

A UTAUT-based analysis of the Adoption Factors of Student Evaluations of Teaching

My Hami Doan
doanm4@mymail.nku.edu

Nicholas Caporusso
caporusson1@nku.edu

Bikash Acharya
acharyab2@mymail.nku.edu

Priyanka Pandit
panditp1@mymail.nku.edu

Sushant Shrestha
shresthas11@mymail.nku.edu

Na Le
len4@mymail.nku.edu

Rajani Khatri
khatrir2@mymail.nku.edu

Will Pond
pondw1@mymail.nku.edu

Human-Computer Interaction Lab
Northern Kentucky University
Highland Heights, USA

Abstract

Student Evaluations of Teaching are an essential component of educational assessment that provides valuable feedback to instructors and their institutions. Indeed, their effectiveness depends on students' active participation and engagement with the assessment process itself. Identifying the factors that influence students' adoption of teaching evaluation systems is crucial for increasing response rates, which ultimately leads to better validity and utility of the assessment. However, adoption dynamics of course evaluations received little attention, especially in computer science disciplines. This paper presents the findings of a study aimed at identifying the factors that motivate and hinder students from participating in the course feedback process. To this end, we designed a survey using the Unified Theory of Acceptance and Use of Technology and distributed it among college students to assess their

experiences with the current evaluation system. Our findings show that while students perceive the importance of providing professors with feedback to improve their teaching performance, other extrinsic aspects, such as effort and facilitating conditions, together with the uncertainty of whether their input is acknowledged and acted upon, hinder them from filling out Student Evaluations of Teaching.

Keywords: Student Evaluation of Teaching (SET), Educational assessment, Unified Theory of Adoption and Use of Technology, UTAUT Model.

1. INTRODUCTION

The significance of student feedback in shaping instructional quality, with specific regard to higher education, has been acknowledged in a large body of scholarly literature (Okogbaa, 2016). Given its effectiveness in decision-making on important issues, such as teaching quality, course organization, assessment, and learning resources (Okogbaa, 2016), different types of Student Evaluation of Teaching (SET) systems have been designed to capture the value of ongoing, constructive feedback, which not only informs teachers about their practice but also stimulates reflection and dialogue between all stakeholders, including students, educators, and administrators (Mandouit, 2018). In fact, SET serves multiple purposes that contribute to the overall quality of teaching and learning, including providing faculty with useful feedback to improve their pedagogy (Boysen, 2016), supporting administrators in their annual faculty performance evaluations when making merit pay, promotion, and tenure decisions (Jaquett et al., 2017; Terry et al., 2017), and assisting students in course and instructor selection decisions, thanks to the possibility to provide students with information about the perceived teaching styles and course demands of different instructors (Stroebe, 2020).

Previous research explored instructors' perceptions of and reactions to SET based on various aspects of teaching. Several studies found that formal evaluations, particularly those using standardized instruments with multiple dimensions, raise awareness among teachers and encourage them to tailor their pedagogy and course design and delivery to meet students' preferences (Boysen, 2016). In the context of the review and tenure process, untenured instructors are more likely to use SETs to inform their teaching practice compared to tenured instructors (Omer et al., 2023). Also, previous studies found that, as instructors' practices are shaped by their beliefs about students' needs and capabilities, SET can be useful in reframing teachers' perspectives to align with their students better (Lee et al., 2016). However, the validity and reliability of SETs are subjects of ongoing

debate due to their susceptibility to numerous factors beyond teaching quality. For instance, previous research identified significant variance in SETs attributable to differences among teachers, courses, and individual student perceptions. This variability is further complicated by disciplinary differences, as (Yu et al., 2022) noted that students in STEM fields generally provide higher ratings compared to their peers in non-STEM disciplines. Consequently, instructors in non-STEM fields, who are more likely to face harsher evaluations, tend to view SETs more negatively than their STEM counterparts (Omer et al., 2023).

On the contrary, students' opinions about SET have not been explored as extensively. Previous studies found that students perceive teaching evaluation as an important process for improving teaching and giving them a voice (Sullivan et al., 2024). Also, regardless of the type of institution, academic discipline, class standing, and respondent gender, students generally hold positive views about the evaluation process (Kite et al., 2015) and see themselves as qualified to assess teaching performance (Huxam et al., 2017; Suárez et al., 2022). Simultaneously, several studies reported overall low completion rates (Brown & Kosovich, 2015). Specifically, the factors motivating their engagement with SET and preventing them from providing their teachers with feedback have received less attention. Indeed, understanding students' adoption of teaching evaluation systems is especially crucial to enhancing the quality of teaching and adapting to the evolving needs of students in the field of computer science.

In addition to traditional official SET tools, third-party review platforms and websites offer students a more informal and, in many cases, anonymous means of sharing their feedback. For instance, RateMyProfessors.com (RMP) is a popular website where students can anonymously rate professors on difficulty, clarity, and overall quality. In addition, students can leave public reviews about their experiences. RMP, active in the United States, Canada, and the United Kingdom, has quickly become a popular resource with millions of user-generated ratings and

comments. RMP evaluations can significantly influence students' perceptions and self-efficacy in courses. Students often turn to RMP to fill an information gap, particularly when official SETs are not readily available or easily accessible to them (Boswell, 2020). Therefore, addressing the lack of research on the adoption factors that motivate and prevent students from filling out SETs also involves a closer examination of the reasons why students engage with alternatives to official SETs.

2. RELATED WORK

SETs are particularly crucial in computer science disciplines where the rapid advancement of technology and evolving demands of the job market present significant challenges for educators and institutions. The introduction of new systems, languages, and innovations requires curricula to adapt and remain current. Also, educators face the constant challenge of identifying and addressing the changing needs of their students. In this scenario, although prior research has emphasized the need for a more integrated, relevant, and innovative approach to evaluating teaching, several studies found that even skill-oriented CS curricula often lack connection to real-world challenges students face after graduation (Weymouth et al., 2021) and computer science instructors struggle to continually adapt their course content and delivery with respect to a technological scenario evolving quickly (Hai-zhe, 2014). To this end, SETs and other types of evaluations, including mid-semester ones, can effectively address these challenges by providing valuable feedback to educators, enabling them to identify areas for improvement (Sozer et al., 2019).

Student teaching evaluations are crucial in computer science education, offering insights into course effectiveness and faculty performance. Research highlights that computer science courses often receive lower evaluations compared to other disciplines, underscoring the need for tailored teaching strategies (Wang et al., 2023). These evaluations, however, are subject to various influences such as course characteristics, level, and size (Wang et al., 2023). Additionally, in computer science departments, teaching-track faculty positions often heavily depend on student evaluations for career advancement, despite concerns about the inherent biases of these assessments (Glebova et al., 2024). Biases, including those related to gender, can skew evaluations, as found by (Santiesteban et al., 2022). Despite these issues, integrating evaluation practices with research in computing

education is crucial for validating claims and strengthening empirical approaches in the field (Decker et al., 2018). As computer science education evolves, it is essential to develop more comprehensive and unbiased evaluation methods to ensure fair assessments and continuous improvement in teaching quality.

A study (Ying, 2010) evaluated students' understanding of teaching quality and their assessment criteria, which can inform the design of SET tools and systems. Their findings revealed that most students recognize the importance of teaching quality evaluation and prioritize factors such as learning outcomes, teacher attitudes, and teaching ability. However, several other studies have raised concerns about the validity of SET, as the questions used in the evaluation are often teaching-oriented, non-specific, and satisfaction-based (Borch et al., 2020). Additionally, the accuracy of student evaluations in higher education is dubious due to multiple sources of measurement error (Quansah et al., 2024). To address this, researchers proposed a questionnaire that considers specific factors of teaching quality, such as the ability to transfer knowledge, instructor accessibility, and social skills, to obtain a more accurate and comparable assessment of teaching quality across universities (Veveře & Kozlinkis, 2011). Moreover, the study found that official course evaluations, which are typically conducted at the end of the term or semester, are not conducive to realizing immediate improvements. Thus, a comprehensive evaluation system that integrates multiple sources, such as student feedback, self-assessment, peer review, and teaching portfolios, is needed (Constantinou & Wijnen-Meijer, 2022).

Another concern is the effectiveness and outcome of SET. Student evaluations alone are insufficient for evaluating teaching effectiveness, and a refocus on outcome-based academic standards is needed (Cui et al., 2022). Therefore, SETs should be used cautiously to prove teaching effectiveness (Ali et al., 2021). Data generated by student evaluation systems should lead to genuine and lasting improvements in teaching quality and student learning (Palmer, 2012). They suggest making course evaluation outcomes publicly available to ensure the long-term impact of the evaluation process. Despite ongoing debates about whether SET results should be shared publicly, there is currently little evidence of implementing these suggestions and a lack of studies evaluating whether public availability of SET outcomes leads to better teaching and learning outcomes. However, several studies reported poor engagement with and participation

in SET (Chapman & Joines, 2017).

In contrast to official course evaluations, platforms like Rate My Professors (RMP) offer publicly accessible ratings and potentially serve as a feedback loop between student opinions and academic performance. According to previous studies, exposure to positive RMP evaluations leads to higher ratings of instructor competence, increased student engagement, and better quiz performance compared to negative evaluations (Reber et al., 2017). While research (Sonntag et al., 2009) indicates a positive correlation between RMP ratings and official evaluations, suggesting some validity, concerns have been raised regarding gender biases against female professors, especially in STEM fields (Katrompas & Metsis, 2021). Nevertheless, the influence of RMP on students' course selection decisions has been underscored: positive comments about professors on RMP can positively influence students' evaluations (Scherr et al., 2013), and students show a greater tendency to enroll in course sections taught by instructors with higher ratings (Brown et al., 2015). Considering the significant impact of RMP on students' decision-making, understanding the factors that incentivize their participation in the evaluation process could enhance the SET system, improving its validity, representation, and sustainability.

Whether through official SETs or alternative systems, understanding the factors that motivate or hinder students from contributing their feedback is key to identifying strategies that can drive engagement. In (Chapman & Joines, 2017), the authors surveyed faculty members to discover approaches for incentivizing students and increasing SET response rates. The study revealed three key tactics: (1) emphasizing the importance of class evaluations during lectures, (2) cultivating a classroom atmosphere of mutual respect between instructor and students, and (3) informing students about how their feedback contributes to course modifications. For instance, previous research suggests that faculty members should review past evaluation results and highlight any changes to show students that their feedback is valued (Medina et al., 2019). This approach may motivate students to participate in future evaluations. Specifically, the study found that response rates increase when instructors demonstrate a strong interest in receiving evaluations (Young et al., 2019). Several studies emphasize the importance of continuous monitoring and communication with students throughout the evaluation process to motivate their participation. In particular, Gordon (Gordon

et al., 2018) found that rewarding students with additional points toward an assignment or test can be an effective strategy.

While these studies have identified specific strategies to improve student participation in teaching evaluations, focusing on isolated factors may not be sufficient to fully address low response rates, especially considering that SET is a complex process influenced by multiple interrelated elements. Therefore, a more comprehensive, holistic approach is needed to understand and effectively improve SET adoption among students.

Researchers have suggested extending the Technology Acceptance Model (TAM) to gain a deeper understanding of the factors influencing students' intention to participate in computer-based or online course evaluations. Previous research found that perceived usefulness is a key factor driving individuals' intention to use technology, while perceived ease of use can affect intention directly and indirectly by shaping perceptions of usefulness (To & Tang, 2019). The study further enhances the original TAM by incorporating additional factors such as subjective norm—students' perceptions of whether their teachers, classmates, or parents expect them to participate in evaluations—and perceived relevance, which refers to the extent to which students view participation as important and relevant to their overall academic experience. However, this area remains underexplored in educational research, and to the best of our knowledge, this is the only paper that has applied the Technology Acceptance Model (TAM) to understand the factors influencing course evaluation. To this end, we propose using the Unified Theory of Acceptance and Use of Technology (UTAUT) model (Venkatesh, 2003) in this paper, which would provide a more systematic approach to identifying the key factors affecting students' acceptance and use of tools for SET.

3. MATERIALS AND METHODS

The goal of our work is to provide an in-depth understanding of the specific adoption factors of SETs to ultimately aid the development of more effective strategies to incentivize students' participation in the evaluation process. Specifically, we are interested in the aspects that motivate students to fill out course evaluations as well as the factors that hinder them from participating in this process.

To this end, we utilized the UTAUT model

(Venkatesh, 2003), a widely recognized theoretical framework for evaluating an individual's willingness to adopt new technology. This model has been extensively applied within educational contexts to analyze the adoption of various types of innovative systems in higher education, from social networking to communication tools and platforms (Lewis et al., 2013). Although it can be applied to evaluate students' willingness to engage with SETs, it has not been utilized for this purpose before. The UTAUT model characterizes user adoption using the following dimensions, described in Figure 1.

- *Performance expectancy* indicates the degree to which an individual believes that using a particular technology will help them achieve gains in performance or accomplish specific tasks effectively. In the context of SET, performance expectancy relates to students' perceptions of how effective the evaluation process is in providing valuable feedback to instructors and improving the overall quality of teaching and learning. Therefore, they may assess the usefulness of SET based on their expectations of how their feedback can enhance teaching practices and academic outcomes.
- *Effort expectancy* refers to individuals' perceptions of how effortless it is to interact with SET tools. The goals are to (1) assess the perceived ease or difficulty of filling our course evaluation based on factors such as the accessibility of the evaluation platform, the user interface design, and the simplicity of the evaluation process and (2) discover if they influence students' willingness to engage with the system.
- *Social influence* encompasses external factors, such as peer recommendations and social norms, that impact individuals' acceptance and adoption of technology. Given that students' decisions to participate in the evaluation process can be influenced by social factors, including reminders from instructors and peer interactions, they have the potential to shape students' attitudes toward SET participation.
- *Facilitating conditions* focuses on the availability of resources, support, and infrastructure that facilitate the adoption and usage of a technology or system. In the case of SET, incentives (e.g., extra credits) provided by the instructors as well as clear instructions and guidance on how to navigate the system, can enhance students' participation in the evaluation process.
- *Intrinsic motivation* is the component that is often fueled by individuals' inherent interest and enjoyment in the task. Some students

might derive intrinsic satisfaction from the act of providing feedback and making a meaningful contribution to the academic community. They see value in the process itself, regardless of external or incentives.

We utilized the UTAUT model to design a survey consisting of 18 questions organized as follows. Questions 1-2 involved demographic and screening questions. We did not include questions about race and gender as they were deemed irrelevant descriptors for the objective of our study based on previous literature. Instead, we focused on factors such as class standing and GPA levels. Questions 3-5 indicated factors influencing their course selection process for both required and elective courses. Questions 6-10 asked participants to share factors influencing their adoption of SET and their preference for accessing SET results.

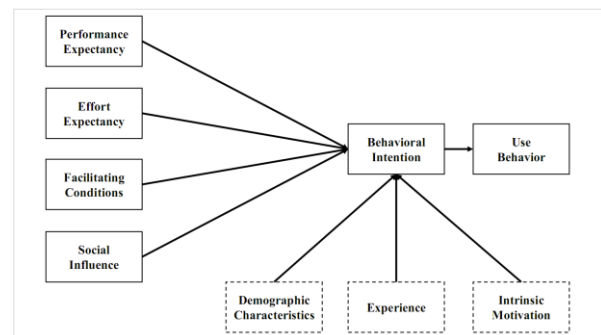


Figure 1 The UTAUT framework

In questions 11-16, participants were presented with a series of visualizations aimed at determining the types of information they wished to gain from SET and the preferred visual presentation methods. Questions 17-18 involved open-ended questions that enabled respondents to share additional thoughts, with the option for voluntary participation in follow-up interviews. The survey was disseminated via email and social media to over 500 students primarily enrolled at one university in the United States, though respondents were invited to share the questionnaire with their contacts.

4. RESULTS AND ANALYSIS

A total of 228 community college students from the Southeastern region of the United States, across various disciplines and primarily from undergraduate teaching populations, completed the survey in Spring 2024. The survey was self-reported. This school only uses online (computer-based) student teaching evaluations, which are sent out only at the end of the course to collect

student responses. Responses from a number of students (i.e., 76) who completed less than 47% of the survey were excluded from the analysis. Most participants were juniors (35.57%), sophomores (30.20%), and seniors (22.15%), with the remaining 12.08% being freshmen, as shown in (see Figure 2). In terms of GPA level, 43.62% reported that their GPA was higher than 3.75 on a scale of 4.0, 20.13% had a GPA from 3.50 to 3.74, 20.81% had a GPA from 3.00 to 3.49, whereas 7.33% reported that they had a GPA from 2.50 to 2.99. Two participants had a GPA below 2.50, and ten reported that they either did not know or did not want to share their GPA.

Motivating factors

Subsequently, we analyzed individual responses to reconcile them with the UTAUT dimensions in order to categorize the adoption factors that motivate students to complete course evaluations. Specifically, respondents were asked to rank possible options that engaged them with SETs. The respondent’s top choice was given the highest weight (i.e., 5), while their least preferred choice was assigned a weight of 1. Our analysis indicated that the strongest motivating factor for completing course evaluations is the belief that providing feedback will enhance the course, with a weighted average ranking of 3.65. This finding aligns with previous research (Chapman & Joines, 2017) highlighting students’ motivation coming from the potential impact of their feedback on course improvement (i.e., performance expectancy). Following closely behind is the incentive to fill out evaluations (i.e., 3.13), suggesting that external rewards or recognition also play a significant role in motivating students. Additionally, the ease of completing evaluations and the sense of responsibility to provide feedback to instructors resulted in moderately influential factors, scoring 3.01 and 2.62, respectively. These findings underscore the importance of streamlining the evaluation process and students’ perceived obligation to contribute constructively to instructional improvement. Finally, factors related to social influence, including the instructor prompting for their feedback and whether other students participate in SET, appear to have the least impact on the motivation to complete evaluations. This implies either a lack of effective influence from instructors, which was also emphasized in previous studies (Young et al., 2019) or that such encouragement does not impact student behavior significantly.

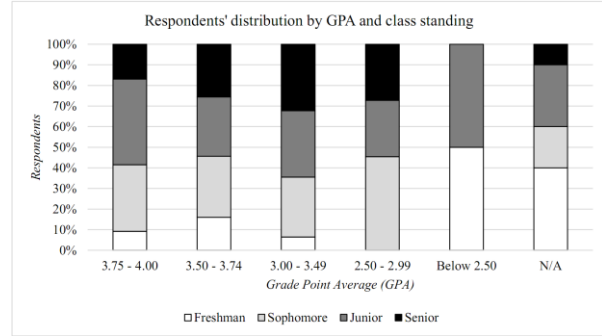


Figure 2 Distribution of respondents across class standings and GPA

Hindering factors

Then, we analyzed the factors that represent a barrier to the adoption of SET. A significant portion (32.11%) highlighted aspects related to time constraints (i.e., effort expectancy), the non-mandatory nature of evaluations (i.e., facilitating conditions), or that SET was not a priority for them (i.e., intrinsic motivation). This was followed by 22.63% of students citing a perceived lack of impact or importance attributed to the evaluations (i.e., performance expectancy), signaling a potential gap in understanding the value of feedback and its potential influence on instructional improvement. Additionally, 18.96% of respondents expressed disinterest in providing feedback (i.e., intrinsic motivation), while 14.07% mentioned the absence of encouragement from professors or peer influence as barriers to participation (i.e., facilitating conditions and social influence), further underscoring the role of instructor engagement in fostering student involvement, but also partially in contrast with our previous findings. Usability concerns regarding the evaluation form (i.e., effort expectancy) were identified by a relatively smaller percentage of students (7.34%).

Behavioral intention model

After analyzing the factors that motivate and hinder students’ adoption of SET, we used our results to create a behavioral intention model as specified by the UTAUT framework. Specifically, we utilized quantitative data from participants to determine the impact of each of the five dimensions of the UTAUT on the overall students’ behavioral intention to adopt SETs. To this end, we first associated each dimension with a weight, which was standardized on a scale from 0 to 1. Facilitating conditions, performance expectancy, and effort expectancy have weights of 0.25, 0.23, and 0.20, respectively, while intrinsic motivation received a weight of 0.17, and social influence has the least weight at 0.15.

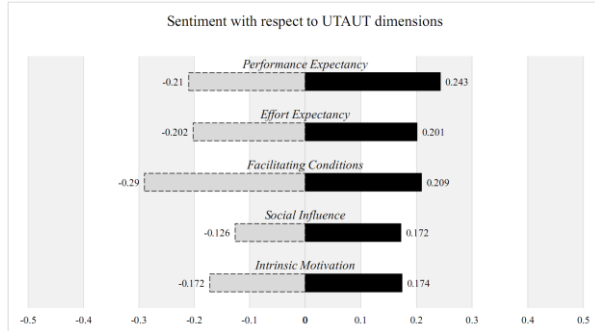


Figure 3 Weighted motivating (right) and hindering factors (left) influencing students' adoption of SET tools

Facilitating conditions, which include incentives that facilitate the participant process, such as the provision of extra credits, play the most significant role in driving adoption. With performance expectancy having the second highest weight, this indicates that students' belief in the potential impact of their feedback on course improvement serves as a primary motivator for engagement with SET. Effort expectancy, ranking third, includes factors such as system accessibility, user interface design, and the simplicity of the evaluation process. Intrinsic motivation ranks slightly higher than social influence, indicating its relatively minor impact on adoption. While intrinsic motivation, which includes aspects such as making a meaningful contribution and perceiving value in the evaluation process itself, is present, it is not as pronounced as other factors. Finally, social influence was reported to play a minimal role in adoption, with participants mentioning factors such as reminders from instructors and peer interactions. While peer and instructor influence may serve as gentle reminders, they are not significant drivers of student engagement with SET. Figure 3 shows the specific weight values for the motivating and hindering factors, associated with a positive sentiment and a negative sentiment, respectively.

Each factor's weight reflects its significance in motivating students to adopt SET. Additionally, we evaluated respondents' attitudes towards each factor to assess whether it motivates or hinders adoption. To accomplish this, we computed sentiment by aggregating multiple responses and normalizing them on a scale from -1 to 1, where a score of -1 indicates an absolutely negative attitude towards adoption, while 1 signifies an entirely positive willingness to adopt. Our analysis revealed that facilitating conditions had the most negative impact on adoption (-0.081) compared to other dimensions,

while respondents felt somewhat influenced by social factors (0.047). Moreover, respondents exhibited a positive sentiment towards performance expectancy (0.033), indicating their recognition of the potential performance benefits of providing feedback to enhance education quality. Specifically, in regard to students' sentiments toward sharing SET results with future students while maintaining anonymity, the majority (61.64%) expressed being moderately to highly willing to fill out course evaluations whereas a high proportion (32.19%) indicated that this would not impact their behavior. In contrast, when questioned about the perceived helpfulness of accessing course evaluation results before enrolling in a course, the responses leaned significantly toward positive sentiments. Approximately 91.78% of participants indicated varying degrees of perceived helpfulness, ranging from moderately helpful (21.23%) and slightly helpful (27.4%) to extremely helpful (43.15%). This underscores a strong endorsement of the publication of course evaluation results. Furthermore, the disparity between the two scenarios highlights the importance of perceived personal benefit in shaping students' attitudes toward evaluation processes. While the potential impact on future students may motivate some students to participate more actively, the direct benefits of accessing evaluation results for informed decision-making appear to resonate more strongly with most students.

Following the determination of weights and sentiment for each factor f , we calculated the actual behavioral intention as described in equation (1) to participate in SET.

$$BI = \sum_{f=1}^5 s_f \times w_f \quad (1)$$

Figure 4 presents specific weight and sentiment values for each factor and summarizes the calculated behavioral intention score outlined in the equation. The measured intention was -0.006 on a scale from -1 to 1, which, overall, does not suggest any specific intention to adopt (or lack thereof) SETs. As shown in Figure 4, and in contrast with the UTAUT model (i.e., Figure 1), we did not incorporate demographic aspects in our analysis, specifically regarding class standing and GPA. This limitation will be addressed in our future work. Finally, we were also interested in understanding whether students prefer to fill out official SETs or rely on other systems.

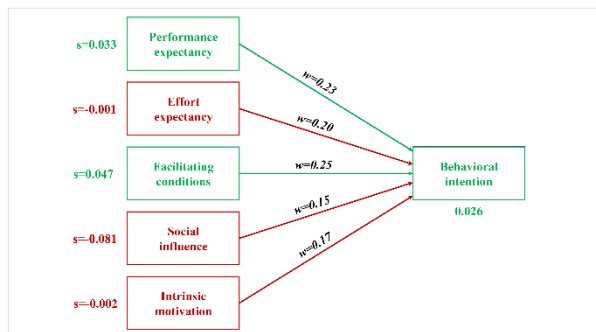


Figure 4 Calculated behavioral intention to adopt SETs based on UTAUT dimensions

Therefore, we asked them about the average number of course evaluations students complete per semester, encompassing both official course evaluations and RMP ratings. Responses showed that students typically complete 4.11 official course evaluations per semester while submitting an average of 1.43 RMP ratings. Furthermore, an analysis of this data based on GPA and class standing indicates no significant differences between various student groups. The number of responses from official course evaluations is 2.9 times higher than RMP for many reasons, primarily institutional encouragement and the provision of incentives such as extra credit for completing official evaluations.

6. CONCLUSION AND FUTURE WORK

In this paper, we utilized a novel approach to understanding the key adoption dynamics of SETs. Specifically, we applied the UTAUT model, which is widely utilized in many different contexts, to identify factors that influence the willingness of individuals to engage with any product or system. The model, which has not been employed before in this context, can provide additional insight into the adoption factors of SET. By leveraging UTAUT's established constructs, including performance expectancy, effort expectancy, social influence, facilitating conditions, and intrinsic motivation, this study aimed to offer a more in-depth understanding of the specific dimensions of adoption influencing students' willingness to participate in the evaluation of teaching. Our results do not indicate a specific preference in terms of overall adoption. This is because our findings show that specific dimensions of the UTAUT model act as opposing forces, with some (i.e., performance expectancy and social influence) positively contributing to students' willingness to fill out teaching evaluations and others (i.e., effort expectancy, facilitating conditions, intrinsic motivation) acting as hindering factors. Therefore, our study

suggests that specific interventions are needed on the latter dimensions to skew students' behavioral intention toward the positive side of the adoption spectrum.

This is consistent with previous studies about promoting student participation (Medina et al., 2019; Fjortoft, 2015). To enhance effort expectancy, evaluations could be administered during scheduled class time near the end of the semester or at times least likely to conflict with other assessments, deadlines, or students' personal commitments, thereby minimizing disruption to their schedules. For facilitating conditions, opportunities could be explored for student representation in course review committees or feedback sessions. Evaluations should be designed with clear, concise, and relevant questions that target key aspects of teaching effectiveness and course quality, avoiding overly lengthy or ambiguous questions. While incentives such as extra grades or early access to grades might temporarily boost response rates, fostering intrinsic motivation requires cultivating a feedback culture where students recognize the inherent value of participating in evaluations. This could be achieved by acknowledging and summarizing key themes from previous evaluations at the start of each semester, outlining specific actions taken based on student feedback, and transparently explaining any limitations or constraints that prevent the implementation of certain suggestions.

Our future work will address the limitations of our study. Specifically, we will collect additional data to avoid unequal representation among students' class standing and GPA. Furthermore, we will investigate individual responses and realize correlation analysis to evaluate whether specific student demographics (e.g., based on class standing and GPA) are represented by a behavioral intention model that differs from the general profile discussed in Figure 4.

10. REFERENCES

Okogbaa, V. (2016). Quality in Higher Education: The Need for Feedback from Students. *Journal of Education and Practice*, 7(32), 139–143.

Mandouit, L. (2018). Using student feedback to improve teaching. *Educational Action Research*, 26(5), 755–769. <https://doi.org/10.1080/09650792.2018.1426470>

- Moore, S., & Kuol, N. (2005). Students evaluating teachers: Exploring the importance of faculty reaction to feedback on teaching. *Teaching in Higher Education*, 10(1), 57–73. <https://doi.org/10.1080/1356251052000305534>
- Boysen, G. A. (2016). Using student evaluations to improve teaching: Evidence-based recommendations. *Scholarship of Teaching and Learning in Psychology*, 2(4), 273. <https://doi.org/10.1037/stl0000069>
- Omer, K., Jacobs, S., Bettger, B., Dawson, J., Graether, S., Murrant, C., ... Newton, G. (2023). Evaluating and Improving the Formative Use of Student Evaluations of Teaching. *Canadian Journal for the Scholarship of Teaching and Learning*, 14(1), n1. <https://doi.org/10.5206/cjsotlracea.2023.1.10960>
- Jaquett, C. M., VanMaaren, V. G., & Williams, R. L. (2017). Course factors that motivate students to submit end-of-course evaluations. *Innovative Higher Education*, 42, 19–31. <https://doi.org/10.1007/s10755-016-9368-5>
- Terry, C. B., Heitner, K. L., Miller, L. A., & Hollis, C. (2017). Predictive relationships between students' evaluation ratings and course satisfaction. *American Journal of Pharmaceutical Education*, 81(3), 53. <https://doi.org/10.5688/ajpe81353>
- Stroebe, W. (2020). Student evaluations of teaching encourages poor teaching and contributes to grade inflation: A theoretical and empirical analysis. *Basic and Applied Social Psychology*, 42(4), 276–294. <https://doi.org/10.1080/01973533.2020.1756817>
- Lee, H. H., Leong, A. P., & Song, G. (2016). Investigating teacher perceptions of feedback. *Elt Journal*, ccw047. <https://doi.org/10.1093/elt/ccw047>
- Yu, Y., Lin, Y., Qi, J., & Yan, H. (2022). Biases in student evaluations of teaching: An exploratory analysis to a Chinese case study. *Innovations in Education and Teaching International*, 1–12. <https://doi.org/10.1080/14703297.2022.2145985>
- Sullivan, D., Lakeman, R., Massey, D., Nasrawi, D., Tower, M., & Lee, M. (2024). Student motivations, perceptions and opinions of participating in student evaluation of teaching surveys: a scoping review. *Assessment & Evaluation in Higher Education*, 49(2), 178–189. <https://doi.org/10.1080/02602938.2023.2199486>
- Kite, M. E., Subedi, P. C., & Bryant-Lees, K. B. (2015). Students' perceptions of the teaching evaluation process. *Teaching of Psychology*, 42(4), 307–314. <https://doi.org/10.1177/0098628315603062>
- Huxham, M., Scoles, J., Green, U., Purves, S., Welsh, Z., & Gray, A. (2017). 'Observation has set in': comparing students and peers as reviewers of teaching. *Assessment & Evaluation in Higher Education*, 42(6), 887–899. <https://doi.org/10.1080/02602938.2016.1204594>
- Suárez Monzón, N., Gómez Suárez, V., & Lara Paredes, D. G. (2022). Is my opinion important in evaluating lecturers? Students' perceptions of student evaluations of teaching (SET) and their relationship to SET scores. *Educational Research and Evaluation*, 27(1–2), 117–140. <https://doi.org/10.1080/13803611.2021.2022318>
- Brown, C. L., & Kosovich, S. M. (2015). The impact of professor reputation and section attributes on student course selection. *Research in Higher Education*, 56, 496–509. <https://doi.org/10.1007/s11162-014-9356-5>
- Boswell, S. S. (2020). Effects of Ratemyprofessors. com and university student evaluations of teaching on students' course decision-making and self-efficacy. *Higher Learning Research Communications*, 10(2), 9. <https://doi.org/10.18870/hlrc.v10i2.1194>
- Weymouth, J., Karne, R. K., & Wijesinha, A. L. (2021). A Survey of Innovation in Undergraduate Computer Science Education. 2021 International Conference on Computational Science and Computational Intelligence (CSCI), 1079–1084. IEEE. <https://doi.org/10.1109/CSCI54926.2021.00228>
- Hai-zhe, M. I. (2014). Discussion of Computer Teaching Reform in Colleges and Universities. Hunan Agricultural Machinery. Retrieved from <https://api.semanticscholar.org/CorpusID:148022635>
- Sozer, E. M., Zeybekoğlu, Z., & Kaya, M. (2019). Using mid-semester course evaluation as a feedback tool for improving learning and teaching in higher education. *Assessment & Evaluation in Higher Education*, 44, 1003–1016. <https://doi.org/10.1080/02602938.2018.1564810>
- Wang, Z., Denny, P., Leinonen, J., & Luxton-Reilly, A. (2023). Understanding Student Evaluation of Teaching in Computer Science Courses. *Proceedings of the 16th Annual ACM*

- India Compute Conference, 13–18. <https://doi.org/10.1145/3627217.3627220>
- Glebova, O., Gregg, C., McDaniel, M., & Strange, L. (2024). Teaching Track Faculty in Computer Science. Proceedings of the 55th ACM Technical Symposium on Computer Science Education V. 2, 1911–1911. <https://doi.org/10.1145/3626253.3635361>
- Santiesteban, P., Endres, M., & Weimer, W. (2022). An analysis of sex differences in computing teaching evaluations. Proceedings of the Third Workshop on Gender Equality, Diversity, and Inclusion in Software Engineering, 84–87. <https://doi.org/10.1145/3524501.3527604>
- Decker, A., McGill, M. M., Ravitz, J., Snow, E., & Zarch, R. (2018). Connecting evaluation and computing education research: Why is it so important? Proceedings of the 49th ACM Technical Symposium on Computer Science Education, 818–819. <https://doi.org/10.1145/3159450.3159642>
- Ying, Z. (2010). A Questionnaire Analysis on College Students' Evaluation of Teaching Quality. Journal of Higher Education in Science & Technology. Retrieved from <https://api.semanticscholar.org/CorpusID:148531085>
- Borch, I., Sandvoll, R., & Risør, T. (2020). Discrepancies in purposes of student course evaluations: what does it mean to be "satisfied"? Educational Assessment, Evaluation and Accountability, 32(1), 83–102. <https://doi.org/10.1007/s11092-020-09315-x>
- Quansah, F., Cobbinah, A., Asamoah-Gyimah, K., & Hagan, J. E., Jr. (2024). Validity of student evaluation of teaching in higher education: a systematic review. Frontiers in Education, 9, 1329734. Frontiers Media SA. <https://doi.org/10.3389/educ.2024.1329734>
- Vevere, N., & Kozlinskis, V. (2011). Students' Evaluation of Teaching Quality. Online Submission.
- Constantinou, C., & Wijnen-Meijer, M. (2022). Student evaluations of teaching and the development of a comprehensive measure of teaching effectiveness for medical schools. BMC Medical Education, 22(1), 113. <https://doi.org/10.1186/s12909-022-03148-6>
- Cui, G., Ni, Z., & Wang, C. H. (2022). Refocusing on the Traditional and Effective Teaching Evaluation: Rational Thoughts About SETEs in Higher Education. Journal of Higher Education Theory and Practice, 22(3). <https://doi.org/10.33423/jhetp.v22i3.5086>
- Ali, A., Crawford, J., Cejnar, L., Harman, K., & Sim, K. N. (2021). What student evaluations are not: scholarship of Teaching and Learning using student evaluations. Journal of University Teaching & Learning Practice, 18(8), 01. <https://doi.org/10.53761/1.18.8.1>
- Palmer, S. (2012). Student evaluation of teaching: Keeping in touch with reality. Quality in Higher Education, 18(3), 297–311. <https://doi.org/10.1080/13538322.2012.730336>
- Sonntag, M. E., Bassett, J. F., & Snyder, T. (2009). An empirical test of the validity of student evaluations of teaching made on RateMyProfessors. com. Assessment & Evaluation in Higher Education, 34(5), 499–504. <https://doi.org/10.1080/02602930802079463>
- Katrompas, A., & Metsis, V. (2021). Rate my professors: A study of bias and inaccuracies in anonymous self-reporting. 2021 2nd International Conference on Computing and Data Science (CDS), 536–542. IEEE. <https://doi.org/10.1109/CDS52072.2021.00098>
- Scherr, S., Müller, P., & Fast, V. (2013). Single comments or average ratings: which elements of RateMyProfessors.com shape university students' judgments and course choice intentions? Educational Assessment, Evaluation and Accountability, 25, 131–141. <https://doi.org/10.1007/s11092-013-9164-z>
- Chapman, D. D., & Joines, J. A. (2017). Strategies for increasing response rates for online end-of-course evaluations. International Journal of Teaching and Learning in Higher Education, 29(1), 47–60.
- Reber, J. S., Ridge, R. D., & Downs, S. D. (2017). Perceptual and behavioral effects of expectations formed by exposure to positive or negative Ratemyprofessors. com evaluations. Cogent Psychology, 4(1), 1338324. <https://doi.org/10.1080/23311908.2017.1338324>
- Medina, M. S., Smith, W. T., Kolluru, S., Sheaffer, E. A., & DiVall, M. (2019). A review of strategies for designing, administering, and using student ratings of instruction. American Journal of Pharmaceutical Education, 83(5), 7177. <https://doi.org/10.5688/ajpe7177>
- Young, K., Joines, J., Standish, T., & Gallagher, V. (2019). Student evaluations of teaching: the impact of faculty procedures on response rates. Assessment & Evaluation in Higher Education, 44(1), 37–4. <https://doi.org/10.1080/02602938.2018.1467878>

- Gordon, H., Stevenson, E., Brookhart, A., & Oermann, M. H. (2018). Grade incentive to boost course evaluation response rates. *International Journal of Nursing Education Scholarship*, 15(1), 20180031. <https://doi.org/10.1515/ijnes-2018-0031>
- To, W. M., & Tang, M. N. F. (2019). Computer-based course evaluation: An extended technology acceptance model. *Educational Studies*, 45(2), 131-144. <https://doi.org/10.1080/03055698.2018.1443797>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 425-478. <https://doi.org/10.2307/30036540>
- Fjortoft, N. (2015). A reflection of faculty and course evaluations. *American Journal of Pharmaceutical Education*, 79(9). <https://doi.org/10.5688/ajpe799129>