8,34	7	8
8	Good insight of the company	8,14	8,12	8,16	8	11
9	Team spirit within your working group	8,09	7,83	8,50	11	6
10	Deepen your own knowledge	7,90	7,70	8,21	13	9
11	Recognition through your supervisors	7,90	7,85	7,98	10	12
12	Company interesting as future employer	7,84	7,99	7,60	9	17
13	Internship/Co-op as a challenge	7,81	7,80	7,83	12	14
14	Supervised by personal supervisor	7,67	7,36	8,16	14	10
15	Training on the job	7,47	7,25	7,83	15	15
16	Own knowledge transfer	7,37	7,01	7,93	17	13
17	Internationality of the company	7,34	7,15	7,63	16	16
18	Your own work space	7,05	6,87	7,34	18	18
19	Company willing to accept outside ideas	7,03	6,86	7,30	19	19
20	After work integration with colleagues	6,59	6,26	7,11	20	20
21	Salary	6,23	6,12	6,40	21	22
22	Regular work hours	6,16	5,57	7,11	23	21
23	Proper office tools	6,07	5,91	6,33	22	23
24	Possibility to join a retention program	5,47	5,41	5,57	24	24
	Average	7,61				

Structure of the determinants that may influence an internship success

For our analysis we have divided the different aspects/determinants that seem to influence the success of internships for students in four groups. The macro factors are emotional aspects, the company culture, content of tasks and framework. This division is not only a logical differentiation, but also considers the extent to which both the company and the single departments can influence the intern's satisfaction. The framework of an internship can be modified easily whereas the emotional aspects and the company culture cannot be changed within a narrow timeframe. The intern's job enrichment depends very often on the department and supervisor who actually give the tasks to the student. The scheme shows not only the structure, but also the ranks and means of all the 24 factors.



Conclusion

The first results of the big study show that students (here from German universities) select their intern on the basis of many determinants.

We found that male and female students rated in the top 9 the same determinants that are important for them choosing an internship in a company. The ranks, however, differ slightly.

Female students have the tendency (statistically proven) to weight the importance of the parameters higher than male students. This result might be important for employers when they offer interns for female students.

We also tried to group the different determinants as a first analytical tool for companies how to structure their internship offers to students.

All in all provides the data base of the study a big chance of data mining and correlating different general questions with the different determinants. Much more data mining has to be done and is on progress (see below).

Outlook

More data of the study will be presented at the conference. Life data mining with a research software will be shown.

Several publications of data of this study will follow.

The authors of this study and other researchers intend to roll-out this study in different countries world-wide.

By the existing structure of the questionnaire input of data by using the already existing website for the study is easy and fast.

The data that can be mined, compared and published by researchers between countries, subjects studied are enormous.

Therefore the organizing committee is asked to open a follow up discussion after this presentation for interested researcher to join this study and to make a roll-out possible.

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