Students' motivation towards seeking feedback in the clinical workplace: A comparison between high and low performing students

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Abstract

Background: In the assessment of workplace based learning (WBL) the monitoring of relevant competencies is important. This is done by providing feedback through the use of feedback tools. In this matter, the ability of actively seeking feedback is important. Therefore, it could be worthwhile to explore the difference in motivation between high (HP) and low (LP) performing students towards seeking feedback. The objectives of this study were to evaluate the difference in quantity and quality of motivation towards seeking feedback in the clinical workplace between HP and LP students.

Methods: Participating students in their final years of their study at the Faculty of Veterinary Medicine, Utrecht University were used in this study (n=87). These students collected feedback in a portfolio on their performance in clinical workplace. Using a mixed method study, the quantity of motivation was measured through counting the amount of mini-CEX forms a student collected (experiment 1). The quality of motivation was measured in a questionnaire based on the Self Determination Theory (experiment 2), combined with semi-structured interviews (experiment 3) to gain more in depth insights. HP and LP students were differentiated using the received grade on their portfolio assessment.

Results: The multiple regression model showed that HP students collected significant more mini-CEX forms form both supervisors and peers ($p<0,01$; experiment 1). The questionnaire (response rate: 54%; experiment 2) had sufficient reliability and represented the experimental group. The Kruskal-Wallis test found a significant difference concerning autonomous motivation ($p=0,003$), intrinsic motivation ($p=0,007$), identified regulation ($p=0,003$) and external regulation ($p=0,017$). No difference was found concerning controlled regulation, introjected regulation and amotivation. The post hoc Wilcoxon rank sum test corrected with a Holm-Bonferroni test showed that HP students were significant higher autonomous motivated ($p=0,008$), intrinsic motivated ($p=0,02$) and identified regulated ($p=0,006$) compared to LP students; while LP students were more external regulated compared to HP students ($p=0,014$). The interview (experiment 3) provided further insights into these outcomes.

Conclusions: HP students experienced a higher quantity of motivation compared to LP students. Furthermore, HP students were higher autonomous motivated, intrinsic motivated and identified regulated, while LP students were higher external regulated. No difference was found in amotivation, controlled regulation and introjected regulation.

Keywords: Motivation, Feedback, SDT, Performance, Clinical workplace, Autonomous motivation, Amotivation, Assessment

Introduction

Over the last years, the focus of the educational field has shifted to competency-based learning (CBL). Workplace based learning (WBL) facilitates and stimulates competency based outcomes[1] and therefore, many educational programs have incorporated WBL into their curriculum[2]. As a consequence of this shift the educational field has being challenged with the question how to accurately assess students in a WBL setting. Research showed that monitoring of relevant competencies a student should master is important in WBL assessment[3]. This can be realized by providing feedback directly following performance observation[4].

In previous years, many feedback tools for WBL assessment have been developed, e.g.: Mini-Clinical Evaluation Exercise (Mini-CEX)[5], 360-degree evaluation[6], Clinical Encounter Card[7]. These feedback tools require students to actively seek feedback. This is supported by Teunissen et al., which consider students as active seekers of feedback, rather than passive recipients[8]. Therefore, the ability of seeking feedback is of major importance in WBL. Bok et al. showed that feedback-seeking behavior depends on personal and interpersonal factors[9]. However, this study did not investigate the specific role of amount and type of motivation a student experiences in the search for feedback. Since motivation is a measure for the extend of and reason why a person is being moved to perform a task[10], it could be worthwhile to explore how motivation is of influence on students' feedback-seeking behavior.

In 1985 Deci and Ryan[11] formulated the Self Determination Theory (SDT). This theory is focused on the orientation of motivation to perform a task. The SDT initially differentiates between two types of motivation based on different goals or reasons to perform a task: intrinsic and extrinsic motivation. A student who is intrinsically motivated performs a task because he or she is interested or enjoying it, whereas a student who is extrinsically motivated only completes a task because it leads to an inseparable outcome. Intrinsic motivation results in high-quality learning and creativity.

Based on increased internalization extrinsic motivation was subdivided into external regulation, introjected regulation and identified regulation (Figure 1). Next to that, amotivation was included, which represents a state of lacking the intention to act and unwillingness, thus shows no internalization. These categories can be regarded as a continuum, in which external and introjected regulation are combined to 'controlled' motivation and identified regulation and intrinsic motivation combined to 'autonomous' motivation.[12]

Figure 1 SDT categories based on increased internalization. This figure shows the categories of the SDT theory based on internalization. Internalization increases between external regulation and intrinsic motivation. Intrinsic motivation has the highest level of internalization. Amotivation represents a state of unwillingness.

Increased internalization leads to greater persistence, more positive self-perceptions and better quality of engagements.[10] A study performed by Kursurkar et al. found that in medical students relative autonomous motivation is associated with higher performance[13]. This suggests that high performing students show higher internalization compared to low performing students.

The aim of this study was to evaluate whether different performing students (high vs low) show difference in quantity and quality (orientation) of motivation towards seeking feedback in the clinical

workplace. In this study the parameter used for performance was the grade a student received on the portfolio assessment.

This study aimed to answer the following research questions:

Q1 Is there a difference in quantity of motivation in feedback seeking between high and low performing students?

Q2 Is there a difference in quality of motivation in feedback seeking between high and low performing students?

With respect to Q1 it was hypothesized that in a clinical workplace environment high performing students (HP) experience a higher quantity of motivation in comparison to low performing students. Regarding Q2 it was hypothesized that high performing students are predominantly autonomously (intrinsic and identified) motivated compared to low performing students (LP). Next to that, high performing students score lower on controlled (introjected and external) regulation and amotivation compared to low performing students.

Materials and methods

Background

At the Faculty of Veterinary Medicine, Utrecht University (FVMU); the Netherlands, learning in the final years of the study is mainly organized around clinical rotations. Students are encouraged to collect feedback on their performance in clinical workplace from different sources (e.g. fellow student, teacher, tutor, patient owner…). For this purpose several feedback forms are provided by and organized in a portfolio: mini-Clinical Evaluation Exercise (mini-CEX), Evidence Based Case Report (EBCR), Multiple Source Feedback (MSF) and Personal Development Plan (PDP). For each form the student is required to collect a minimum amount per rotation type as described in the exam regulations. The forms are all structured around the competency domains described in the applied competency framework[14].

At the FVMU, the study Veterinary Medicine consists of a Bachelor (year 1 to 3) and a Master (year 3 to 6) phase. The Master phase is subdivided into a Major and Minor period. The Major period consists of general clinical clerkships for all animal species (Companion Animals, Equine Sciences and Farm Animal Health) and a specific clinical clerkship for the species of choice (rotation type). The Major period covers year 1 and 2 of the Master phase and the Minor period year 3. The final score for the Master phase at the FVMU predominantly consists of a longitudinal competency based assessment of the students' portfolio. This summative assessment takes place after the Major and Minor period.

Participants

Initially, the experimental group consisted of 97 students, with varying differentiation. These students were assessed for their Major Portfolio between March and September 2015 and were expected to be occupied with their Minor in 2016.

The collected data were linked to the performance of the student. The parameter used as a predictor of performance was the grade a student received on the Major portfolio assessment. The Major assessment was graded on a 10 point scale (a grade of 6 or higher means a 'PASS') [15]. High performing (HP) students were defined as graded with 8 or 9/10 and low performing (LP) students were defined as graded 5/10. The 'average' performing (AP) student was defined as graded 7/10.

Experiment 1: Mini-CEX-forms

Procedure

Since the mini-CEX-tool was considered to require pro-active behavior of students, this feedback tool was used as a parameter for quantity of motivation. The amount of mini-CEX forms received from supervisors and mini-CEX forms received from peers for each participant were counted. The co-authors HB and RF the amount of collected mini-CEX forms for 49 and 48 students respectively. The quantity of mini-CEX forms in the selected portfolios (n=97) were counted according to a protocol from the start of the Major till the assessment period (end Year 2).

At the time of counting, the portfolios of 10 students were closed because these students were graduated, resulting in an experimental group of 87 participants.

Statistical analysis

Data were analyzed using R, version 3.1.1 (2014-07-10). The amount of forms student collected for each feedback tool (mini-CEX supervisor and mini-CEX peer) was linked to the received grade on the Major portfolio assessment. This was analyzed through a multiple regression model, family=quasipoisson (residual deviance/df≠1). LP students were regarded as intercept for the model. No correction for the minimum amount requirement per rotation type was applied, since the effect was minimally.

Experiment 2: questionnaire

In this experiment a questionnaire based on the SDT was conducted to assess the quality of motivation in students regarding seeking feedback in clinical workplace.

The questionnaire

The questionnaire was derived from the Dutch Academic Self Regulation Questionnaire (SRQ-a)[16-20]. The Dutch SRQ-a was developed through modifying the SRQ-a designed by Ryan and Connell, 1989 [21] and, in this study, complemented with the subscale amotivation translated from the Academic Motivation Scale (AMS) by Vallerand et al., 1989[22].

The Dutch SRQ-a was modified for the purpose of the current study (see appendix A for questionnaire in Dutch). Participants were asked to answer twenty statements on a five-point Likert scale (1-completely not important to 5-very important) concerning why the student searched feedback forms (mini-CEX teacher/fellow student, EBCR, MSF and PDP) during their Major. These twenty statements were grouped into four subsubscales according to the SDT: intrinsic motivation, identified regulation, introjected regulation and external regulation. Each subsubscale consisted of four items. Autonomous motivation (subscale) was assessed by intrinsic motivation (subsubscale) and identified regulation (subsubscale), whereas controlled motivation (subscale) was assessed through introjected regulation (subsubscale) and external regulation (subsubscale); the subscale amotivation is not subdivided into subsubscales and thus consisted of four items (Figure 2).

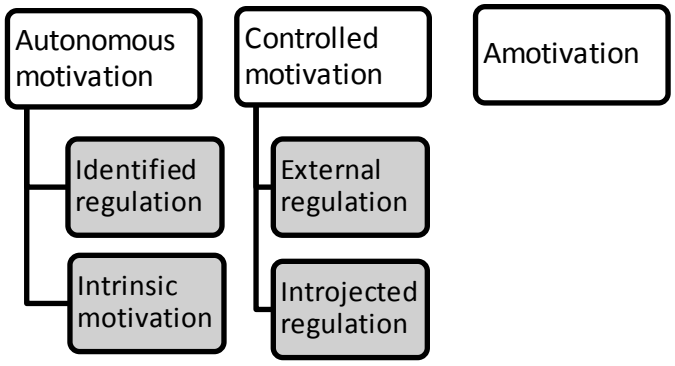

Figure 2 Sub(sub)scales quality of motivation. The quality of motivation as assessed in the questionnaire was grouped into four subsubscales (intrinsic motivation, identified regulation, introjected regulation and external regulation) and three subscales (autonomous motivation, controlled motivation and amotivation).

Procedure

The questionnaire was available online (www.surveymonkey.com) and sent out by email to all participants (n=97). To raise the response, three reminders were send out. After 20 days (on 27th of

January 2016), 51 students responded to the survey. However, 10 students from which the portfolio was closed were removed from the experimental group (experimental group n=87), four of them responded to the survey and thus had to be deleted. Four students did not agree on the informed consent and three students dropped out during the survey. N=40 students were used for analysis. These students were arranged into three groups: LP, AP and HP students.

Statistical analysis

The collected data were analyzed using R, version 3.1.1 (2014-07-10). Reliability of the survey was measured using the Cronbach's alpha[23]. For data analysis the answer of each question related to sub(sub)scale was added and dived by the number of questions, this resulted in a score for the sub(sub)scale for each student. This score was then compared between LP, AP and HP students. Since the data were distributed non-normally and the sample size small, the non-parametric Kruskal-Wallis was applied. The sub(sub)scales which differed significantly were analyzed post hoc using a Wilcoxon rank sum test. A Holm-Bonferroni correction was applied to prevent type 1 error.

Experiment 3: interview

On the final page of the questionnaire students were asked whether they were willing to participate in an interview. Students who gave permission (n=22) were informed and asked whether they still volunteered to participate. Seven students replied, six students agreed. The interviews with the participating students (n=6) were planned by e-mail and held at the FVMU or through skype (two students were residing abroad) by main researcher (LJ). The interviews were semi-structured and based on the outcomes of the questionnaire. Seven main questions were formulated, which were categorized in five categories: main goal, amotivation, external regulation, introjected regulation and intrinsic motivation.

A pilot interview was conducted to evaluate the interview protocol. Since this pilot resulted in minor changes, the pilot was included into the experimental group (n=6). All participants gave permission to obtain their Major grade: 1 student received a 5 (out of 10) (LP); 1 student received a 7 (out of 10) (AP), 2 students received an 8 (out of 10) and 2 students received a 9 (out of 10) (HP). The interviews lasted 10-25 minutes and were audiotaped. Within a week, LJ summarized the interviews and sent each participant the transcript in order to support member-checking protocol[24]. All participants responded to this request, one student made a suggestion for change. This adjustment was implemented in agreement with the student. Overall trends and fragments from the transcript summary were used to get further insight into the outcomes of the questionnaire.

Ethical considerations

All participants in the survey and interview were informed and gave informed consent. It explicitly stated participation was voluntary and confidentiality fully assured. The ethical review board of the Dutch Association for Medical Education (NVMO- ERB) approved this study (number: 618).

Results

Quantity of motivation (experiment 1)

The quantity of motivation was monitored by counting the amount of mini-CEXs received from supervisors and peers. As seen in Figure 3 the median of the amount of forms gradually increased in higher performing students.

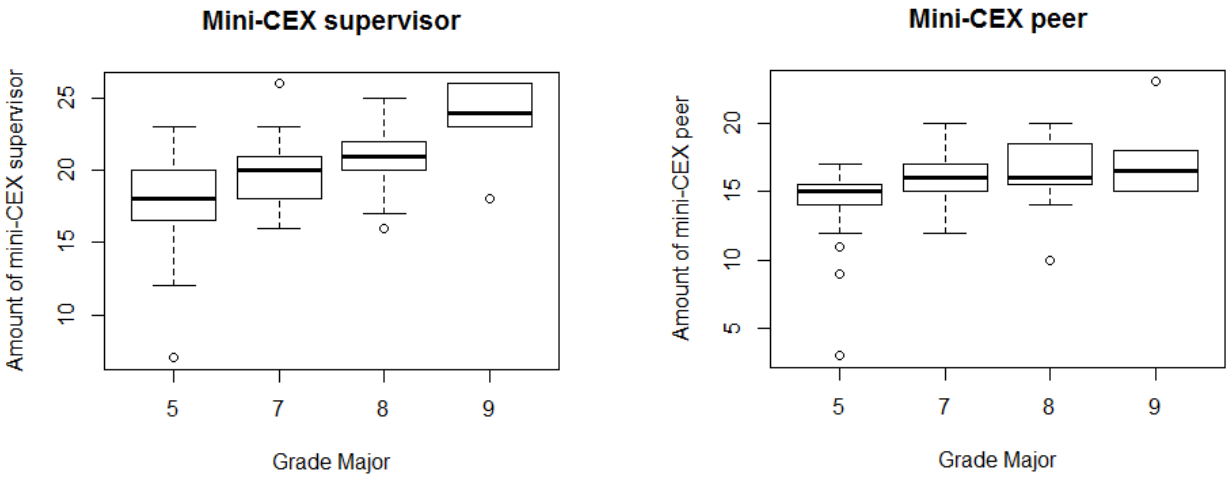

Figure 3 Boxplot amount of mini-CEX supervisor & peer regarding performance. The x-axis reflects the grade received for the Major portfolio (parameter for performance); the y-axis reflects the amount of mini-CEX collected.

Multiple regression showed that AP and HP students collected significant more mini-CEX forms from both supervisors and peers.

Concerning mini-CEX forms received from the supervisor, AP students collected 10% more mini-CEX forms compared to LP students (p=0,017). Students graded 8 or 9 (HP) collected respectively 15% and 31% more mini-CEX forms compared to LP students (p=2,38e-04 and 9,91e-06). On average, LP students have collected 18 mini-CEX forms (outliers deleted).

Next to that, LP students collected on average 14,3 mini-CEX forms from peers (outliers deleted). AP students collected 12% more mini-CEX forms compared to LP students (p=0,018). Students graded 8 or 9 collected respectively 16% and 22% more mini-CEX forms compared to LP students (p=4,29e-04 and 0,004).

Quality of motivation (experiment 2 & 3)

From the experimental group of 87 students, 47 students responded to the questionnaire (response rate: 54%), n=40 students were used for analysis. Regarding the performance the respondents of the survey were representative for the experimental group (Figure 4).

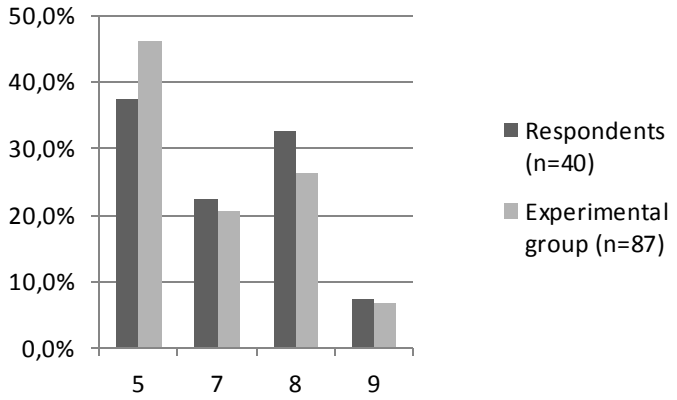

Figure 4 Grades of survey respondents compared to research group. This graphic illustrates the grades of the survey respondents compared to the composition of the grades students in the experimental group received. Fewer students who received a 5/10 filled in the questionnaire (37,5%) in comparison to the students which received a 5/10 in the experimental group (46%). While more students who received an 8/10 for their Major portfolio assessment filled in the questionnaire (32,5%) compared to the students graded with an 8/10 (26,4%). However, no major differences were found, therefore we concluded that the students who filled in the survey were representative for the experimental group.

The Cronbach's alfa analysis showed the questionnaire had sufficient reliability. The subscale autonomous motivation had a high reliability (α=.88). The subscales controlled motivation and amotivation had a reliability of α=.71 and .78 respectively. One question in the subscale controlled motivation seemed to be a potential problem, it was thought that this could be due to the fact that many students identified with this statement, while other statements were answered differently between groups. The subsubscales intrinsic motivation and introjected regulation had a reliability of α=.84 and .78 respectively, while the subsubscales identified regulation and external regulation had a slightly lower reliability (α=.69 and .71 respectively).

For each sub(sub)scale the data was summarized using the median of all scores (Table 1). This showed that the median of the quality of motivation on a 5-point Likert scale shifted gradually between groups. The median of the sub(sub)scales related to higher internalization (autonomous, intrinsic and identified) increased in HP students, while the median of sub(sub)scales controlled, introjected and external decreased in HP students. The median of AP students was situated between LP and HP students.

Quality of motivation	LP	AP	HP
Autonomous	2,38	2,88	3,44
- **Intrinsic**	2,25	2,50	3,25
- **Identified**	3,00	3,00	3,75
Controlled	3,13	2,88	2,63
- **Introjected**	2,25	2,25	2,00
- **External**	3,75	3,50	2,75
Amotivation	3,00	2,50	2,13

Table 1 Median quality of motivation score(μ; Likert scale 1-5) per group. Median score (Md) of the quality of motivation compared with a variating performance (LP: low performing students; AP: average performing students; HP: high performing students) on a 1-5 point Likert scale (1-completely not important to 5-very important). The group of students who received a 5,7,8 or 9 on their portfolio for their Major assessment, consisted of respectively of n=15, n=9 and n=16. The values were rounded off on 2 decimals.

Statistical analysis (Kruskal-Wallis test) showed that there was a difference between LP, AP and HP students concerning autonomous motivation (p=0,003), intrinsic motivation (p=0,007), identified regulation (p=0,003) and external regulation (p=0,017). There was no difference found in controlled regulation, introjected regulation and amotivation between LP, AP and HP students. Post hoc Wilcoxon rank sum test compared LP versus AP; AP versus HP and LP versus HP independently concerning autonomous motivation, intrinsic regulation, identified regulation and external regulation; the p-values were corrected with a Holm-Bonferroni correction (Table 2).

Quality of motivation	LP versus AP	AP versus HP	LP versus HP
Autonomous	W=57; p=0,550 (NS)	W=24,5; p=0,015*	W=44; p=0,008*
- Intrinsic	W=59,5; p=0,652 (NS)	W=26; p=0,019*	W=52; p=0,022*
- Identified	W=55; p=0,465 (NS)	W=30,5; p=0,037*	W=42,5; p=0,006*
External	W=75,5; p=0,651 (NS)	W=100,5; p=0,219 (NS)	W=191,5; p=0,014*

Table 2 Post hoc Wilcoxon rank sum test corrected with Holm-Bonferroni. Post hoc analysis of Kruskal-Wallis test, with Holm-Bonferroni correction. The sub(sub)scales autonomous, intrinsic, identified and external were compared between group A (low performing students), B (average performing students) and C (high performing students). The W and P-values were reproduced for each sub(sub)scale and specific comparison. *=significant <0,05; NS=non-significant >0,05. The values were rounded of on 3 decimals.

There was no difference found in quality of motivation in seeking feedback between LP students and AP students. However, HP students seemed to be more autonomous motivated (p=0,008), intrinsic motivated (p=0,022) and identified regulated (p=0,006) compared to LP students, while LP students were more external regulated compared to HP (p=0,014). AP students were significantly less autonomous motivated (p=0,015), intrinsic motivated (p=0,019)and identified regulated (p=0,037) compared to HP, however not necessarily higher external regulated (p=0,219).

The quality of motivation in seeking feedback between HP and LP students based on the questionnaire is summarized in Figure 5.

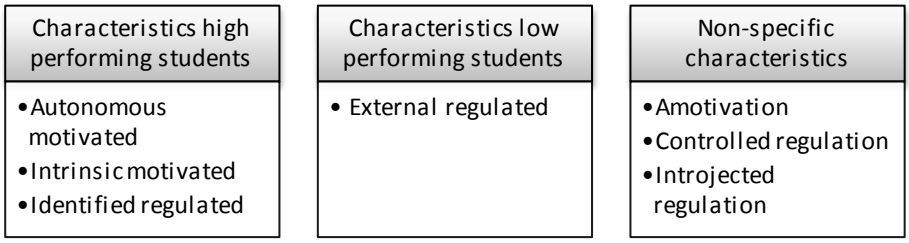

Figure 5 Characteristics of high performing students versus low performing students. The feedback seeking behavior of high performance students was characterized by autonomous motivation, intrinsic motivation and identified regulation. While the feedback seeking behavior of low performance students was characterized by external regulation. Amotivation, controlled regulation and introjected regulation were non-specific characteristics for HP and LP students alike.

In addition to the motivation questionnaire, an interview (n=6 students) was held to provide in depth insights into the outcomes of the questionnaire. Based on the five categories (main goal, amotivation, external regulation, introjected regulation and intrinsic motivation) the quality of motivation between different performing students was evaluated.

Main goal- The main goal for LP and AP students to seek feedback was mentioned to be the requirement to pass their studies (external regulation). HP students also mentioned they experienced this obligation, but in addition experienced the feeling of development of their competencies (identified regulation): "*Partially because it's required, partially out of curiosity on my performance and as a result of this, the development in becoming a good vet." (S2; HP)*

Amotivation- Both LP, AP and HP students could describe a situation in which they felt amotivated to seek feedback: "*I was amotivated to seek feedback when the teacher's response was delayed or when they were not motivated to fill in the feedback form." (S6; AP)*

External regulation- LP and HP remarked they experienced situations in which they felt obliged to seek feedback, the LP student even pointed out that these situations occurred often: "*This occurred often and it resulted in a negative learning effect."* (S3; LP)

Introjected regulation- LP and AP students mentioned that they did not seek feedback because they wanted fellow students to think they were smart/wise/skillful, while 3 out of 4 HP students said they did: "*At the start of my Major I asked for a mini-CEX nearly every day, to show them I was very motivated in realizing my personal development." (S1; HP)*

Intrinsic motivation- Both, LP, AP and HP students said they enjoyed reading feedback afterwards rather than seeking feedback. HP students added they liked asking feedback from owners of patients: "*Especially the MSF forms, it felt as a real 'test' to receive feedback from owners, since that's what it's all about." (S5; HP)*

The outcomes of the interview provided further insight into the outcomes of the questionnaire. It mainly confirmed the outcomes of the questionnaire. However, according to the interview, HP students seemed to experience introjected regulation, while the questionnaire characterized this subsubscale as non-specific.

Discussion

This mixed method study was conducted to evaluate motivation of students towards seeking feedback in clinical workplace. The aim of this study was to gain insight into the quantity and quality of motivation between high and low performing students. In this section the main results will be discussed regarding current literature. Furthermore, practical implications, strengths and limitations of this study will be evaluated.

Autonomous motivation

As hypothesized, high performing students searched more feedback forms (mini-CEX supervisor and fellow student) and therefore experience higher quantity of motivation compared to low performing students. Furthermore, HP students were predominantly autonomous (intrinsic motivation and identified regulation) motivated to seek feedback in clinical workplace. This is desirable in an effective use of feedback tools. HP students searched feedback because they enjoyed seeking it or identify with the personal importance of seeking feedback[10]. Our results are in line with previous research from VandeWalle and Cummings (1997), who found that the likelihood to seek feedback increased when learning goal orientation became greater than performance goal orientation[25]. Although intrinsic motivation was significant different between HP and LP students, in the interview all participants said they preferred reading feedback afterwards rather than seeking feedback.

Amotivation

In contrast, regardless of performance, no difference was found between low and high performing students regarding amotivation. This is interesting since all interviewees said they experienced amotivation in seeking feedback, thus all participants experienced a certain amount of amotivation. A study performed by Baker (2004) showed that amotivation has a high impact on stress and other negative outcomes[26]. Since the impact of amotivation is high, further research is necessary to explore the extent of amotivation students experience in seeking feedback.

Summative versus formative assessment

At the moment there is an ongoing debate whether the portfolio should be assessed summatively or formatively. It seems that quantity and quality of motivation are essential factors in this debate. Research showed that summative assessment ensured students to take the portfolio seriously[27]. In this study, both from the interview as the questionnaire it appeared LP students experienced predominantly external regulation. The interview also indicated that HP students experienced external regulation in seeking feedback, but significantly less than LP students. This suggests that summative assessment is necessary to encourage students to collect feedback, even though external regulation has least internalization of all subsubscales and is considered less desirable[10]. However, as a result of summative assessment students might avoid honest answers and shortcomings[28]. Students could be seeking feedback because they want others to think they are smart/wise or skillful (introjected regulation). The interviewed HP students seemed to experience introjected regulation. This orientation of motivation might result in avoiding honest answers and shortcomings. However, from the questionnaire no difference was found between LP and HP students concerning introjected regulation. Further research should focus on the effect of formative assessment on the motivation of

feedback seeking behavior between high and low performing students in order to get a full picture on this matter.

Practical implications

Research has shown that feedback seeking behavior results from costs-benefit analyses and is determined by the instrumental motive to achieve a goal, the ego-based motive to protect one's ego and image based motive[9,29]. This costs-benefit analysis of the students results in a certain quantity and quality of motivation. Therefore, quantity and quality of motivation could be indicators for the costs-benefits analysis students experience in seeking feedback. Since feedback seeking is essential in the assessment of WBL, educational institutions could use the questionnaire to evaluate clinical clerkship students in their motivation towards seeking feedback. Depending on the outcome, the student can be guided towards higher internalization and therefore experience a higher learning effect during clinical clerkship. Eventually educational institutions could consider evaluating students regarding their motivation towards seeking feedback in their admission procedure for clinical clerkship. In order to do this, the questionnaire can be combined with an interview.

Strengths and limitations

The current study combined qualitative and quantitative methods (mixed-method) towards seeking feedback in clinical clerkships. To our knowledge this was the first study which combined quantity and quality of motivation using the SDT theory in evaluating the motivation of feedback seeking in students in the clinical workplace.

A potential limitation of this study might be that exclusively the relation between performance and quantity and quality of motivation was researched. However, more factors could be related to the motivation of students to seek feedback, e.g. working and personal circumstances (confounding factors). This might decrease the reproducibility of this study.

Conclusions

This study showed that HP students collected a higher amount of mini-CEX forms from both supervisors and peers compared to LP students. As the amount of received mini-CEX forms is used as a measure for quantity of motivation, HP students experience a higher quantity of motivation compared to LP students.

Furthermore, the outcomes of the questionnaire showed that HP students were higher autonomous motivated, intrinsic motivated and identified regulated compared to LP students. While LP students were higher external regulated compared to HP students. No difference was found between HP and LP students concerning amotivation, controlled regulation and introjected regulation. In addition, the outcomes of the interview mainly confirmed the outcomes of the questionnaire. However, in the interview, HP students seemed to experience introjected regulation while the questionnaire characterized this subsubscale as non-specific.

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Appendix A The questionnaire (Dutch)

Studenten kunnen verschillende redenen hebben om feedback over het functioneren te documenteren in een portfolio. Op deze pagina staan een aantal redenen die hierbij een rol kunnen spelen. Bij de onderstaande stellingen kun je aangeven in welke mate een stelling belangrijk was voor jou tijdens de Major. De schaal die gehanteerd wordt varieert tussen 1 (helemaal niet belangrijk) en 5 (helemaal wel belangrijk); zie onderstaande schaal.

1	2	3	4	5
Helemaal niet belangrijk	**Eerder niet belangrijk**	**Neutraal**	**Belangrijk**	**Helemaal wel belangrijk**

Ik was tijdens de Major gemotiveerd om feedback te verzamelen over mijn functioneren in mijn portfolio, omdat…

1.	… ik wilde dat anderen denken dat ik verstandig/handig ben.	1	2	3	4	5
2.	… ik dit een aangename bezigheid vond.	1	2	3	4	5
3.	… ik dit persoonlijk zeer waardevol vond.	1	2	3	4	5
4.	… anderen (docenten, tutoren en medestudenten) dit van mij verwachtten.	1	2	3	4	5
5.	… ik verondersteld werd dit te doen vanuit mijn opleiding.	1	2	3	4	5
6.	… ik me schuldig zou voelen als ik het niet gedaan zou hebben.	1	2	3	4	5
7.	… dit leuk was.	1	2	3	4	5
8.	… dit voor mij een persoonlijk belangrijke keuze was.	1	2	3	4	5
9.	… ik nieuwe dingen wilde bijleren over mijn presteren.	1	2	3	4	5
10.	… dit me erg interesseerde.	1	2	3	4	5
11.	… ik anderen de indruk wilde geven dat ik een goede student ben.	1	2	3	4	5

12. … ik dit een belangrijk levensdoel vond. 1 2 3 4 5

13. … anderen (docenten, tutoren en medestudenten) mij hiertoe verplichtten. 1 2 3 4 5

14. … ik me zou schamen als ik het niet gedaan zou hebben. 1 2 3 4 5

15. … ik dit boeiend vond. 1 2 3 4 5

16. … anderen (docenten, tutoren en medestudenten) mij dwongen om dit te doen. 1 2 3 4 5

Intrinstieke motivatie: stelling 2, 7, 10 en 15; Geïdentificeerde regulatie: stelling 3, 8, 9 en 12; Geïntrojecteerde regulatie: stelling 1, 6, 11 en 14; Externe regulatie: stelling 4, 5, 13 en 16

2) Er waren wellicht momenten waarop je minder gemotiveerd was om je portfolio bij te houden. Geef aan in welke mate de stellingen op jou van toepassing waren. *Let op de schaal is nu iets gewijzigd: variërend van 1 (Helemaal niet mee eens) tot 5 (Helemaal wel mee eens).*

17. Ik had het gevoel dat ik mijn tijd hiermee verdeed. 1 2 3 4 5

18. Ik zag niet in waarom dit nuttig zou zijn. 1 2 3 4 5

19. Aan het begin van de Major was ik gemotiveerd dit te doen, maar aan het einde vroeg ik me af waarom ik dit eigenlijk deed. 1 2 3 4 5

20. De redenen waarom ik dit deed waren mij niet duidelijk. 1 2 3 4 5

Amotivatie : stelling 17, 18, 19 en 20