THE IMPACT OF PROVIDING FEEDBACK TO STUDENTS AS FUTURE PROFESSIONALS ON THEIR PROFESSIONAL CALLING

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Abstract
Researchers express ideas about the relationship between feedback provided during the studies and students’ professional calling and raise hypotheses about the impact of certain elements of feedback on some aspects of professional calling, however, empirical evidence of the impact of feedback on students’ professional calling is still lacking. The article raises the problematic question: “What is the impact of providing feedback to students as future professionals on their professional calling?” The accomplished quasi-experiment and post-experimental testing of 110 students of the social pedagogy study programme has revealed that providing feedback to students as future professionals during their studies has an impact on their professional calling.

Keywords: professional calling, professional self-awareness, feedback, higher education.

Introduction
Practical relevance of the research on professional calling. Although today there is no common agreement on the united concept of calling (Duffy, Alan, & Bot, 2012), there are no comprehensive interpretations of origins and development of calling (Praskova, Hood, & Creed, 2014; Duffy, Allan, & Bott, 2012; Wrzesniewski, 2012), it is usually interpreted as a relationship between individual and his professional occupation, which is expressed through inner human experiences, attitudes, abilities and motives (Dobrow & Tosti-Kharas, 2011; Steger & Pickering, Shin & Dik, 2010).

Recently, the importance of professional calling is especially emphasised (Praskova et al., 2014; Danilevičius, 2013; Hagmaier & Abele, 2012; Hirschi, 2012), since it is stated that those employed people who have a calling perform their duties more diligently, see the meaning in their work, feel the inner satisfaction with their work, defend the prestige of their profession and seek to improve their professional skills. Moreover, it is asserted that such people have a greater desire to use their professional activities to contribute to the welfare of other people and the whole community (Steger et al., 2010). More importantly, to work as a pedagogue without a calling is considered to be unethical in respect of yourself and others (Jovaiša, 1994, p. 47).
Calling is an evolving construct, it is not suddenly and fully disclosed (Wrzesniewski, 2012; Hunter, Dik, & Banning, 2010), and, therefore, it is not by accident indicated in the scientific literature that it is important to develop professional calling of people, especially – of the young ones (Hagmaier & Abele, 2012; Hirschi, 2012; Dobrow & Tosti-Kharas, 2011; Duffy, Allan & Dik, 2011; Danilevičius, 2013). The role of a higher school in the development of students’ professional calling is also highlighted (Praskova et al., 2014; Danilevičius, 2013).

Studies suggest that students’ professional calling is related to satisfaction with one’s life and psychological adaptation (Steger et al., 2010); it is related to satisfaction with academic and chosen career (Duffy et al., 2011; Saveljeva, Petružienė, & Braslauskienė, 2011; Duffy & Sedlacek, 2007); it is related to professional self-clarity (Duffy, Sedlacek, 2007), clearer career vision (Dobrow & Tosti-Kharas, 2011; Duffy & Sedlacek, 2007) and more positive attitudes towards career (Steger et al., 2010). Meanwhile, the studies on professional calling of higher school students reveal that only about half or less students have a calling for their chosen profession and it depends on the country and on the study programme (Danilevičius, 2013; Saveljeva et al., 2011; Duffy & Sedlacek, 2010).

The provided arguments motivate the practical significance of the development of students’ professional calling.

The extent of the research on professional calling. Researchers who are concerned with the concept of the development of professional calling have already revealed a number of regularities, tendencies and aspects of the development of students’ professional calling. It has been identified that during the development of professional calling it is appropriate to acquaint students with the concept of calling and the factors influencing it (Praskova et al., 2015; Hirschi, Herman, 2013; Duffy & Sedlacek, 2010; Kavaliauskiene, 2001). In addition, it is stated that it is important to provide students with opportunities to assess their own calling for the chosen profession (Dik et al., 2009), to assist them in clarifying and improving their professional interests, values and abilities (Hirschi & Herrmann, 2012; Duffy & Sedlacek, 2010), to help them in identifying their career goals and in achieving them (Praskova et al., 2014; Duffy & Dik, 2013). It is noted that in the course of the development of professional calling those activities are important during which a person can focus his attention to himself, such as: introspection, self-reflection, self-analysis (Wrzesniewski, 2012), as well as social support from parents, career counsellors, pedagogues or friends (French & Domene, 2010). Roberts and Creary (2012) point out that on the basis of social learning theory (Bandura, 1977) it can be assumed that calling can be developed by observing and imitating parents’ or other persons’ behaviour, by motivating to acquire and develop positive identities.

The research problem. As it was already mentioned, within the concept of the development of professional calling there are ideas about other people’s influence on the development of professional calling (French & Domene, 2010; Roberts & Creary, 2012). On the other hand, within the framework of the concept of studying at a higher education institution much attention is paid to providing feedback to students during their studies, especially highlighting the importance of providing such information on different aspects of students’ personality development and students’ academic and other behaviour (Sargeant, McNaughton, Mercer, Murphy, Sullivan, & Bruce, 2011; Ramaligela, 2014; Bearman, Hodgson, Bearman, & Schneider-Kolskye, 2012; Zang & Cheng, 2011, etc.). With reference to these facts, it is likely that there is a relation between providing feedback to students as future professionals and students’ professional calling.
However, there is a lack of empirical evidence that would determine the impact of providing feedback to students as future professionals on their professional calling. It is therefore purposeful to accomplish empirical research in order to answer the question: “What is the impact of providing feedback to students as future professionals on their professional calling?”

**Literature Review**

_Providing feedback to students._ Feedback can be defined as “all feedback exchanges generated within assessment design, occurring within and beyond the immediate learning context, being overt or covert (actively and/or passively sought and/or received), and importantly drawing from a range of sources” (King, 2013, p. 71). Hattie and Timperley (2007) conceptualize feedback as information provided by an agent (e.g., teacher, peer, book, parent, self, experience) regarding aspects of one’s performance or understanding. A teacher or a parent can provide corrective information, a peer can provide an alternative strategy, a book can provide information to clarify ideas, a parent can provide encouragement, and a learner can look up the answer to evaluate the correctness of a response. Feedback thus is a “consequence” of performance.

By disclosing the importance of providing feedback to people the researchers note a relation of feedback to some aspects of the development of professional career that in one way or another are related to professional calling. For instance, it has been found out that feedback is important for the development of professional identity (Bearman et al., 2012); it helps people to raise goals for their professional development and to realise them (Atwater, Brett, & Charles, 2007; Hodgetts, Luthans, & Slocum, 1999). Meanwhile, researches accomplished in higher education institutions reveal crucial benefit of feedback to learning and students’ personal development (Sargeant et al., 2011). Exceptionally noted is the benefit of providing feedback to students after their practical tasks (particularly the benefit of simulations of professional activities, role play, microteaching) (e.g., Ramaligela, 2014; Bearman et al., 2012; Zang & Cheng, 2011; Grossmann & McDonald, 2008).

During the studies in a higher education institution, potential providers of feedback are peers, teachers, practice coordinators and other pedagogues with whom students encounter during their studies. Studies reveal that all these providers in some way or another contribute to students’ learning and personal development. For instance, Amobi’s (2005) studies suggest that feedback from peers increases active reflection of future elementary school teachers and the reflection of microteaching experience helps the future teachers to change their self-awareness and training behaviour. As it is proposed by Litvack, Mishna, & Bogo (2010), practice coordinators who base their communication on the “strength perspective” encourage students to identify their strengths and to rely on them, they also encourage students to choose their profession reasonably (Litvack et al., 2010). The research by Bagdonaitė-Stelmokienė and Žydžiūnaitė (2015) reveals that students’ personal and professional development is influenced by students’ relationship with practice coordinators. Hadar and Brody (2016), after accomplishing a qualitative study of pedagogues and students, state that if feedback from pedagogues is in the form of a dialogue, it leads to the development of students’ professional self-awareness, encourages them to analyse their learning process and their role in it, forms new understanding of a learning practice. Similar conclusions are made by Beaumont, O’Doherty, and Shannon (2011) who have identified that students perceived quality feedback when it does not only produce a summative judgment of their work; instead it produces dialogue that
stimulates students’ improvement. Some studies reveal the benefit of feedback by peers to the learning process. The study by Havnes, Smith, Dysthe, and Ludvigsen (2012) has found that feedback without grades is not frequent, and evidence shows that students prefer to be assessed by peer assessment and feedback instead of marks; Nicol, Thomson, and Breslin (2014) also state that a peer review of feedback brings benefits for students’ learning, for evaluation and for regulation of their own and peers’ work, being reflective learners through the evaluative judgment.

The mentioned facts form the basis to view feedback provided by people involved in the studies as a factor for many positive changes in students’ personalities and enables to raise hypothesis about the impact of feedback on the development of students’ professional calling.

Theoretical basis for the development of students’ professional calling by providing feedback. In search for the theoretical basis for the development of students’ professional calling by providing feedback it is appropriate to rely on objective self-awareness theory (Silvia & Duval, 2001; Silvia & Phillips, 2013). This theory explains that people can focus their attention to themselves any time. Focusing attention to yourself leads to self-assessment in accordance with standards which may be different, often unclear, perfectionistic, inaccessible and inconsistent (Phillips & Silvia, 2005, p. 703). Silva and Duval (2001, p. 233) argue that if people who focus their attention to themselves find discrepancies with the standard, they may look for reasons of such discrepancies and seek to reduce them. If the discrepancy can be reduced, people will attribute failure to themselves and will seek to change their behavioral performance and themselves. If the discrepancy cannot be reduced, people will attribute failure to external causes, such as standards or another person. This will encourage people to avoid or escape self-awareness and reminders about the discrepancies between one’s self and standards. Thus, depending on this to whom the person ascribes the reasons of discrepancy – to himself or standards – determines what action a person will take in order to reduce this discrepancy.

The application of this theory in order to understand the development of professional calling by providing feedback helps to see the relationship between providing feedback to students about their professional calling and the change in their professional calling afresh. It is likely that providing feedback to students about their professional calling helps them to focus their attention to themselves and to see their professional calling with new eyes. In the information received from other people (peers, teachers, practice coordinators, other pedagogues) about their professional calling students perceive certain standards of professional calling and “inside them” compare themselves according to those standards. Although those standards can be very different, unclear, inconsistent, perfectionistic and even inaccessible, they motivate to search for these standards and for discrepancies between the perception of professional calling, to understand the reasons for these discrepancies and to remove them. At the same time, by removing the reasons for the discrepancies one can become more aware of his professional calling and even enhance it.

Methodology

Design. In order to achieve the purpose of the research, the quasi-experiment with the non-equivalent comparison group design with no pretest has been carried out (Green, Camilli, & Elmore, 2006; Wiersma & Jurs, 2009). Essential features of such quasi-experiment: *research is conducted in two non-randomly formed groups (experimental and control); *the manipulation with the independent variable takes place only in the experimental group; *no primary, pre-experimental measurement is carried out neither in the experimental, nor in the
control group; *the final measurement is carried out in the experimental and control groups after performing the manipulation with the independent variable in the experimental group. A group is considered to be inequivalent if the assignment of respondents to this group is not random (Rupšienė & Rutkienė, 2015); since during this quasi-experiment the assignment to a control group was not random, this group is considered to be inequivalent.

The quasi-experimental programme was implemented in the experimental group of Klaipėda University students in 2009-2014. The control group consisted of students from three Lithuanian universities (Lithuanian University of Educational Sciences, Šiauliai University and Kaunas University of Technology). The final measurement was carried out in the control and experimental groups in May-June, 2014.

Sample. Students studying social pedagogy at Lithuanian universities have been selected as the population of the quasi-experiment. In compiling the sample a few rules have been followed: *the sample of the research has been purposely comprised of only full-time student population; *only senior students (3rd year and 4th year students) have been chosen for the final measurement; *in choosing the experimental and control groups, the requirement (Kardelis, 2007) that the minimum number of cases in the control and experimental group should not be less than 30 has been taken into account; *after selecting a control group in a convenient way, the conditions have been set up so that all students of this groups could participate in the final measurement. Finally, a total of 110 students participated in the experimental and control groups: in the EG – 31 student, in the CG – 79 students.

The quasi-experimental programme. In the course of creating the quasi-experimental programme, it has been referred to the ideas about providing feedback to students, that had been previously identified in the theoretical analysis, that describe that in the development of professional calling during the studies of the social pedagogy study programme feedback can be provided to a student by other student, teacher, practice coordinator and by other pedagogue. Such information is particularly valuable if it is given after practical tasks and during professional practice. Therefore, participants of the experimental group during their studies were able to get feedback on their inclinations and their suitability for the profession of a social pedagogue: 1. Such information was provided by peers, teachers and other pedagogues during practical exercises after holding class meetings in simulated and real environments; 2. Such information was provided by practice coordinators during the practice.

The programme was implemented by one of the authors of the present article (Regina Saveljeva) in her taught subjects and guided practical activities and during students’ professional practice. Feedback was provided to students in accordance with the general ethical principles immediately after the tasks were completed; it was directly related to the purposes of the task and student’s exhibited behaviour during the task. Students were prior introduced to the course of the provision of feedback, i.e. the purpose and nature of information provision have been identified, etc. The quasi-experiment was performed in compliance with the principle of voluntarity – students were not forced to provide and receive feedback.

The instrument. The post-experimental measuring instrument was developed by Regina Saveljeva, one of the authors of the present article, referring to the essential features of providing feedback to students as future professionals, that had been identified during the theoretical analysis, and specifics of the work as a social pedagogue in general education school. The instrument variables were grouped into two groups: providing feedback during practical activities, and providing feedback during the professional practice.

Using these variables, two scales have been constructed: the nominal scale and the ordinal scale. The first (nominal) scale was designed to determine the differences of providing
feedback to EG and CG students as future professionals. In questionnaire respondents were asked to tick Yes if they were engaged in the listed professional activities and No – if they were not. Another (ordinal) scale was more related to the purpose of the research – it was designed to determine students’ opinion about the educational impact of providing feedback on their professional calling. In the questionnaire respondents were asked to evaluate this impact in a 7-point scale (1 – weak impact on the development of professional calling, 7 – strong impact on the development of professional calling).

Assessing the reliability of the nominal scale, it has been found that the coefficient of Cronbach’s alpha is 0.903, the coefficient of subscales – 0.905 and 0.855. Assessing the reliability of the ordinal scale, it has been found that the coefficient of Cronbach’s alpha is 0.903, while the coefficient of subscales – 0.932 and 0.890. It is estimated that, if one variable from any subscales had been removed, it would have slightly increased the coefficients of Cronbach’s alpha. Moreover, there was no variable that would have its resolution r/itt smaller than 0.2. Considering the above mentioned facts, it can be stated that both scales and all subscales are characterised by an internal coherence and are suitable means for measurement.

Methods of data analysis. First of all, several derivative variables have been designed:
1. The derivative variable of the scale of providing feedback to students as future professionals.
2. The derivative variable of the first subscale (providing feedback during practical activities) of this scale.
3. The derivative variable of the second subscale (providing feedback during professional practice) of this scale.
4. The derivative variable of the scale of evaluation of an impact of providing feedback to students as future professionals on their professional calling.
5. The derivative variable of the first subscale (the impact of providing feedback during practical activities on professional calling) of this scale.
6. The derivative variable of the second subscale (the impact of providing feedback during professional practice on professional calling) of this scale.

Since it was intended to compare the differences between EG and CG, statistical assumptions have been examined in order to choose the methodology for calculation of differences. Kolmogorov-Smirnov criterion has been used to test the normality of distributions. Since in all cases, the assumption of normality of derivative and primary variables had been violated (p < α = 0.05), Mann-Whitney U test has been used to determinate differences in the derivative variables of two groups. In addition, the Chi-square test was calculated in those cases when searching for differences between EG and CG by comparing the primary data of nominal scale variables, while the Mann-Whitney U test was calculated by comparing the primary data of ordinal scale variables.

Results
Providing feedback to students as future professionals in the experimental and control groups. The analysis of differences in providing feedback to students as future professionals has revealed statistically significant differences (Mann-Whitney U=286,500, p=0.000): mean rank of EG students is in 85,76 higher than CG students (mean rank – 43,63). Consequently, in general more feedback has been provided to EG students as future professionals.

The analysis of differences in providing feedback during practical activities has revealed statistically significant differences (Mann-Whitney U=154,500, p=0.000): mean rank of EG students is in 90,02 higher than CG students (mean rank – 41,96). Consequently, during practical activities more feedback has been provided to EG students than to CG students.
It has been found out that the majority of EG students and much less CG students had held class meetings in simulated environment and in real environment, after holding class meetings in simulated environment had received teacher’s and students’ of their group feedback about their inclination and suitability to work as social pedagogues, as well as after holding class meetings in a real environment received students’ of their group and pedagogues’ of the institution in which they had held class meetings feedback about their inclination and suitability to work as social pedagogues, and they themselves had provided feedback to students of their group about their inclination and suitability to work as social pedagogues (Table 1). Only slightly more than half of EG students (54,8%) and a small part of CG students (8,9%) had received their teachers’ feedback about their inclination and suitability to work as social pedagogues.

Table 1. Providing feedback during practical activities in the experimental and control groups (N=110)

<table>
<thead>
<tr>
<th>Variables</th>
<th>CG</th>
<th>EG</th>
<th>Chi-square test</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have held class meetings in simulated environment</td>
<td>25.3%</td>
<td>96.8%</td>
<td>(\chi^2=45.852, df=1, p=0.000)</td>
</tr>
<tr>
<td>After holding class meetings (in simulated environment) a teacher has provided feedback about my inclination and suitability to work as a social pedagogue</td>
<td>16.5%</td>
<td>90.3%</td>
<td>(\chi^2=51.957, df=1, p=0.000)</td>
</tr>
<tr>
<td>After holding class meetings (in simulated environment) students of my group have provided feedback about my inclination and suitability to work as a social pedagogue</td>
<td>20.3%</td>
<td>80.6%</td>
<td>(\chi^2=34.730, df=1, p=0.000)</td>
</tr>
<tr>
<td>After holding class meetings (in simulated environment) I have provided feedback about students’ of my group inclination and suitability to work as social pedagogues</td>
<td>10.1%</td>
<td>77.4%</td>
<td>(\chi^2=48.874, df=1, p=0.000)</td>
</tr>
<tr>
<td>I have held class meetings in real environment (to pupils in a classroom)</td>
<td>55.7%</td>
<td>93.5%</td>
<td>(\chi^2=14.290, df=1, p=0.000)</td>
</tr>
<tr>
<td>After holding class meetings (in real environment) a teacher has provided feedback about my inclination and suitability to work as a social pedagogue</td>
<td>8.9%</td>
<td>54.8%</td>
<td>(\chi^2=27.591, df=1, p=0.000)</td>
</tr>
<tr>
<td>After holding class meetings (in real environment) students of my group have provided feedback about my inclination and suitability to work as a social pedagogue</td>
<td>20.3%</td>
<td>80.6%</td>
<td>(\chi^2=34.730, df=1, p=0.000)</td>
</tr>
<tr>
<td>After holding class meetings (in real environment) pedagogues of the institution have provided feedback about my inclination and suitability to work as a social pedagogue</td>
<td>15.2%</td>
<td>71.0%</td>
<td>(\chi^2=32.435, df=1, p=0.000)</td>
</tr>
</tbody>
</table>

The analysis of differences in providing feedback during professional practice has revealed statistically significant differences (Mann-Whitney U=649,000, p=0,000): mean rank of EG students is in 74.06 higher than of CG students (mean rank – 48.22). Consequently, more feedback during professional practice has been provided to EG students than to CG students.

It has been found out that the majority of EG students and less than half of CG students during their practice had received feedback from the social pedagogue about their personality characteristics and abilities necessary for the profession of a social pedagogue, had received feedback about their inclination and suitability for the profession of social pedagogues and during practice discussed with social pedagogue their calling for the profession of a social pedagogue (Table 2).
Table 2. Providing feedback during professional practice in the experimental and control groups (N=110)

<table>
<thead>
<tr>
<th>Variables</th>
<th>CG</th>
<th>EG</th>
<th>Chi-square test</th>
</tr>
</thead>
<tbody>
<tr>
<td>During professional practice I have discussed with social pedagogues my calling for the profession of a social pedagogue</td>
<td>44.3%</td>
<td>74.2%</td>
<td>(\chi^2=7.980, \text{df}=1, p=0.005)</td>
</tr>
<tr>
<td>During professional practice social pedagogue(s) has (have) provided feedback about my inclination and suitability for the profession of a social pedagogue</td>
<td>49.4%</td>
<td>80.6%</td>
<td>(\chi^2=7.666, \text{df}=1, p=0.006)</td>
</tr>
<tr>
<td>During professional practice social pedagogue(s) has (have) provided feedback about my personality characteristics necessary for the profession of a social pedagogue</td>
<td>48.1%</td>
<td>90.3%</td>
<td>(\chi^2=16.537, \text{df}=1, p=0.000)</td>
</tr>
<tr>
<td>During professional practice social pedagogue(s) has (have) provided feedback about my abilities necessary for the profession of a social pedagogue</td>
<td>44.3%</td>
<td>87.1%</td>
<td>(\chi^2=16.577, \text{df}=1, p=0.000)</td>
</tr>
</tbody>
</table>

The impact of providing feedback to students as future professionals on professional calling in the experimental and control groups. The analysis of an impact of providing feedback to students as future professionals on professional calling has revealed statistically significant differences (Mann-Whitney \(U=241,500, p=0.000\)): mean rank of EG students is in 84.21 higher than CG students (mean rank – 41.68). Consequently, the impact of providing feedback on their professional calling has been evaluated more highly by EG students than by CG students.

The analysis of the impact of providing feedback during practical activities on professional calling has revealed statistically significant differences (Mann-Whitney \(U=117,000, p=0.000\)): mean rank of EG students is in 63.23 higher than CG students (mean rank – 28.29). Consequently, the impact of providing feedback during practical activities on professional calling has been evaluated more highly by EG students than by CG students. It has been found out that estimates of all variables of EG and CG students were statistically significantly different: EG students more highly than CG students have evaluated the impact of holding a class meeting in a simulated and real environment and after this meeting the impact of feedback provided by students of a group, teacher and pedagogues of the institution on professional calling (Table 3).

Table 3. The impact of providing feedback during practical activities on professional calling in the experimental and control groups (N=110)

<table>
<thead>
<tr>
<th>Variables</th>
<th>CG</th>
<th>EG</th>
<th>Mann-Whitney</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have held class meetings in simulated environment (i.e. to students during lectures or seminars)</td>
<td>17.78</td>
<td>30.65</td>
<td>145.500, 0.001</td>
</tr>
<tr>
<td>After holding class meetings (in simulated environment) teacher has provided feedback about my inclination and suitability to work as a social pedagogue</td>
<td>11.62</td>
<td>25.36</td>
<td>60.000, 0.000</td>
</tr>
<tr>
<td>After holding class meetings (in simulated environment) students of my group has provided feedback about my inclination and suitability to work as a social pedagogue</td>
<td>12.81</td>
<td>26.24</td>
<td>69.000, 0.000</td>
</tr>
</tbody>
</table>
After holding class meetings (in simulated environment) I have provided feedback about students’ of my group inclination and suitability to work as social pedagogues

<table>
<thead>
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<th>Variables</th>
<th>Mean Rank</th>
<th>Mann-Whitney</th>
</tr>
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<tbody>
<tr>
<td>During professional practice I have discussed with social pedagogues my calling for the profession of a social pedagogue</td>
<td>27.64</td>
<td>32.33 337.500 0.278</td>
</tr>
<tr>
<td>During professional practice social pedagogue(s) has (have) provided feedback about my inclination and suitability for the profession of a social pedagogue</td>
<td>31.13</td>
<td>34.64 434.000 0.444</td>
</tr>
<tr>
<td>During professional practice social pedagogue(s) has (have) provided feedback about my personality characteristics necessary for the profession of a social pedagogue</td>
<td>28.93</td>
<td>39.70 358.500 0.020</td>
</tr>
<tr>
<td>During professional practice social pedagogue(s) has (have) provided feedback about my abilities necessary for the profession of a social pedagogue</td>
<td>29.17</td>
<td>34.52 391.000 0.227</td>
</tr>
</tbody>
</table>

The analysis of the impact of providing feedback during professional practice on professional calling has revealed statistically significant differences (Mann-Whitney U=450,500, p=0.000): mean rank of EG students is in 57.47 higher than CG students (mean rank – 37.27). Consequently, the impact of providing feedback during professional practice on professional calling has been evaluated more highly by EG students than by CG students.

The more detailed analysis has revealed that statistically significantly different evaluations by EG and CG students were only in one case: in general EG students (mean rank – 39.70) more highly than CG students (mean rank – 28.93) have evaluated the impact of feedback by a practice coordinator about student’s personality characteristics, necessary for the profession of a social pedagogue, on professional calling (Table 4).

**Table 4.** The impact of providing feedback during professional practice on professional calling in the experimental and control groups (N=110)

<table>
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**Discussion**

**Discussion of research findings.** The results of the research indicate that those students who had participated in the experimental programme during their studies received more feedback as future professionals. On the other hand, participants of the experimental group have evaluated the impact of providing feedback on their professional calling more highly.
Therefore, there is a reason to believe that such provision of feedback to students as future professionals contributes to the development of students’ professional calling. These results partially confirm French and Domene’s (2010) statement that support from other people (friends, pedagogues, parents, career specialists) is very important in the development of professional calling. Moreover, they also confirm the assertion by other researchers (Roberts & Creary, 2012; Wrzesniewski, 2012; Hall & Chandler, 2005) that cooperation with other people is important in the development of professional calling.

The results of the research can be compared with other researches that note the benefit of providing feedback to students after their practical tasks (especially after simulations of professional activities, role play, microteaching) (e.g., Ramaligela, 2014; Bearman et al., 2012; Zang & Cheng, 2011; Grossmann et al., 2009) by specifying that this benefit can occur by developing students professional calling.

The research has shown that more feedback has been given to participants of the experimental group as future professionals than to participants of the control group from different sources: peers, teachers, practice coordinators and other pedagogues. The effect of such information from the mentioned sources on professional calling was also evaluated more highly in the experimental group. This fact is consistent with the statement by Atwater et al. (2007) that feedback provided by other people can be thoughtful. Meanwhile, Hodgetts et al. (1999) notes a greater reliability of feedback from several sources. It is likely that participants of the experimental group, after receiving more feedback from several sources, were able to develop their professional calling more.

The research has revealed highly significant impact of feedback provided by practice coordinators on students’ professional calling – after receiving more such information students evaluated its impact on professional calling more highly. These results are related to the fact which is already stated in the scientific literature (Raudeliūnaitė, 2010; Litvack et al., 2010; Bagdonaštė-Stelmokienė & Žydžiūnaitė, 2015) that feedback obtained from practice coordinators is important for the development of a professional; this idea also broadens the understanding of the phenomenon by concretizing that feedback obtained from practice coordinators is important to the specific aspect of the development of professionals, namely – to their professional calling.

As it can be judged from the results of the research, professional calling is actually an evolving construct, as it is also noted by other researchers (e.g., Wrzesniewski, 2012). The research also confirms the statement by other researchers (e.g., Praskova et al., 2014; Danilevičius, 2013) which suggests that higher education institutions indeed play an important role in developing students’ professional calling.

The obtained results of the research are as well relevant for the development of the concept of the development of professional calling in other way. As it has been mentioned, so far a number of aspects of the development of professional calling have been revealed, but there was a lack of empirical evidence that would state the impact of providing feedback to students as future professionals on their professional calling. The obtained empirical evidence contributes to the solution of this scientific problem.

**Limitations of the research.** The implementation of the quasi-experimental programme has been conditioned by some limitations of the pedagogical experiment. Management limitations of the experimental system should be mentioned. The development of future social pedagogues in a university depends on activities of many teachers that are not always compatible with each other. During the implementation of the programme, different teachers’ activities
have not been coordinated. It has been done by only one of the authors of the present article when she was teaching several subjects for the students of the mentioned study programme. Moreover, the effect of precision in recording the results of the experiment is that the result of the mentioned experiment cannot be isolated from others in order to determine whether the desired result is the effect of the applied quasi-experimental programme, or whether this result could be influenced by factors that are uncontrollable by the experimenter (e.g., experience outside the university). The results should be interpreted with caution and due to the fact that the respondents have rated the impact of providing feedback on their professional calling by themselves, thus the results are more a reflection of their self-perception and self-report, they are also quite subjective. It is necessary to mention the fact that the empirical research has included only the main case of full-time studies of social pedagogy, thus the results of the research more reliably reflect only this case.

**Recommendations.** It is recommended to higher school teachers who aim to develop students’ professional calling to organize the provision of feedback to students as future professionals by modifying some of the elements according to the standards of professional education, to promote students’ interest and develop their professional calling.

**Conclusions.** Generalisation of research findings resulted in the following conclusions:

The results of the research show that those students who received more feedback information as future professionals from peers, teachers, practice coordinators and other pedagogues, after some professional tasks were accomplished, evaluated the impact of this feedback information on the development of professional calling more highly than other students. Referring to the results of the empirical research and their analysis, it can be stated that providing feedback to students as future professionals during their studies plays an important role in developing students’ professional calling.

**References**


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Despite the fact that in the scientific literature much attention is paid to providing feedback to students during their studies, especially emphasising the importance of providing such information to different aspects of students’ personality development (Sargeant et al., 2011; Ramaligela, 2014; Bearman et al., 2012; Zang & Cheng, 2011, etc.) as well as the ideas of other people’s influences on developing professional calling (French & Domene, 2010; Roberts & Creary, 2012), there still is a lack of empirical evidence which would determine the impact of providing feedback to students as future professionals on their professional calling. Therefore, it is purposeful to accomplish the empirical research in order to answer the question: “What is the impact of providing feedback to students as future professionals on their professional calling?” In order to answer this question it has been decided to carry out the quasi-experiment with inequivalent control group and final measurement (Green et al., 2006; Wiersma & Jurs, 2009).

The quasi-experimental programme was implemented in the experimental group of Klaipėda University students in 2009-2014. The sample of the quasi-experiment consisted of 110 students of the social pedagogy study programme: in EG – 31 student, in CG – 79 students.

The preparation of the quasi-experimental programme was based on ideas about providing feedback to students, that have been revealed during the theoretical analysis, that propose that in the development of professional calling during the studies in social pedagogy study programme feedback can be provided to a student by another student, teacher, practice coordinator and by other pedagogues. Such information is particularly valuable if it is given after practical tasks and during professional practice. Therefore, participants of the experimental group during their studies were able to receive feedback about their inclinations and suitability for social pedagogue’s profession: 1. During practical activities after holding class meetings in simulated and real environments such information was provided by students to each other, teachers and by other pedagogues; 2. During professional practice such information was provided by practice coordinators.

Post-experimental measuring instrument was developed on the basis of fundamental features of providing feedback to students as future professionals, that have been revealed during the theoretical analysis, as well as on the basis of the specifics of social pedagogue’s work in a general education school. The instrument variables have been grouped into two groups: providing feedback during practical activities and providing feedback during professional practice.
By using these variables two scales have been constructed: the nominal scale and the ordinal scale. The first (the nominal) scale has been designed to determine the differences in providing feedback to EG and CG students as future professionals. The other (the ordinal) scale has been more related to the purpose of the research – it aimed to determine students’ opinion about the educational effect of provision of feedback on their professional calling.

Trying to assess the reliability of the scales and subscales it has been found out that Cronbach’s alpha coefficient ranges from 0.855 to 0.932, thus both scales and all subscales are characterised by internal coherence and are suitable means for measurement.

In order to choose the methods for data analysis some derivative variables have been designed. In order to compare the differences between EG and CG, to test normality of distributions, Kolmogorov-Smirnov’s test has been used. Since in all cases the assumption of normality of derivative and primary variables has been violated (p < α = 0.05), Mann-Whitney U test has been used to determinate differences in the derivative variables of two groups.

The analysis of the differences of providing feedback to students as future professionals has revealed statistically significant differences (Mann-Whitney U=286,500, p=0.000): mean rank of EG students is in 85.76 higher than CG students (mean rank – 43.63). Consequently, in general more feedback has been provided to EG students as future professionals.

The analysis of differences in providing feedback during practical activities has revealed statistically significant differences (Mann-Whitney U=154,500, p=0.000): mean rank of EG students is in 90.02 higher than CG students (mean rank – 41.96). Consequently, during practical activities more feedback has been provided to EG students than to CG students.

The analysis of differences in providing feedback during professional practice has revealed statistically significant differences (Mann-Whitney U=649,000, p=0.000): mean rank of EG students is in 74.06 higher than CG students (mean rank – 48.22). Consequently, more feedback during professional practice has been given to EG students than to CG students.

The analysis of the impact of providing feedback to students as future professionals on their professional calling has revealed statistically significant differences (Mann-Whitney U=241,500, p=0.000): mean rank of EG students is in 84.21 higher than CG students (mean rank – 41.68). Consequently, the impact of providing feedback on their professional calling has been evaluated more highly by EG students than by CG students.

The analysis of the impact of providing feedback during practical activities on their professional calling has revealed statistically significant differences (Mann-Whitney U=117,000, p=0.000): mean rank of EG students is in 63.23 higher than CG students (mean rank – 28.29). Consequently, the impact of providing feedback during practical activities on their professional calling has been evaluated more highly by EG students than by CG students.

The analysis of the impact of providing feedback during professional practice on professional calling has revealed statistically significant differences (Mann-Whitney U=450,500, p=0.000): mean rank of EG students is in 57.47 higher than CG students (mean rank – 37.27). Consequently, the impact of providing feedback during professional practice on professional calling has been evaluated more highly by EG students than by CG students.

On the basis of the results of the empirical research and their analysis it can be stated that provision of feedback to students as future professionals plays an important role in the development of students’ professional calling.