Virtual versus face to face peer evaluations: On the net, I may not know you, but I know your work

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A R T I C L E   I N F O

A B S T R A C T

Peer evaluations allow individuals to express their assessment of the contributions of group members. Having this opportunity is popular in both face-to-face and online environments. Peer evaluations provide a sense of empowerment and distributive justice to individuals. The present study examines differences concerning the utilization of peer evaluations for face-to-face groups and online groups. Significant differences exist in the peer evaluations that these two groups reported. Online group members are more likely to differentiate their evaluations of fellow group members. In addition, online group members tend to differentiate peer evaluations to a greater extent. Implications for managing groups and future research are discussed.

1. Introduction

Virtual groups and face-to-face may interact in a fundamentally different manner; however, the goals are normally the same. Complete the task or assignment. The challenge for instructors is to foster an environment that promotes learning and cooperation. One commonly used technique to do so is peer assessments. Peer assessments allow group members to make internal group assessments that could prove difficult for the instructor. Unfortunately, peer assessments have not been thoroughly examined in virtual settings. Do virtual group members evaluate each other in the same manner as face-to-face groups? As group interaction changes from face-to-face to virtual, assumptions of similarity concerning information processing and peer assessments may be ill advised.

This study investigates peer evaluations in face-to-face and virtual groups. Our objectives are to assess student perceptions concerning the utilization of peer evaluations, to identify potential differences between face-to-face and virtual groups concerning the exercise of peer evaluations, and to identify intensity differences in the utilization of peer evaluations. Hopefully, the resulting information will educate instructors and administrators on a contextual difference associated with the shift from face-to-face to virtual environments.

The study begins with a review of the literature concerning group processes and peer evaluations. This is followed by a comparison of online and face-to-face group processes. Next, hypothesis are presented, followed by methodology, results, conclusions and recommendations.

2. Literature

The following literature review examines group projects as a learning tool. Numerous problems and suggestions are covered. Peers evaluations, attitudes toward peer evaluations as distributive justice, and peer evaluation errors are discussed next. The final

section compares face-to-face and online groups.

2.1. Group projects

Tasking a group with the completion of a project is relatively common. Classroom settings utilize groups due to their greater resources, stimulation of creativity, positive impact on comprehension, and development of interpersonal skills (Alavi, 1994; Burke, 2011). Additionally, collaborative work helps students develop and apply concepts that are discussed in class (Nagel, Ebert-May, Weber, & Hodder, 2005). The disruptive issues that are routinely associated with groups (e.g. pressure to conform, individual dominance, social loafing, additional time) while challenging are generally considered manageable.

Team work can present students with an added dimension to the learning environment. The necessity of coordination, influence, and negotiation may become valuable learning elements in addition to course subject matter. The instructor's task is to construct an environment that promotes successful completion of the project while reducing negative team sentiment ("I Hate Working in Groups"). Such adverse reactions to working in groups can have detrimental consequences both in the classroom and in future careers (Anson and Goodman, 2014).

Student groups contribute multiple perspectives to projects which can assist in the development and verification of conclusions. This group interaction may reveal different views and enable a more comprehensive understanding to emerge (Alavi, Wheeler, & Valacich, 1995). A study by Kemery and Stickney (2014) on a multifaceted multilevel approach to teamwork learning showed significantly higher achievement marks for group members. More than 75% of the time, teams achieved synergy (bested their best performer) on class assessments.

2.2. Peer evaluations

While potentially beneficial, incorporating teamwork into the classroom is often problematic due to uneven efforts and varying levels of participation by individual team members (Gueldenzoph & May 2002). Many students have negative perceptions of group projects due to experiences with dysfunctional groups (Fiechtner & Davis, 1985), and free riding or social loafing problems (Brooks & Ammons, 2003; Mello, 1993). One intervention that might ease this apprehension would be to incorporate peer evaluations into team projects. Peer rating is the process of having group members rate each other on a given set of performance or personal characteristics against a set of rating scales. Peer assessments whether formal or informal are probably inevitable in group projects. Social Identity Theory suggests that the mere or even imagined presence of people in social situations creates an atmosphere of evaluation (Ashforth & Mael, 1989).

Group members often work closely together and have a greater number of accurate behavioral observations (Greguras, Robie, & Born, 2001). The evaluation of individual contributions to group work can positively influence a group's ability to work well together (Druskat & Wolff, 1999) and help to ensure that team members contribute their fair share of the work (Karou & Williams, 1993). While supervisors may be able to directly identify group outcomes, internal group contributions may be beyond their measurement. Calling upon group members to make that internal differentiation has been shown to be appropriate (Anson & Goodman, 2014; Topping, 1998). Tsayl and Brady (2010) found that a positive and significant relationship existed between student involvement in cooperative learning and peer evaluations. The heavily-engaged students want to evaluate their peers. Not using peer evaluations could be detrimental to the group process especially when uneven efforts exist. However, before delegating even a portion of the performance evaluation responsibility to team members, supervisors need a clear understanding of the reasons for doing so, the reliability of peer evaluations, and the limitations of these assessments.

As Murphy and Cleveland (1995) discuss, there are three main reasons why peers may be the single best source of performance information. First, peers generally work closely together. This proximity increases peers' opportunities to observe performance-related behaviors which presumably will increase the accuracy of their ratings (Wherry & Bartlett, 1982). Second, peers probably observe a less-biased sample of behavior than other rater sources. Employees may alter or censor their behaviors while around supervisors or customers in order to project a certain image, but may be more likely to display their typical levels of performance when around their peers. Third, because peers generally are more numerous than supervisors, aggregating their ratings should increase the reliability of their ratings and remove some of the biases of individual raters. In addition to these potential advantages, the shift from individually-based work to team-based work in organizations has increased the relevancy and importance of peer feedback.

2.3. Distributive justice

Before discussing validity and reliability issues, it is worth noting that students seem to enjoy having the option of evaluating their peers. Peer evaluations have been reported as promoting a sense of distributive justice (Kilpatrick, Linville, & Stout, 2001). A belief that the distribution of awards is fair has been shown to be negatively related to social loafing (Liden, Wayne, Jaworski, & Bennett, 2004; Karriker & Williams, 2009). Students may also choose to withhold effort if they believe that the benefits of social loafing outweigh the cost of their lack of participation (Murphy, Wane, Liden, & Erdogan, 2003).

2.4. Peer evaluation errors

According to Farh, Cannella, and Bedeian (1991), peer ratings are likely to exhibit almost every form of rater bias that has been