

The role of goal orientations in students' perceptions of classroom assessment in higher education

Amrita Kaur, Mohammad Noman & Rosna Awang-Hashim (2017): The role of goal orientations in students' perceptions of classroom assessment in higher education, *Assessment & Evaluation in Higher Education*, DOI: [10.1080/02602938.2017.1359818](https://doi.org/10.1080/02602938.2017.1359818)

Abstract

Students' perception of assessment methods plays a significant role in determining their effort towards learning and their assessment tasks. Similar to the role of goal orientation in predicting students' classroom learning, this study aims to examine how students' goal orientations influence their perception of classroom assessments. Using a qualitative research design, the data was collected from 41 students enrolled in master's degree programme at a public university in northern Malaysia, using reflection notes and semi-structured interviews. Data was analysed using a typological approach to inductively develop the categories. The findings demonstrated that perception of mastery goal oriented students considerably contrasted with those with performance goal orientation. The distinctions in perception is discussed under four categories: assessment as a process or product, preferences for modes, reasons for effort and feeling and emotions. The implications of the findings are discussed for higher education practitioners.

Keywords: Assessment; goal orientation; higher education; typological approach

Introduction

With ever increasing global competitiveness among students of higher education, institutes of higher education are required to produce graduates who are mature, autonomous, self-regulated and informed citizens (Barnett 2007). Student-centred learning and pedagogical innovations in higher education are at the core of this discourse. However, efforts to achieve this goal through advances in teaching and learning would not suffice if not accompanied by the adoption of effective assessment practices that define students' learning for higher education. Assessment is integral to teaching and learning since it not only measures

learning as an end product, but also functions as a process for learning to take place. It is considered a powerful tool that can influence students' learning (Gibbs 1999; Brown, Henry, and Mark 2014). Spiller (2015) states that 'The determining influence of assessment is so powerful that poorly-considered assessment tasks can lead to learning that may be directly opposite to intended learning or undermine the learning outcomes' (3). Therefore, it is important to advance assessment practices in higher education by critical examination of the factors that influence students' assessment.

That students channel their energies towards successful accomplishment of the assessment requirements set by instructors (Cartney 2010) is a major insight for instructors in developing effective assessment that can positively influence learning and provide students with the opportunity to acquire knowledge, develop and demonstrate skills in their subject areas. However, students' perceptions and their attitudes towards classroom assessment practices are fundamental in determining successful outcomes of the assessment practices (Anderman and Patrick 2012). Students' performance, quantity and quality of effort applied for an assessment task is shaped by their attitudes. Moreover, the nature and quality of their perceptions of classroom assessment practices can significantly influence the inferences instructors draw using assessment outcomes, thus causing bias in the interpretation of assessment scores (Birenbaum 1997). Struyven, Dochy, and Janssens (2005) remarked that 'the way a student thinks about learning, determines the way he tackles the evaluation task' (326).

Previous studies have demonstrated a considerable interaction between students' personal characteristics and attitudes towards certain kinds of assessments (Zeidner 1987; Traub and MacRury 1990; Birenbaum and Feldman 1998). For example, Birenbaum and

Feldman (1998) found that students' attitudes towards assessment formats are correlated with their cognitive processing (learning approaches). Students who adopt deep learning approaches prefer essay type questions, while students with surface learning approaches prefer multiple choice questions. Studies on factors that determine students' learning approaches have demonstrated a strong link between students' goals and their learning approaches. Students' use of certain learning strategies is dependent upon whether they adopt a mastery or performance goal orientation in the classroom (Dansereau 1985; Ames and Archer 1988; Meece, Blumenfeld, and Hoyle 1988). This indicates that students with advanced learning abilities would prefer assessments that require higher order thinking skills to solve complex problems (Birenbaum and Feldman 1998). Hence, students' goal orientations and learning approaches are strongly related to their perception of classroom assessment which, in turn, affects their performance on assessment tasks (Birenbaum 1997).

While there is an established link between students' goal orientations and learning approaches, and learning approaches and assessment preferences, little is known about how higher education students' goal orientations directly affect their perception of classroom assessment. Therefore, it would be meaningful to explore how students' perceptions of classroom assessment differ on the basis of their goal orientations. Harackiewicz, Barron, and Elliot (1998) state that goals 'can be generally defined as cognitive representations of the things we wish to accomplish' (2). Goal orientation functions as a powerful motivational tool that has the potential to influence individual's action in a desired direction. They can also explain and describe students' motivation and determine their behaviour towards learning, effort and achievement (Meece, Blumenfeld, and Hoyle 1988; Ames 1992).

Students' goal orientation can explain how learning context, learning environment and

individual characteristics can exert influence on their learning and achievement behaviour (Pintrich and Schunk 2002). The characteristics of their goal can potentially influence their cognition, affect and behaviour during situations, such as testing and evaluation that focuses on achievement and performance (Dweck and Leggett 1988). Even though success in an educational context is largely defined in terms of performance evaluation and grades (Harackiewicz, Barron, and Elliot 1998), with the knowledge of student's goal orientation instructors can determine the direction of their effort and redefine the achievement behaviour. Literature suggests (Ames 1992; VandeWalle and Cummings 1997) that goal orientation comprises both dispositional and situational components; therefore, understanding of its functioning can help the instructors devise strategies to shape students' goal orientations in favourable ways.

Investigations of the goal orientation of students' learning approaches and students' assessment preferences have tended to adopt quantitative approaches (Birenbaum and Feldman 1998; Martin et al. 2003). However, in those instances, the quantitative data was unable to explain the ways in which students' perception of assessment differ on the basis of their orientations. Therefore, by using qualitative approach we can gain in-depth understanding on how this construct shapes students' perception of classroom assessments.

In order to achieve the research objective, the study was guided by the following main question: In which ways do students' perceptions of classroom assessment differ on the basis of their mastery and performance goal orientations?

Goal orientations

Griffin (2005) defines goal orientation as a mental framework that determines individual's approaches for achievement situations. Initially goal theory had classified goals into two broad

categories (Dweck 1986; Ames and Archer 1988) of mastery goal orientation, which is defined as ‘a desire to develop competence and increase knowledge and understanding through effortful learning’, and performance goal orientation, which is defined as ‘a desire to gain favourable judgments ... of one’s competence’ (Murphy and Alexander 2000, 28). Subsequently, goal orientation was theorised as a trichotomy that further divided performance goal orientation into performance-approach and performance-avoidance (Elliot and Harackiewicz 1996; Middleton and Midgley 1997). Students with performance goal orientation seek positive judgments of their performance in relation to others, whereas students with performance-avoidance goal orientation avoid negative judgments of their performance in relation to other people (McCollum 2004).

Students with mastery goal orientation are concerned with acquiring new knowledge to master skills and develop competence. These students are inclined to take up challenging tasks, and use deep learning strategies for better outcomes. They are consistent in their efforts, hold positive views about learning and spend a long time over given tasks with greater interest (Church, Elliot, and Gable 2001). They do not view intelligence as a fixed ability; therefore, effort, hard work and self-regulation are the key characteristics of mastery-oriented students (Dweck and Leggett 1988; Schunk 1996; Anderman and Patrick 2012). Mastery goal orientations are also associated with enhanced academic performance and positive attitudes towards learning (Church, Elliot, and Gable 2001).

In contrast, students with performance goal orientation are more concerned with outperforming others to seek positive evaluations and avoid negative judgments of their abilities (Dweck 1986). These students do not view success as an outcome of effort but attribute it to fixed ability or task difficulty (Ames 1992). This tendency prevents them from

seeking challenging tasks to avoid failure, and encourages them to adopt surface learning strategies such as rote memorisation to outperform their peers (Meece, Blumenfeld, and Hoyle 1988). Several studies have established that in general performance goal orientations are also associated with poor academic outcomes and negative attitudes towards learning (Ames and Archer 1988; Liem, Lau, and Nie 2008). It is also suggested that performance and mastery goal orientations are neither mutually exclusive nor contradict each other (Button, Mathieu, and Zajac 1996), because it is possible that an individual may want to develop competencies as well as outperform others. However, given the design and scope of the study, we do not include investigation of performance-avoidance goal orientation and individuals who possess both mastery goal orientation and performance goal orientation.

Method

Participants

A questionnaire adapted from the Patterns of Adaptive Learning Survey (PALS: Midgley et al. 1998), assessing students' mastery goal orientations using four items (e.g. 'It's important for me to understand my class work very well') and performance-approach goal orientations using four items (e.g. 'It's important to me that I look smart compared to other students in my class') was distributed to 94 students studying education, enrolled in three classes at a public university in northern Malaysia, with an invitation to participate in the study. Participation in the study was voluntary. In total, 68 students agreed to participate in the study and returned the questionnaire. All the items were rated on a 5-point Likert scale (1 = strongly disagree and 5 = strongly agree). The scale reliability was found to be $\alpha = 0.84$.

Based upon the difference between mastery goal orientation score and performance goal orientation score, the students were grouped into three categories. Students with

positive (10 or higher) scores were categorised into the mastery goal orientation category (high on mastery orientation and low on performance orientation), and students with negative (10 or lower) scores were categorised into performance goal orientation category (high on performance orientation and low on mastery orientation). Students with zero or very low difference score (less than 10) were dropped from the study because its scope was limited to investigating the difference in students' perceptions of class- room assessment on the basis of their mastery and performance goal orientations. In the end, we were left with 41 participants, 22 in the mastery goal orientation category and 19 in the performance goal orientation category. Students in the mastery goal orientation category comprised 14 females and 8 males. The mean age of the participants in this group was 26.4 years. Students in the performance goal orientation category comprised 7 female and 12 males. The mean age of the participants in this group was 27.6 years. Five students from each category were chosen for face-to-face interviews on the basis of their willingness to participate. There were 6 females and 4 males, with average age of 25 years who participated in the interview.

Procedure

Data was collected using reflective writing and semi-structured interviews. For both reflective writing and interview sessions, students were blind to their categorisation. For the reflective writing sessions, participants stayed back after their last class. Students in each category were taken to two different rooms by the researchers (for the ease of identification). They were made to sit individually to prevent discussion among themselves. In order to get candid opinions, students were explicitly asked to keep their responses unidentified and were informed that their responses would not be graded. The students were asked to list down the assessment methods in which they participated during the current semester. They cited group

presentations, online quiz, class test, project work, article review and final examination as the assessment methods. Students were asked to reflect upon their experiences during those activities and answer the following questions:

(1) What were your experiences with the classroom assessment?

(2) Which method of assessment did you prefer the most and the least and why?

Students were asked to write their responses using their preferred language (English or Malay). Students took 40–50 min to finish their reflection. The researcher supervising the mastery orientation group assigned a unique code to each individual reflection, while the researcher supervising the performance orientation group also assigned a unique code for each reflection.

The semi-structured interview sessions were conducted in the following week at different times. The researchers followed a similar interview protocol for all the participants. In order to create a rapport, the interview began with general questions about respondents' background and their plans for the next semester. Students were promised anonymity and were encouraged to give honest opinions. Each interview lasted 35–45 min. The interviews were audiotaped and transcribed verbatim for the data analysis. The questions that were asked during the interview were:

(1) What comes to your mind when you hear the word assessment?

(2) How do you think assessment is useful to you?

(3) What kind of assessment do you think is appropriate to measure your success?

Data analysis

Coding and categorising of data is one of the most important aspects of qualitative analysis. Therefore, it is important to describe the audit trail which demonstrates how coding was done

and categories were formed (Lincoln and Guba 1985). By summarising the components of categorisation with the data of their study, researchers can achieve this objective (Constas 1992). Among several components proposed by Constas (1992), we use a few to explain our categorisation. One of them is origination which ‘refers to where the responsibility or authority of categorisation resides’(Martin et al. 2003, 619). In the present study, authority of categorisation resides in: (1) researchers’ purpose of the study, which focused on the ways in which students’ perceptions of classroom assessment differ on the basis of their goal orientations, and (2) the literature, e.g. in this study categorisation was driven on the basis of suggested characteristics of students with varied goal orientations. Another component of categorisation for this study can be explained by verification which refers to ‘the strategies used to justify the creation of categories’(Martin et al. 2003, 619). In this study, the categories reflect logical connection in relation to the research question that emphasises the difference in students’ perception of classroom assessment on the basis of their goal orientations. The established research findings support theoretical explanation (goal orientation and students’ characteristics) for the categories created.

For the purpose of analysing data, we adopted a typological approach that allows inductive development of a set of categories that are related but not mutually exclusive or subsidiary to one another (Ayres and Knafl 2012). According to Ayres and Knafl (2012), typological analysis requires the researchers first to identify an organising framework for typology development. Later, when the data is collected, the researcher identifies the commonalities and variation in the data to construct patterns of similarity and difference into models (Ayres and Knafl 2012). In the present study the organising framework revolved around the goal orientation and students’ characteristics to identify commonalities and

variation in data. However, given the nature of the goal orientation as a construct, where the two categories (goal and mastery) are neither mutually exclusive nor contradict each other, the coding was a complex task. There were instances when typology characteristics overlapped within the groups. For example, students in the performance group reported assessment as means for grades only, but at the same time placed high relevance on project work because it provides opportunity for applying skills in a real life context. Similarly, another student in the mastery group placed high value on the grade earned which, in general, can be interpreted as a characteristic of performance oriented individual, while also reporting that his grades were the reflection of his understanding and mastery. Such discrepancies were resolved using the interview data and analysing the context of data.

Four major themes were identified for contrasting the findings between the performance oriented and the mastery oriented groups. The four themes identified were: (1) assessment as a process or product, (2) preferences for modes, (3) reasons for effort, and (4) feeling and emotions. To illustrate our findings, we include quotes from the reflective notes, interviews and memos. The participants' reflective notes are identified using labels e.g. perf01 and for interviews as Iperf01.

Results

Assessment as a process or product

The most significant differences between the performance oriented and mastery oriented students emerged in the form of their perception of assessment as a process or product. Students in the mastery group viewed assessment as a long and continuous process that comprised several stages, such as classroom instruction, revision, preparation for examination,

writing examination, getting to know the outcomes and working on it later on. For example, mas011 expressed in the reflection that 'assessment to me is the lecturer working along with me during the whole semester, watching over my every step, giving me the feedback and again checking over my progress'. Another student, Imas04 remarked that 'assessment to me is less of a grade but more of a feedback and reflection of my understanding that helps me throughout the semester to learn'. However, some students in the mastery group did give preference to earning a better grade, but it was in a different sense when looked at in context. For example, Imas03 said that 'the grade is important to me because it is a reflection of my mastery; it makes me feel good and gives me confidence'.

On the other hand, students in the performance group expressed assessment as a way to achieve grades, earn credit and even to prepare them for final examination. Students considered it more as a product than as a process. For example, perf05 said that 'assessment is important to me because it helps me get a grade at the end of the term'. The utility of the assessment process was reduced to a means to achieve the end, as perf16 described, 'during the class assessment I get an opportunity to revise, study hard so that I can prepare for my final examination and achieve good grades'.

Another dimension of perceiving assessment more as a process than a product by the mastery oriented students was expressed in their willingness for getting continuous feedback. Students viewed feedback 'as an important part of the assessment that gives them an opportunity to know their mistakes and correct them in future'(mas011). Students in the mastery group did not feel apprehensive in sharing the scores publicly. For some students, class discussion on a test or presentation performance did not mean discussing the grade in terms of ranking or comparison, but it meant discussing the process of learning that is

measured through the quality of responses provided by them. For example, Imas3 said ‘if we all are given feedback in a group we can learn from others’ mistakes, as well as from our own mistakes. Also we can know how others responded to a particular problem and learn from them’. On the other hand, students in the performance group sometimes avoided or did not appreciate getting feedback publicly. They were keen on knowing only the grades, that too privately. As one student mentioned ‘I am happy to know my grades through whatsapp personal message’ (perf11). Students’ reflection in performance group demonstrated frequent discussion on tests and test scores. For example, perf015 stated that ‘Sometimes to me feedback is more like picking on my weakness... I prefer getting a final score which can tell how I did in my assessment’. Another student remarked that ‘I would be very embarrassed and shy to discuss my score in class, especially when I have scored much less than my classmates’ (Iperf03).

Preferences of modes

Other noteworthy differences emerged in students’ evaluation of assessment modes that were presented to them during the semester. Students in the mastery group gave positive evaluations for the formative modes of assessment or the modes that required application of more effort, higher order thinking skills and had personal and professional relevance. For example, for the project work that required comprehensive preparation and application of the concept into real classroom contexts, students in the performance group described it as an important and effective practice. For example, a student wrote, ‘project work was a valuable activity that helped them understand the concepts and its uses in real life context’ (mas04). Article critique activity was a mode of assessment that required considerable effort, deep learning and critical thinking strategies. Students in the mastery group in general perceived this activity as

informative, engaging and challenging. For example, Imas02 remarked, 'this assessment required me to read, research and critically analyse the information, it helped me get so much of information and knowledge'. Therefore, for several students this was an opportunity to write critically to express their thoughts and gain empirical insights in their subject area.

In contrast, students in the performance group gave positive evaluations for the assessments that were less time consuming, less challenging, required minimal effort, created less anxiety and gave them an opportunity to prove themselves. For example, Iperf02 remarked that 'project work was surely important, but it required us to give so much of time. It also required us to learn additional skills such as calculation... we have three other courses to fulfil their requirement, I don't think I can do my best in this'. For some students in the performance oriented group, article critique was an activity that was complicated and required complex thinking skills. Iperf04 stated that 'I don't think we are ready to read those articles and analyse them, this requires a lot of hard work and knowledge that we don't have'.

Students in this group also expressed their preferences for class quizzes, as perf012 wrote in reflection: 'I prefer quiz the most, it requires us to study limited topics and we can get quick results'. The most interesting findings under this theme emerged when the students gave positive reviews of the group presentation activity because it can be achieved through collective effort and seems to reduce anxiety, 'it's fun to work together in informal ways' (perf018), but with the proviso that 'peers can help so individual score is not known and who did the best'. Another student (perf011) remarked that 'the lecturer should make sure that students don't get any help with their friends during the activity'. This clearly indicated that the modes of assessment that gave them the opportunity to highlight their performance were the most preferred, in comparison to the modes that would help them master the skills or

knowledge. The frequent mention of the word 'peers' and 'help' also indicated a desire for competition and outperforming others.

Reason for effort

It was obvious that the assessment tasks required effort from the students; however, the reasons for making effort differed on the basis of students' orientation. For example, reasons for making effort by the students in mastery group were more focused on acquisition of skills and knowledge, enhancement of learning and personal benefit. Students believed that the entire process of assessment prepared them to face the challenges of the real world with confidence and become successful. 'Having participated in assessment and working hard for it has given me the confidence that my skills are now refined and I can apply them in real life situations', wrote mas011. For others, making an effort for assessment was an opportunity 'to make mistakes, to learn new things and to improve on it to become better professionals' (mas09). Other reasons for making an effort during the assessment were described as a tool for self-improvement. For example, a student in the mastery oriented group remarked that 'I always doubted my verbal skills, but the effort I made for the presentation has helped me gain skills that would further help me improve my personality and confidence'(mas05). Even though the group presentation was a collective task, students perceived that as an opportunity to collaborate with their peers, master the skills and learn team work. For example, mas02 stated that 'The efforts that I made for the group presentation helped me master the knowledge. I could confidently share the information with other classmates and answer their questions'.

On the other hand, students in the performance group made efforts to receive higher grades, to safeguard their reputation, to fulfil the course requirement, to meet the deadlines and

to avoid embarrassment. For example, efforts made by these students during the assessment were more focused on meeting deadlines: 'I sleep late at night to make sure that I am ready for the test or I am able to submit my work on time ... I don't want to miss the deadline and lose marks' (perf04). Another student said 'I work very hard because if I fail, I would feel bad in front of my classmates, who are also my colleagues' (perf012). For several students in the performance oriented group, being diligent in assessment meant 'meeting the requirement' in order to pass the course.

Feelings/Emotions

Another important distinction occurred in students' expression of emotions and feelings regarding the assessment. Students in the mastery group associated their emotional experience with assessment as being motivated to fair well, exhilarating and stimulating. According to the students, assessment motivated them to think critically and bring the best out of them. Imas01 reported that 'assessment makes me more alert; it provokes me to think deeply and perform better than I would in other conditions'. Students in this group generally reported positive emotions, such as mas013' claim, 'It is a great feeling when you perform well and get positive feedback from your lecturers and friends'. Mas02 said 'assessment always motivates him to go forward, to try more and learn more'. However, some students in the mastery group expressed negative emotion pertaining to the assessment experiences, but their explanations were different from the performance oriented group. For example, Imas02 stated that 'sometimes assessment makes me nervous and I feel stressed that I may not be able to demonstrate my true understanding in certain situations'.

On the other hand, students in the performance group associated assessment with anxiety and stress provoking activity. They thought assessment was sometimes unfair, burdensome and

depressing. A few students wrote explicitly that assessment has less significance for learning and increases pressure. For example, perf019 stated that 'the word assessment is depressing to me; all it does is create pressure for us to perform'. It was viewed as a 'burdensome' experience of the master's degree. Student perf018 wrote that 'our experience of classroom learning is memorable, but the burden of assessment and passing the course make master's degree programme unattractive to me'. Some students in performance group stated that assessment creates stress and anxiety because 'grades involve proving our worth, we should make sure we do equally well with our classmates'.

Discussion

The significance of effective assessment in higher education for enhanced learning outcomes and student development is well established across the literature. The current assessment trend in higher education, which is moving away from standardised testing (Association of American Colleges and Universities 2016), applies a variety of innovative modes such as portfolios, self and peer assessment, simulations, project work and quizzes. However, how students receive and respond to these assessment methods is largely influenced by their goal orientations. The primary aim of this study was to understand in which ways students' perceptions of classroom assessment differ on the basis of their mastery and performance goal orientations. The findings of this study contribute towards understanding the role of goal orientation into shaping students' perception of their classroom assessment, allowing instructors to modify, adjust and enhance their assessment practices for improved learning outcomes.

The findings demonstrate that the perceptions of mastery goal oriented students significantly contrasted with those with performance goal orientation. The overall experiences

of students in the mastery group were reported to be positive about the assessment. The students in that group perceived assessment as a part of classroom instruction that contributed towards learning, attaining mastery and acquisition of skills. To them, assessment was an opportunity that motivated them to prepare, revise and demonstrate their understanding, which corroborates the claims of Carey (2014) that assessment preparation helps learners to organise information in such that way that it facilitates better retrieval which in turns enhances their performance. Students who seek to master the concept would be enthusiastic and willing to participate in classroom assessments and get continuous feedback on their performance.

The literature suggests that students in higher education view provision of feedback as a crucial support for their learning (Struyven, Dochy, and Janssens 2005). However, contrary to this, students in performance orientation group demonstrated primary concern for the grades received and avoided discussion. They showed least concern on getting feedback on their performance in terms of knowing how they and others approached a certain assessment task, because students with performance goal orientation perceive feedback as an evaluation and judgment about themselves, whereas students with mastery goal orientation view feedback as a tool to improve their weaknesses and develop competencies for mastery (VandeWalle 1997).

A major observation that requires attention in these findings is that a number of students in the performance oriented group were in-service teachers (as compared to the mastery group that had pre-service teachers in the majority), with significant work experience, and their classroom comprised students who were also their professional colleagues. This is understood as a potential explanation for these students to avoid public discussion or open feedback on their assessment performance, because students with performance orientation fear evaluation

and tend to avoid negative judgments (Jang et al. 2015). Moreover, they also believe that their abilities are fixed and uncontrollable; therefore, feedback would not make much difference to their performance (Dweck and Leggett 1988). This observation corroborates the findings of Okun et al. (2006) who reported that older participants are more performance oriented as compared to younger participants who are mastery oriented.

The findings also highlight that students' preferences on modes of assessment also differ on the basis of their goal orientation. In the current context of assessment in higher education, a great emphasis is being placed on applying innovative assessment practices that produce self-directed and autonomous learners. However, students with performance orientations who only value the end product of the assessment, and not the process, would fail to benefit themselves with these modes of assessment. These students showed their preferences for assessment modes that did not require much effort and use of deep learning strategies; whereas, in the mastery oriented group students preferred assessment modes that were challenging and allowed them to demonstrate their understanding (Schunk 1996; Anderman and Patrick 2012). How students approach assessment tasks and how they respond in terms of the quantity and quality of their effort is determined by their goal orientation.

Another significant finding that has emerged is the variability in students' feelings and emotions for classroom assessment on the basis of their goal orientations. The vast literature (e.g. Ames and Archer 1988; Elliot and Harackiewicz 1996; Middleton and Midgley 1997) that defines the characteristics of students on the basis of their goal orientation has hardly ever differentiated the two on the basis of emotions and feelings. The data suggested that the two groups shared contrasting feelings and emotions. The performance oriented group associated negative feelings with classroom assessment that, according to them, also contributed to their

poor experiences and maladjustments in university life. Moreover, the negative feelings reported by the students such as anxiety, depression, pressure and burden are associated with students' personal characteristics and learning patterns. For example, students with good learning skills are more confident of their academic ability and prefer challenging tasks, and also demonstrate persistence in terms of failure; therefore, they are less likely to experience negative emotions (Birenbaum and Feldman 1998; Trigwell, Ellis, and Han 2012). Furthermore, the literature suggests that these learning patterns are directly influenced by the type of orientation students adopt (Ames and Archer 1988; Meece, Blumenfeld, and Hoyle 1988).

Implications

Brown, Henry, and Mark (2014) consider testing and assessment to be central to effective learning, since the process encourages learners to adapt their thinking and ideas, practice and organise newly acquired information for easy retrieval. Therefore, it is important for all the stakeholders in institutions of higher education to create conditions that facilitate positive experiences of assessment among students. That examination grades are acknowledged as the most reliable form of performance evaluation (Harackiewicz et al. 2002) in academic settings suggests that students holding performance goal orientation should not necessarily be considered maladaptive. Students' goal orientations may not be completely mutually exclusive; it is plausible that individuals may be focused on earning a good grade as well outperforming others who they perceive as a challenge or equally competent (Meece and Holt 1993; Anderman and Maehr 1994; Button, Mathieu, and Zajac 1996). Harackiewicz et al. (2002) emphasise that the mastery and performance goals demonstrate an individuals' belief about competence and ways of pursuing competence. However, the other factors which define

performance oriented individuals' orientation for learning and achievement, such as the belief that abilities are fixed (Dweck and Leggett 1988; Barron and Harackiewicz 2001), may prove maladaptive for their learning and must be handled judiciously.

The insights from the present study suggest implications for meaningful assessment aligned with previous studies that recommended changing the goal structure of the classroom for learning (Ames 1992; Church, Elliot, and Gable 2001). For assessment purposes, instructors' motivational practices and university grading policies should encourage students to focus more on learning, mastery and acquisition of skills, rather than merely focusing on grades or evaluation of their ability. The online availability of information and reading resources has diminished the value of attending face-to-face classes (Toles 2009; BBC 2013). Most students attend classes to fulfil the attendance requirement for acquiring a degree; therefore, it is important to employ assessment methods that are engaging and promote value for learning, rather than emphasising acquiring grades to pass examinations (Kaur, Noman, and Nordin 2016).

In order to foster goal orientations that facilitate value for learning over grades, instructors can rely upon information from the developmental perspective on mature learners (Richardson 2006), that suggests that goal orientations are adaptive at different stages of academic lives (Zimmerman and Kitsantas 1997; Martin et al. 2008). Students' orientations are guided by the classroom contexts and the nature of requirements to be fulfilled (Urdu, Midgley, and Anderman 1998). At university level, instructors should encourage students to acquire skills for employability purposes and professional advancement, and avoid social comparisons in the class. In similar contexts, instructors can examine deeply students' beliefs about learning and assessment in higher education that significantly affect their learning and

adjustment at university level (Kember 2010). Classroom environments that foster beliefs that knowledge is malleable and can be improved with effort would facilitate students to develop goals that view assessment, testing and feedback as a way to improve learning rather than a threat to their self-esteem or a source of embarrassment in front of others.

Limitations and recommendations

The study provides insights for higher education practitioners on how students' mastery and performance goal orientation can influence their perception of classroom assessment. However, the findings have significant limitations in terms of personal and contextual factors. The participants were a mix of in-service and pre-service teachers; therefore, an investigation with a larger number of samples from other backgrounds would yield beneficial information on this topic. Furthermore, it would be interesting to know whether the outcomes of the study would be repeatable in another cultural context.

The examination of the context and the findings of the present study suggested that older students or professionals who enrol for postgraduate studies have goals that are more focused on social approval and social solidarity, such as acquiring master's degree for promotion requirement at school. Therefore, we recommend future studies to include cultural as well as social goals (Shim and Ryan 2012) for evaluating students' perception towards assessment. Since the present study focused only on mastery and goal orientation to explore students' perceptions towards assessment, inclusion of performance-approach and performance-avoidance orientations as well would contribute significantly in understanding the role of goal orientations for assessment purposes.

References

- Ames, C. 1992. "Classrooms: Goals, Structures, and Student Motivation." *Journal of Educational Psychology* 84: 261–271.
- Ames, C., and J. Archer. 1988. "Achievement Goals in the Classroom: Students' Learning Strategies and Motivation Processes." *Journal of Educational Psychology* 80: 260–267.
- Anderman, E., and M. L. Maehr. 1994. "Motivation and Schooling in the Middle Grades." *Review of Educational Research* 64: 287–309.
- Anderman, E., and H. Patrick. 2012. "Achievement Goal Theory, Conceptualization of Ability Intelligence, and Classroom Climate." In *Handbook of Research on Student Engagement*, edited by S. Christenson, A. Reschly, and C. Wylie, 173–191. New York: Springer.
- Association of American Colleges and Universities. 2016. *Higher Education Learning Outcomes Assessment Movement Moves Away from Standardized Tests, according to New National Survey*. Association of American Colleges and Universities. Accessed May 6, 2017. <https://www.aacu.org/press/press-releases/higher-education-learning-outcomes-assessment-movement-moves-away-standardized>.
- Ayres, L., and K. A. Knafl. 2012. "The Sage Encyclopedia of Social Science Research Methods." In *Typological Analysis*, edited by Lisa M. Given, 901–902. Thousand Oaks, CA: Sage.
- Barnett, R. 2007. "Assessment in Higher Education: An Impossible Mission?" In *Rethinking Assessment in Higher Education*, edited by D. Boud and C. Falchikov, 29–40. London: Routledge.

- Barron, K. E., and J. M. Harackiewicz. 2001. "Achievement Goals and Optimal Motivation: Testing Multiple Goal Models." *Journal of Personality and Social Psychology* 80 (5): 706–722.
- BBC. 2013. *Massive Open Online Courses – Threat or Opportunity?*, July. Accessed May 6, 2017. <https://www.bbc.com/news/education-23069542>.
- Birenbaum, M. 1997. "Assessment Preferences and Their Relationship to Learning Strategies and Orientations." *Higher Education* 33: 71–84.
- Birenbaum, M., and R. A. Feldman. 1998. "Relationships between Learning Patterns and Attitudes towards Two Assessment Formats." *Educational Research* 40 (1): 90–98.
- Brown, P. C., L. R. Henry, and A. M. Mark. 2014. *Make It Stick*. Cambridge, MA: Belknap Press.
- Button, S. B., J. E. Mathieu, and D. M. Zajac. 1996. "Goal Orientation in Organizational Research: A Conceptual and Empirical Foundation." *Organizational Behavior and Human Decision Processes* 67 (1): 26–48.
- Carey, B. 2014. *How We Learn: The Surprising Truth about When, Where, and Why It Happens*. New York: Random House.
- Cartney, P. 2010. "Exploring the Use of Peer Assessment as a Vehicle for Closing the Gap between Feedback given and Feedback Used." *Assessment & Evaluation in Higher Education* 35 (5): 551–564.
- Church, M. A., A. J. Elliot, and S. L. Gable. 2001. "Perceptions of Classroom Environment, Achievement Goals, and Achievement Outcomes." *Journal of Educational Psychology* 93: 43–54.
- Constas, M. A. 1992. "Qualitative Analysis as a Public Event: The Documentation of Category Development Procedures." *American Educational Research Journal* 29: 253–266.
- Dansereau, D. F. 1985. "Learning Strategy Research." In *Thinking and Learning Skills: Relating Instruction to Basic Research*, edited by J. Segal, S. Chipman, and R. Glaser, 209–240. Hillsdale, NJ: Erlbaum.
- Dweck, C. S. 1986. "Motivational Processes Affecting Learning." *American Psychologist* 41: 1040–1048.

- Dweck, C. S., and E. L. Leggett. 1988. "A Social-cognitive Approach to Motivation and Personality." *Psychological Review* 95: 256–273.
- Elliot, A. J., and J. M. Harackiewicz. 1996. "Approach and Avoidance Achievement Goals and Intrinsic Motivation: A Mediational Analysis." *Journal of Personality and Social Psychology* 70: 461–475.
- Gibbs, G. 1999. "Using Assessment Strategically to Change the Way Students Learn." In *Assessment Matters in Higher Education: Choosing and Using Diversity Approaches*, edited by S. Brown and A. Glasner, 41–53. Buckingham: Open University Press.
- Griffin, R. W. 2005. *Management*. 7th ed. Boston, MA: Houghton Mifflin.
- Harackiewicz, J. M., K. E. Barron, and A. J. Elliot. 1998. "Rethinking Achievement Goals: When are they Adaptive for College Students and Why?" *Educational Psychologist* 33 (1): 1–21.
- Harackiewicz, J. M., K. E. Barron, P. R. Pintrich, A. J. Elliot, and T. Thrash. 2002. "Revision of Achievement Goal Theory: Necessary and Illuminating." *Journal of Educational Psychology* 94: 638–645.
- Jang, E. E., M. Dunlop, G. Park, and E. H. van der Boom. 2015. "How Do Young Students with Different Profiles of Reading Skill Mastery, Perceived Ability, and Goal Orientation Respond to Holistic Diagnostic Feedback?" *Language Testing* 32 (3): 359–383.
- Kaur, A., M. Noman, and H. Nordin. 2016. "Inclusive Assessment for Linguistically Diverse Learners in Higher Education." *Assessment & Evaluation in Higher Education* 42 (5): 756–771.
- Kember, D. 2010. "Beliefs about Knowledge and the Process of Teaching and Learning as a Factor in Adjusting to Study in Higher Education." *Studies in Higher Education* 26 (2): 205–221.
- Liem, A. D., S. Lau, and Y. Nie. 2008. "The Role of Self-efficacy, Task Value, and Achievement Goals in Predicting Learning Strategies, Task Disengagement, Peer Relationship, and Achievement Outcome." *Contemporary Educational Psychology* 33: 486–512.
- Lincoln, Y., and E. Guba. 1985. *Naturalistic Inquiry*. Beverly Hills, CA: Sage.

- Martin, A. J., H. W. Marsh, A. Williamson, and R. L. Debus. 2003. "Self-handicapping, Defensive Pessimism, and Goal Orientation: A Qualitative Study of University Students." *Journal of Educational Psychology* 95: 617–628.
- Martin, A. J., H. W. Marsh, A. Williamson, R. L. Debus, and L. E. Malmberg. 2008. "Performance and Mastery Orientation of High School and University/College Students." *Educational and Psychological Measurement* 68 (3): 464–487.
- McCollum, D. L. 2004. "Development of Integrated Taxonomy of Social Goals." Doctoral diss., Penn State, *Dissertation Abstracts International* 65 (9-A): 3279.
- Meece, J. L., P. C. Blumenfeld, and R. H. Hoyle. 1988. "Students' Goal Orientations and Cognitive Engagement in Classroom Activities." *Journal of Educational Psychology* 80: 514–523.
- Meece, J. L., and K. Holt. 1993. "A, Pattern Analysis of Students' Achievement Goals." *Journal of Educational Psychology* 85: 582–590.
- Middleton, M., and C. Midgley. 1997. "Avoiding the Demonstration of Lack of Ability: An Underexplored Aspect of Goal Theory." *Journal of Educational Psychology* 89: 710–718.
- Midgley, C., A. Kaplan, M. Middleton, T. Urdan, M. L. Maehr, L. Hicks, E. Anderman, and R. W. Roeser. 1998. "The Development and Validation of Scales Assessing Students' Achievement Goal Orientations." *Contemporary Educational Psychology* 23: 113–131.
- Murphy, K. P., and P. Alexander. 2000. "A Motivated Exploration of Motivation Terminology." *Contemporary Educational Psychology* 25: 3–53.
- Okun, M. A., C. Fairholme, P. Karoly, L. S. Ruehlman, and C. Newton. 2006. "Academic Goals, Goal Process Cognition, and Exam Performance among College Students." *Learning and Individual Differences* 16: 255–265.
- Pintrich, P. R., and D. H. Schunk. 2002. *Motivation in Education: Theory, Research, and Applications*. 2nd ed. Upper Saddle River, NJ: Merrill.
- Richardson, J. T. E. 2006. "Mature Students in Higher Education: I. A Literature Survey on Approaches to Studying." *Studies in Higher Education* 19 (3): 309–325.
- Schunk, D. H. 1996. "Goal and Self-evaluative Influences during Children's Cognitive Skill

- Learning.” *American Educational Research Journal* 33: 359–382.
- Shim, S. S., and A. M. Ryan. 2012. “What Do Students Want Socially When They Arrive at College? Implications of Social Achievement Goals for Social Behaviors and Adjustment during the First Semester of College.” *Motivation and Emotion* 36: 504–515.
- Spiller, D. 2015. *Principles of Assessment for Learning*. Teaching Development Unit. University of Waikato. Accessed January 9, 2017. www.waikato.ac.nz/tdu/pdf/Booklets/2015/AssessmentPrinciples.pdf.
- Struyven, K., F. Dochy, and S. Janssens. 2005. “Students’ Perceptions about Evaluation and Assessment in Higher Education: A Review¹.” *Assessment & Evaluation in Higher Education* 30 (4): 325–341.
- Toles, J. L. 2009. “The Virtual Classroom: An Enhancement or Replacement to Traditional Education?”. Undergraduate Research Awards. Paper 3. Accessed May 6, 2017. https://scholarworks.gsu.edu/univ_lib_ura/3.
- Traub, R. E., and K. MacRury. 1990. “Multiple-choice vs. Free-response in the Testing of Scholastic Achievement.” In *Tests und trends 8: Jahrbuch der padagogischen diagnostik*, edited by K. Ingenkamp and R. S. Jäger, 128–159. Weinheim: Beltz Verlag.
- Trigwell, K., R. A. Ellis, and F. Han. 2012. “Relations between Students’ Approaches to Learning, Experienced Emotions and Outcomes of Learning.” *Studies in Higher Education* 37 (7): 811–824.
- Urdu, T., C. Midgley, and E. Anderman. 1998. “The Role of Classroom Goal Structure in Students’ Use of Self-handicapping Strategies.” *American Educational Research Journal* 35: 101–122.
- VandeWalle, D. 1997. “Development and Validation of a Work Domain Goal Orientation Instrument.” *Educational and Psychological Measurement* 57 (6): 995–1015.
- VandeWalle, D., and L. L. Cummings. 1997. “A Test of the Influence of Goal Orientation on the Feedback-seeking Process.” *Journal of Applied Psychology* 82 (3): 390–400.
- Zeidner, M. 1987. “Essay versus Multiple-choice Type Classroom Exams: The Student’s Perspective.” *The Journal of Educational Research* 80 (6): 352–358.

Zimmerman, B. J., and A. Kitsantas. 1997. "Developmental Phases in Self-regulation: Shifting from Process Goals to Outcome Goals." *Journal of Educational Psychology* 89: 29–36.

